1. Uganda’s Transport Sector – Generally
2. Policy and regulatory initiatives
3. Registered success)
4. Key Barriers
5. Key Priority Areas for E-mobility
6. Key Targets
1. **UGANDA’S TRANSPORT SECTOR, GENERALLY**

- The transport sector in Uganda is steered by the Ministry of Works and Transport in collaboration with other stakeholders.

- At national level, all transport infrastructure and services development initiatives are planned and implemented under the **ITIS** (Integrated Transport Infrastructure and Services) Program.

- Specifically, the Ministry is mandated to plan, develop and maintain an economic, efficient and effective transport infrastructure and services.
The main modes of transport are by road, air, water and rail.

Road Transport accounts for more than 90% of both cargo and passenger freight traffic.
Motorization is rapidly increasing. Vehicle population currently stands at close to 1.9 million (including 2 and 3 wheelers).

 Majority of vehicles are imported second hand or used. Only 10% are imported brand new.

 Local vehicle manufacturing is at infancy stage. However, there is potential for growth as the government is working to attract investment and promote local manufacturing.
Most of the freight cargo is transported via the Northern Corridor, and it is either for local consumption or transit to neighboring countries (Rwanda, Burundi, Congo, Sudan).

Whereas the transport sector plays a significant role in economic development, it is largely blamed for its significant contribution to Greenhouse Gas (GHG) emissions that affect climate change and ultimately contribute to global warming.

In 2015, the road transport in Uganda emitted about 2.5MT of Carbon Dioxide and this was projected to increase by 70% by 2030 under a “Business as Usual scenario”
In the last two years, Uganda encountered adverse climate change effects on the transport infrastructure that resulted in the washing away of roads, bridges, road furniture and submerged railway lines in many parts of the country due to excessive rains.

**THEREFORE**, to ensure **sustainable development** in the transport sector, Uganda has put in place a number of policy and regulatory initiatives enabling implementation of key interventions.
POLICY AND REGULATORY INITIATIVES

- The National Transport and Logistics Policy
  - Emphasizes the need to promote inclusive green growth in the transport and logistics sector i.e. Green Logistics Development, promotion of non motorized transport and promotion of electric vehicles, among others

- The Energy Policy 2023 emphasizes greening of the transport sector through supply of clean fuels and clean energy to e-mobility
National Transport Master Plan

- Emphasizes the need to address the challenges of access, development, and sustainability.
- Developed to among others promote a “cost-effective, efficient, safe, and environmentally sensitive transport infrastructure and services”.
The Vision 2040 and National Development Plan III

Emphasizes the need to adopt an Integrated transport Planning approach to address immediate and emerging transport infrastructure challenges which include among others increasing GHG emissions due to increasing motorized vehicle fleet
Non-Motorized Transport (NMT) Policy

- Developed in 2012
- Aims at encouraging the development of NMT compliant infrastructure and use of non-motorized modes of transport to directly reduce traffic congestion and greenhouse gas emissions.
- Pilot NMT corridor on some roads within KCCA already established
PILOT NMT CORRIDOR ESTABLISHED ON SOME ROADS WITHIN KAMPALA CITY
NMT Policy incorporated in all the new road designs around the city
POLICY, REGULATORY AND INFRASTRUCTURE INITIATIVES

- Meter Gauge Railway rehabilitation for freight transit—
  - This initiative aims to achieve 22% of fuel economy improvement of diesel locomotives
  - Has potential to reduce the emissions by approximately 0.0005 MtCO2e by 2030.

- SGR Infrastructure
  - Acquisition of land for the SGR infrastructure in progress
  - Target is to implement **1,412 km** of fully electrified standard gauge rail by 2050.
POLICY AND REGULATORY INITIATIVES

- Traffic and Road Safety Act 1998 as amended
  - Principal law for regulation of traffic and road safety with focus on vehicles.
  - The Amendments cater for among others
    - Harmonization of driving licenses to align with international standards
    - Periodic inspection of vehicles
    - Development of vehicle standards
POLICY AND REGULATORY INITIATIVES

- Periodic Inspection of Vehicles
  - To resume in the FY 2024/25
  - Government to take over all vehicle inspection facilities previously set up by SGS
  - Commercial vehicles to be inspected once a year and private vehicles once after every two years
  - Emissions among the inspection parameters
One of the vehicle inspection stations set up at Namanve
Regulations & Standards for Motor Vehicles in Uganda

- **US 845**: Code of Practice for Inspection & Testing of used Motor Vehicles for Road worthiness, 2017
- **US EAS 1047:2022 Air quality** - Vehicular exhaust emission limits Standard was approved and published as a Uganda Standard in December 2022. However, it is currently on voluntary basis. It will made mandatory after sensitization of the public.
Developing National capacity to enforce mandatory heavy vehicle inspections - CCAC funded Project

- Climate and Clean Air Coalition (CCAC) approved this project for funding in 2023
- Project to support the Government of Uganda to:
  - implement a mandatory emissions inspection program for heavy duty vehicles (HDVs) based on the East African Community (EAC) Euro IV standards
  - Increase the capacity of relevant GOU stakeholders to concurrently implement & enforce national low sulphur fuel and Euro IV standards for HDVs & engines
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POLICY AND REGULATORY INITIATIVES

TRANSPORT DECARBONIZATION
TARGETED POLICY INITIATIVES
POLICY AND REGULATORY INITIATIVES

Nationally Determined Contributions (2022)

- 1% per year increase in alternative cleaner fuel use for all road vehicles
- Adoption of E-Mobility including Electric Road Vehicles, Boda-Bodas, Buses, Rail
- Increase of Road Transport Fuel Efficiency /economy
- Reduction of transport-based emissions by over 2.8MtCO2e by 2030
POLICY AND REGULATORY INITIATIVES

Transition to e-mobility

- E-mobility Policy being formulated to incentivize the local manufacture, purchase and use of electric/hybrid vehicles to support the adoption of cleaner vehicles
Transition to e-mobility

National E-Mobility Strategy (2023) developed.

Key priority areas are:
- Local EV manufacturing & Supply of EVs, components and systems
- Local EV Battery Manufacturing
- Electrification of Public Transport.
- Establish Electric Vehicle Charging Infrastructure and any other emerging charging technologies.
Key priority areas cont’d…

▪ E-Mobility Human Capital Development.
▪ Electric vehicle uptake, including electrification of the government fleet.
▪ E-Mobility standards development to support the e-mobility ecosystem.
POLICY AND REGULATORY INITIATIVES

- Regulation of importation of used vehicles:
  - Max age of 15 years so far, and PVOC inspection
  - The target is to gradually go below 8 years within 5 years
Local Manufacturing/assembly of EVs

- Investment by Government and Private Sector has seen the local manufacturing and deployment of over 1,500 Electric Motorcycles supported by over 1,000 swapping stations and 6 electric buses, with over 20 in production supported by 12 DC fast chargers.
One of the Kiira Motors Corporation DC Fast Chargers
Policy and Regulatory Initiatives

Fiscal Incentives for EVs (Current)

- Battery Packs: Tax exemption on import duty and VAT. Only WHT paid.
- Raw material for manufacturing of e-batteries: Tax exemption for only those with registered manufacturing facilities.
- Tax exemption for all EV CKD and SKD units: Exempt from Duty.
- All imported EVs/Hybrids (Includes M/Cycles): Import duty tax exemption. *Pays VAT and WHT.*
Fiscal Incentives for Evs (under consideration)

- Charging stations to enjoy industrial rate power tariffs particularly during peak hours. Policy being considered
- Policy to exempt all EV unique spare parts in being considered
POLICY AND REGULATORY INITIATIVES

Promoting the use cleaner Fuels

- Use of quality fuel is critical for decarbonizing transport. Accordingly, Uganda adopted the January 2015 low sulphur fuel standards for East Africa of allowing a maximum content of 50 Parts Per Million for diesel fuels.

- Promotion of bio-fuels – In 2018, Uganda developed the Biofuels Act, 2018 to promote the production and blending of biofuels in petroleum products.

- Promotion of fuel efficiency in Uganda is being Undertaken. This is an on-going initiative spearheaded by the Ministry of Energy and Mineral Development and MOWT.
Registered success

- Improvement in standards for cleaner fuel
- Introduction and acceleration of electric mobility
- Mobilization of players in the e-mobility value chain
- National e-Mobility strategy developed
- Local Manufacturing of EVs; 2 wheelers and buses
- Improvement in the National fuel efficiency
- Reduction in transport based emissions
- Introduction of Vehicle age restriction
- Introduction of solar charging stations
- Fiscal Incentives for EVs to promote and accelerate EV uptake
KEY BARRIERS

- Low local manufacturing capacity
- Lack of EV standards
- Inadequate infrastructure and low levels mass transport.
- High initial acquisition costs /lack of affordable financing for EVs
- Inadequate fiscal incentives to accelerate e-mobility
- Low levels of public and stakeholder awareness
- Lack of charging infrastructure
- Lack of data to inform consumers on fuel economy (absence of FE label)
KEY BARRIERS

- Lack of data to inform consumers on fuel economy (absence of FE label)
- Battery end-of-life management (re-usability/circular economy)
- Lack of skilled human capital for Evs
- Low range coverage
- Absence of e-tariffs
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Priority Areas for e-Mobility

- **Local EV Manufacturing & Supply:** To increase Local Manufacturing and supply of Electric Buses, Motorcycles and vehicles with associated Parts, Components and Systems.

- **Local EV Battery Manufacturing:** To promote Local Manufacturing of Electric Vehicle Batteries and Battery Energy Storage Systems for domestic, commercial, and industrial applications.

- **Electrification of Public Transport:** To electrify Public Transport Systems based on Electric Buses, Electric Motorcycles and Electric Trains.

- **Charging Network:** To establish Electric Vehicle Charging Infrastructure supporting battery swapping, contact charging, wireless charging, E-Trams, and any other emerging charging technologies.
Priority Areas for e-Mobility

- **E-Mobility Human Capital Development**: To develop skills and capabilities for the e-mobility value chain.

- **Electric Vehicle Uptake**: To increase Electric Vehicle Uptake including electrification of the Government Fleet.

- **E-Mobility Standards Development**: To develop standards for the E-Mobility Ecosystem.
KEY TARGETS

- Fully integrated domestic battery manufacturing value chain producing over 1GWh of batteries annually by 2040
- Over 10,000 Fast Chargers established with a charger in every 50km radius with 3,500 Public Charging Stations by 2040
- Charging Infrastructure installed at all public offices by 2030
- At least 15,000 Electric Buses deployed for Mass Transit in Uganda by 2040
- Full Electrification of motorcycles in the Greater Kampala Metropolitan Area by 2026
- At least 250,000 people receiving specialized skilling along the E-Mobility Value Chain by 2040
THANK YOU