TRANSPORT AND CLIMATE CHANGE IN AFRICA

#WeAreTransport
#TransportClimateStatus

1. BENEFITS OF SUSTAINABLE, LOW CARBON TRANSPORT

ENVIRONMENT

Reduces climate impacts, improves urban air quality and increases public health

Urban rail reduces CO_2 emissions 75% (and increases capacity 10 times) compared to private transport

ECONOMY

Reduces congestion, dependence on fossil fuel imports and infrastructure costs

Traffic congestion costs USD 800 million annually in Kampala

SOCIETY

Increases equitable job access, improves and creates more jobs than other sectors

Public transport provides 3,000 new jobs in Dar es Salaam

2. DRIVERS OF TRANSPORT DEMAND

Demand for mobility of passengers and goods is influenced by **several external factors**, including:

Between 2000 and 2017-18

- 109% GDP
- 88% Urban Population
- 58% Population

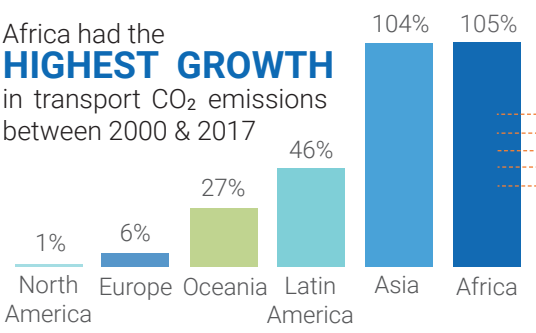
Growth in private car ownership and use:

28.2 cars per 1,000 people → increase from 2005 to 2015 + 33% → 37.6 cars per 1,000 people

Vehicle travel is poised to increase by 230 % from 2015 to 2050

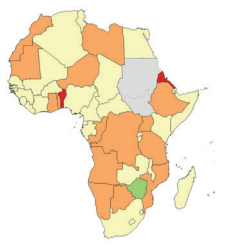
3. TRANSPORT EMISSIONS

Africa had the **HIGHEST GROWTH** in transport CO_2 emissions between 2000 & 2017



- 231% in Kenya
- 211% in Ghana
- 176% in Algeria
- 99% in Egypt
- 51% in South Africa

Transport emissions grew in many countries, annual average growth between 2000 and 2016:



- -5% to 0%
- 0% to 5%
- 5% to 15%
- Above 15%
- No information

4. TRANSPORT MITIGATION POTENTIAL

Global transport CO_2 emissions must be reduced to **2 GIGATONNES by 2050** to meet 1.5°C target of the **Paris Agreement**

More than **75%** below current levels

Current Africa per capita transport emissions are in required range of 0.2 tonnes.

Transport CO_2 emissions per capita:

- AFRICA 0.24 tonnes
- ASIA 0.52 tonnes
- EUROPE 1.49 tonnes
- NORTH AMERICA 5.08 tonnes

5. NATIONALLY DETERMINED CONTRIBUTIONS (NDCs)

5 African countries have defined **transport emission mitigation targets** in NDCs

75% of countries in Africa **highlight transport** as a mitigation source in NDCs (equal to global average)

Mitigation measures in NDCs focus on:

Benin	Cabo Verde	Djibouti	Burkina Faso
Burundi	Seychelles	Ethiopia	Liberia
Egypt	South Africa	Nigeria	Mali
Senegal		Zimbawe	Zambia

6. IMPLEMENTATION OF LOW CARBON TRANSPORT POLICIES

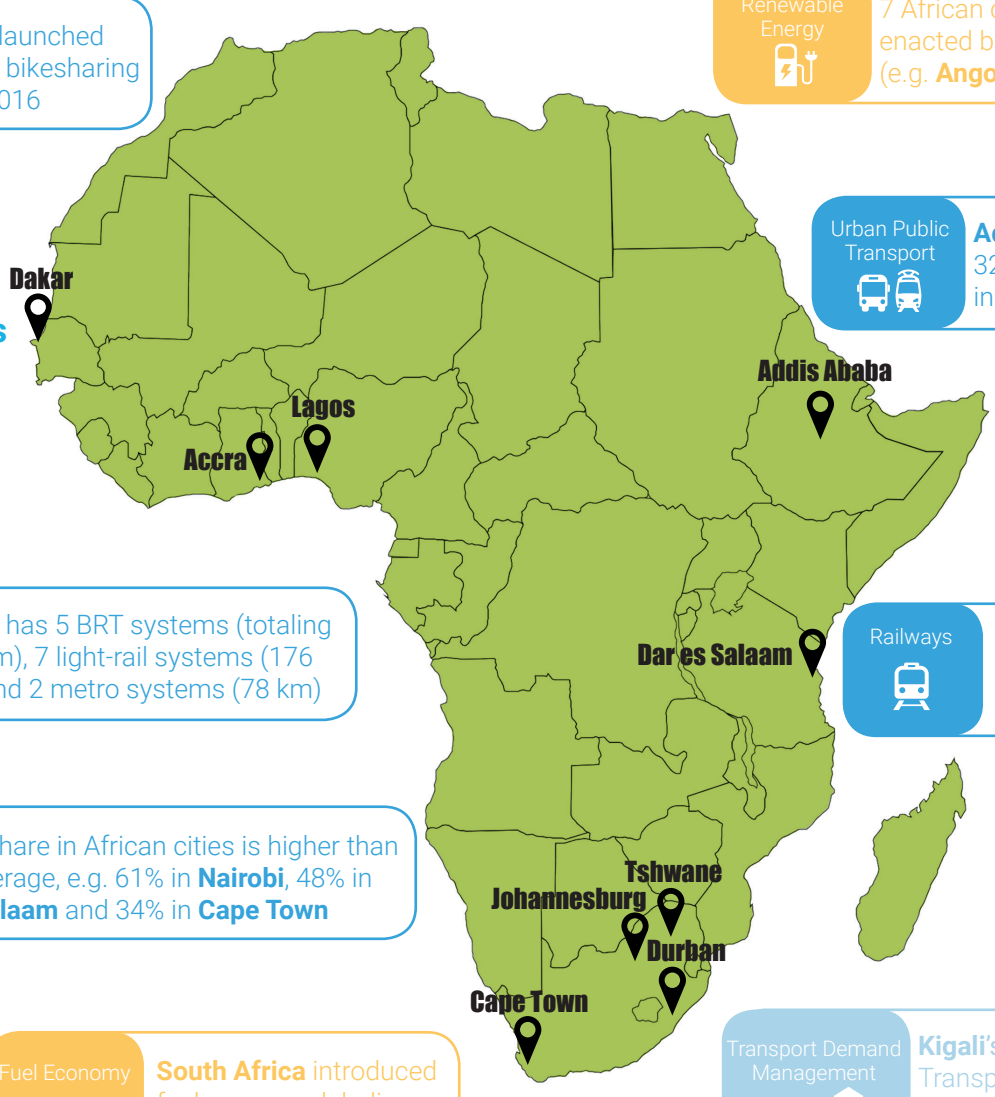
The **Avoid-Shift-Improve** framework is a comprehensive approach to implement sustainable, low carbon transport.

AVOID — Avoid and reduce the need for motorised travel

SHIFT — Shift to more environmentally friendly modes

IMPROVE — Improve energy efficiency of transport modes

9 African cities intend to cut carbon emissions to zero by 2050, requiring low carbon transport



New Mobility Services — **Egyptian** start-up Raye7 encourages drivers to share vehicles through a point system

Walking and Cycling — **Marrakech** launched Africa's first bikesharing system in 2016

Renewable Energy — 7 African countries have enacted biofuel mandates (e.g. **Angola**, **Ethiopia**, **Sudan**)

Urban Public Transport — **Addis Ababa** launched 32 km light-rail system in 2015

Urban Public Transport — **Africa** has 5 BRT systems (totaling 131 km), 7 light-rail systems (176 km) and 2 metro systems (78 km)

Railways — **Kenya** opened a 490 km rail connection in 2017

Walking and Cycling — Walking share in African cities is higher than global average, e.g. 61% in **Nairobi**, 48% in **Dar es Salaam** and 34% in **Cape Town**

Fuel Economy — **South Africa** introduced fuel economy labeling scheme in 2008

Transport Demand Management — **Kigali's** 2013 Public Transport Master Plan prioritises public transport

7. MORE INFORMATION

The Transport and Climate Change 2018 Global Status Report (TCC-GSR) is a data-driven report illustrating global trends in transport demand and emissions and showcasing policy targets and measures.

Read the report at slocat.net/tcc-gsr

@SLoCaTOfficial fb.me/SLoCaTOfficial

The TCC-GSR is primarily supported by:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

Partnership on Sustainable Low Carbon Transport

William + Flora Hewlett Foundation

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH