Climate Strategies for Transport in Africa

This infographic examines transport in Nationally Determined Contributions (NDCs) and Long-Term Strategies (LTS) submitted in the framework of the Paris Agreement. The focus is on second-generation NDCs (new or updated NDCs as of 10 April 2022).

On behalf of:

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection

of the Federal Republic of Germany

SLOCAT Partnership on Sustainable, Low Carbon Transport

Key insights

Many NDCs and LTS in the region include targets for the transport sector:

- 8 African countries commit to targets for the reduction of transport greenhouse gas (GHG) emissions.
- 13 countries include other types of transport targets.

GHG mitigation actions primarily focus on the renewal of vehicle fleets, as well as on promoting the use of public transport, walking and cycling.

Second-generation NDCs and LTS in the region have a stronger focus on transport adaptation than the global average - approximately 60% include transport adaptation actions, compared to 40% of all global submissions.

Regional snapshots

42 second-generation NDCs **4 LTS**

42 of the 54 countries in Africa (78%) have submitted updated or second NDCs, a much higher proportion than in other regions. However, 40% of transport emissions in the region are still not accounted for in second-generation NDCs.

Regional transport emissions could be further reduced if countries that have yet to update their climate strategies include more ambitious transport targets in their forthcoming strategies. This is especially important in countries with significant emissions from transport, including **Egypt, Algeria** and **Libya**.

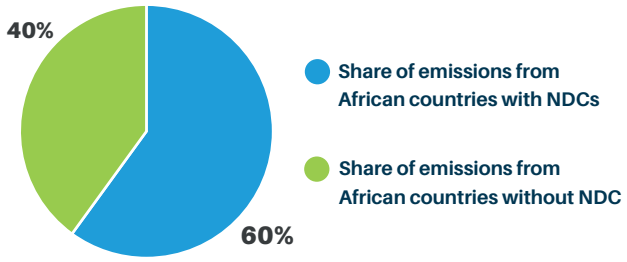
Transport targets

Transport GHG emission targets

8 out of the 19 countries that have included transport GHG emission targets in their second-generation NDCs are African. These specific, time-bound transport GHG emission targets set by small African countries are great examples for larger emitters to follow.

Among the LTS submitted by African countries, only **Nigeria** includes a specific target to reduce transport GHG emissions. It aims to reduce emissions by 4 Mt CO_2-eq by 2030, representing a 14% reduction of 2019 transport emissions levels.

Share of transport CO_2 emissions by African countries with and without 2nd generation NDCs



Burkina Faso: Reduce transport emissions by 1,210 Gg CO_2-eq (unconditional); further additional reduction by 267 Gg CO_2-eq (conditional) by 2025.

Gambia: Reduce emissions by 22.2% below BAU level by 2030.

Guinea: Reduce emissions to 4,142 kt CO2 (unconditional); further to 3,879 kt CO_2 by 2030, compared to BAU level of 4,335 kt CO_2 by 2030.

Liberia: Reduce emissions by 15.1% below BAU by 2030.

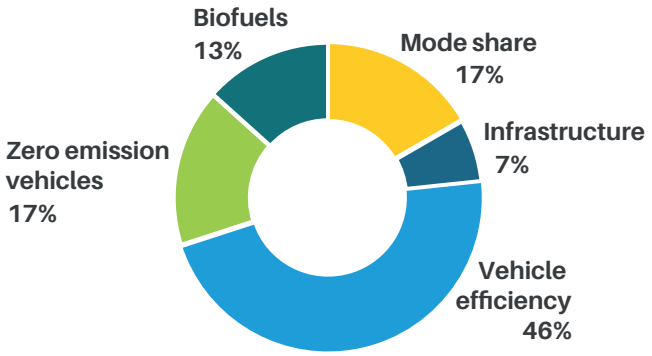
Mauritania: Reduce emissions by 92.65 Gg CO_2-eq of which 5.21% is unconditional by 2030.

Mauritius: Reduce emissions by 129 ktCO_2-eq until 2030.

Seychelles: Reduce emissions by 30% below BAU (to achieve 169.1 kt CO_2-eq) by 2030 (focus on gasoline vehicles).

South Sudan: Reduce emissions by 44% below BAU by 2030.

Non-GHG transport targets in second-generation NDCs

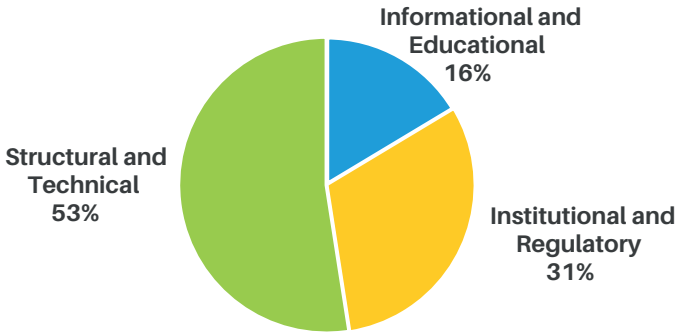


Transport mitigation and adaptation actions

Transport mitigation actions included in second-generation African NDCs focus primarily on mode shift and demand management (32% of all actions), followed by fuels and energy vectors (29%) and system improvements (22%). This is a distinct change from the region's first-generation NDCs, in which electrification made up only 3% of all actions.

While the share of mode shift and demand management actions included in all global NDCs decreased between first and second-generation NDCs, it increased slightly in Africa (from 28% to 32%). African NDCs also put more emphasis on transport system improvements compared to other regions.

Transport adaptation actions by category

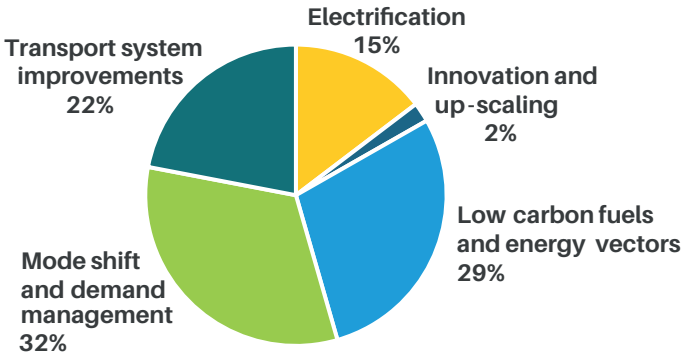


Non-GHG emission targets

These targets focus mainly on vehicle efficiency due to the generally old and inefficient vehicle fleet in many African countries. Countries seem to concentrate on one area of intervention for target setting, likely also influenced by the availability of data to support quantitative targets.

Compared to all submitted NDCs globally, targets on zero emission vehicles play a much smaller role in African NDCs, while biofuels and mode share targets are more prevalent.

Transport mitigation actions by category



25 African NDCs include transport adaptation actions, with more than half of them relating to road infrastructure resilience. Almost one third of all transport adaptation actions refer to incorporating adaptation into the planning and design of transport infrastructure and systems.

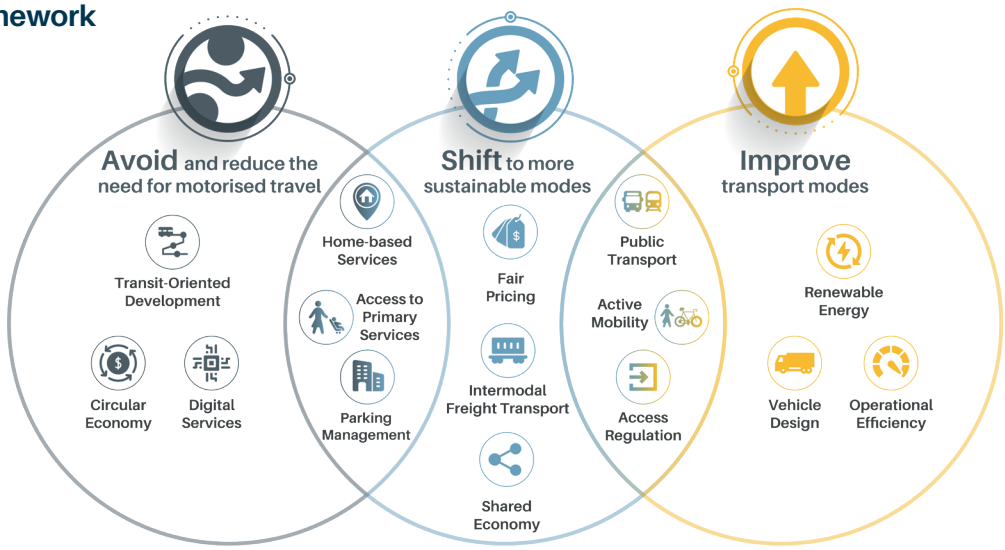
African NDCs have a stronger focus on adaptation than any other region, with more NDCs including adaptation actions and an overall higher number of adaptation actions in each NDC.

Photo from ITDP Africa

Avoid-Shift-Improve framework

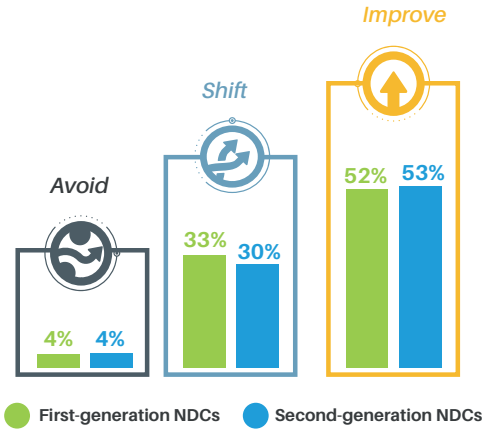
Applying Avoid-Shift-Improve (ASI) actions through integrated, inter-modal and balanced approaches is critical to unleashing the full benefits of sustainable, low carbon transport.

Learn more about the Avoid-Shift-Improve Framework
www.slocat.net/asi



**The A-S-I diagramme presents a non-exhaustive list of measures for illustrative purposes only.*

Mitigation actions by *Avoid-Shift-Improve*



53% of actions in African NDCs aim to improve vehicle efficiency or fuels, with many of these targeting vehicle imports. Shift actions (30%) largely focus on collective transport (buses and rail), walking and cycling.

Cabo Verde supplements its electrification efforts with urban planning and digitalisation to reduce the necessity for travel. The country also plans to upgrade its walking and cycling infrastructure and create bicycle repair and equipment businesses to promote youth employment. As an island nation, Cabo Verde plans to develop by 2023 a domestic and international maritime transport strategy, integrating all aspects of the ASI framework.

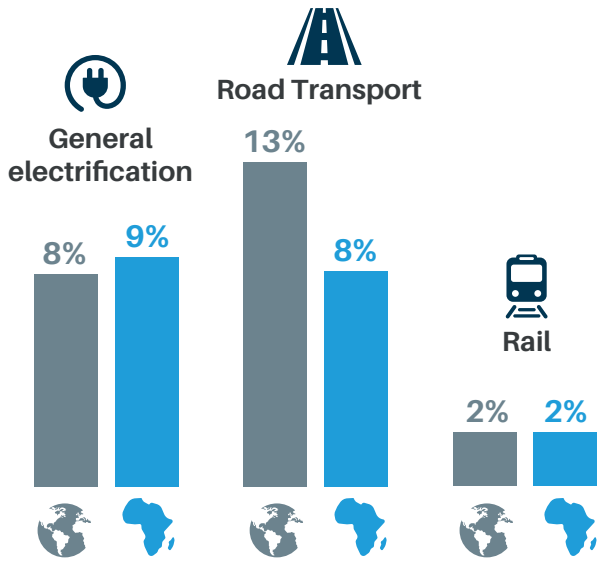
Compared to NDCs globally, ASI actions in Africa are slightly more balanced, with 30% representing Shift actions (versus 25% at the global level). Improve actions (vehicle improvements) make up 53% of all actions in the region, which is the lowest among all regions and slightly below the global level (58%).

Electrification

In African NDCs, 15% of actions focus on the topic compared to 18% of actions in all NDCs. Still, NDCs from the region are largely aligned with global trends in their focus on road transport. For rail transport, the focus in the region is more towards transit rail than what we see globally.

Several NDCs - **Cabo Verde, Congo, Ethiopia, Rwanda, Seychelles, Sierra Leone** and **South Sudan** - include actions to electrify public buses; as an important entry point for longer-term efforts towards more comprehensive electrification of transport.

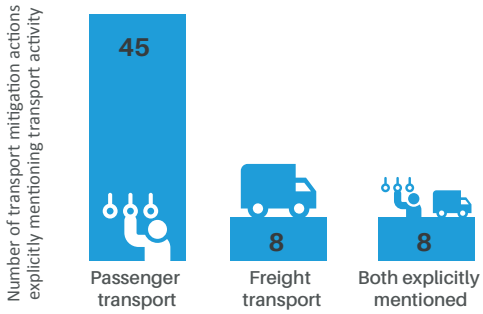
Share of electrification measures by mode



Freight

Only 8% of transport actions in African NDCs explicitly target freight, slightly less than the average of 9% globally in all NDCs. Most of these actions seek to improve vehicle efficiency or shift to low-carbon fuels. Some also aim to shift freight to rail or shipping, or to enhance system efficiency to reduce vehicle mileage.

Mitigation actions in second-generation Africa NDCs, passenger and/or freight ransport



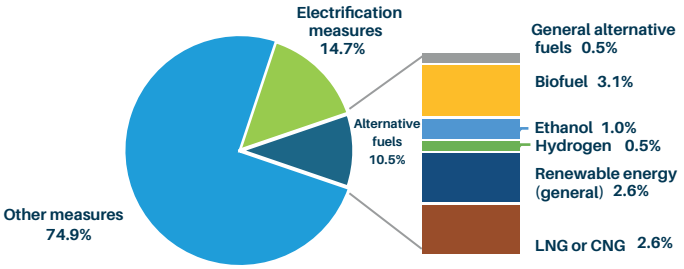
COP26 commitments

COP26 saw an unprecedented number of commitments and initiatives on sustainable, low carbon transport. The table cross-referenced COP26 transport commitments with the second-generation NDCs submitted by countries which signed up to the initiatives.

Renewable energy and alternative fuels

To reduce emissions from the transport sector, it is essential that electrification is supported by renewable energy. However, this linkage is not prominently reflected in African NDCs. Alternative fuel actions represent 10% of transport mitigation actions and below 3% mention renewable energy. Hydrogen is not a focus for the sector in Africa.

Alternative fuels and e-mobility compared to other actions



NDCs by **Burkina Faso, Morocco, Namibia, South Sudan** and **Tanzania** link transport to renewable energy. Cabo Verde includes a target to electrify at least 25% of its landborne transport fleet (new road vehicles) by 2030 supported by renewable energy sources.

	Burkina Faso	Cabo Verde	Egypt	Ghana	Guinea Bissau	Kenya	Morocco	Namibia	Rwanda
Declaration on accelerating the transition to 100% zero emission cars and vans		●		●		●	●		●
Breakthrough agenda - road transport			●		●		●	●	
International aviation climate ambition coalition	●					●	●		
Clydebank declaration for green shipping corridors							●		

- ● Country is a signatory but has not submitted its second-generation NDC.
- ● Country is a signatory and has included some content related to it in its second-generation NDC.

SLOCAT blog on transport commitments and initiatives launched at COP26

SLOCAT preliminary analysis of coherence between commitments and initiatives launched at COP26 and the NDCs of signatory countries

This infographic was produced by GIZ and SLOCAT based on:

GIZ and SLOCAT (2022), Tracker of Climate Strategies for Transport, a database on ambition, targets and policies in NDCs and LTS of the Paris Agreement, https://changing-transport.org/tracker/

SLOCAT (2021), Climate Strategies for Transport: An Analysis of NDCs and LTS, https://slocat.net/ndcs/

GIZ (2021), Key insights -Transport in new NDCs and LTS, https://changing-transport.org/publication/transport-in-ndcs-and-lts/

Learn how to raise climate ambition for sustainable, low carbon transport: