

Climate Strategies for Transport in the Middle East and North Africa (MENA*)



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 (submission of new or updated NDCs as of 15 March 2022).

* MENA covers Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates and Yemen.

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

On behalf of:

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

SLOCAT
Partnership on Sustainable, Low Carbon Transport

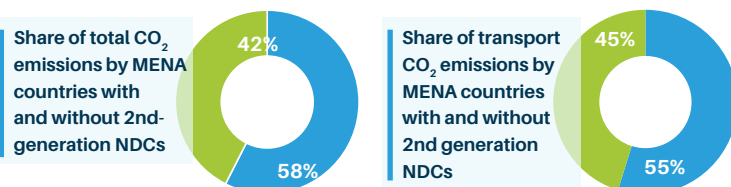
of the Federal Republic of Germany

Regional snapshot

14 second-generation NDCs 1 LTS

14 of the 20 MENA countries have submitted second-generation NDCs. These countries account for 55% of MENA's transport CO₂ emissions.

Other major transport CO₂ emitters, including Iran, Egypt, and Algeria, have yet to submit their second-generation NDCs. Therefore, there is still an opportunity to mitigate a large portion of transport emissions by ambitious actions taken in these countries.



● Share of emissions from MENA country with NDCs

● Share of emissions from MENA country without NDC

Key Insights

Israel is the only country in the region which has included a specific transport greenhouse gas (GHG) reduction target in its NDC.

However, most NDCs include other transport targets, including on road vehicle technologies and alternative fuels (with the exception of biofuels)

Transport system resilience is only included in 30% of MENA NDCs, with a focus on road infrastructure.

★ **Morocco** is the only MENA country that has submitted a LTS, featuring both short-term priorities (e.g. vehicle efficiency standards) and medium-term priorities (e.g. zero-emission vehicles).

→ **Other key priorities:** Behavioral change; demand management for freight and passenger transport; urban mobility development.

Transport targets

Transport GHG mitigation targets

Globally, only 19 second-generation NDCs (14%) include transport GHG mitigation targets.

🇮🇱 In MENA, only **Israel** includes a target to reduce transport emissions:

→ Limit emission increase to 3.3% compared to 2015 levels by 2030.

→ Reduce emissions by 85% compared to 2015 levels by 2050.

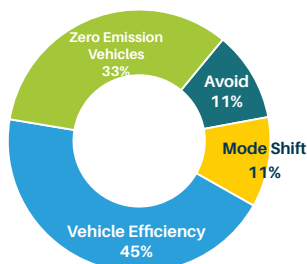


Non-GHG transport targets

MENA countries set targets on vehicle efficiency and zero-emission vehicles.

🇵🇸 **Palestine's** NDC is the only one in the region that includes multiple targets for avoiding motorised transport demand, mode share and vehicle efficiency.

Non-GHG transport targets in 2nd-generation NDCs



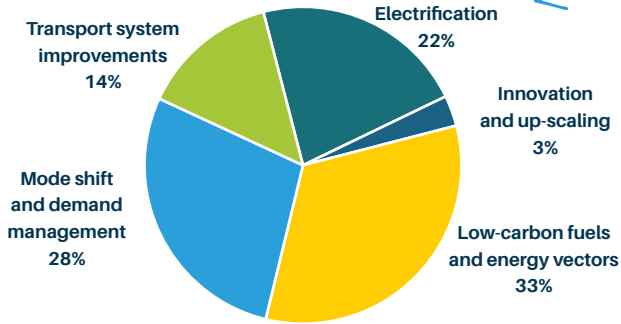
🔍 Among the non-GHG transport targets included in all NDCs, increasing the use of zero-emission vehicles has the highest share (40%), followed by improving vehicle efficiency (29%).

🇮🇱 Among MENA NDCs, only **Israel** includes a target to phase out fossil fuel vehicles. The reversed pattern compared to all NDCs is likely due to oil production being a major economic driver in the region.



Transport mitigation and adaptation actions

Transport mitigation actions by category



Between first and second-generation MENA NDCs, many more countries included actions on transport electrification, which went from representing 4% to 22% of all measures.



Compared to all submitted NDCs, MENA NDCs have a slightly stronger focus on improving vehicle fleets and switching fuels (58% of all actions in MENA, compared to 50% of all actions globally).

The United Arab Emirates' second-generation NDC includes a comprehensive package of sustainable, low carbon transport actions:

- Rail expansion to enhance freight transport efficiency.
- Metro services and network expansion in Dubai.
- Improved standards for electric, hydrogen and autonomous vehicles.
- Expansion of charging infrastructure.
- Introduction of Euro 5 and 6 emission performance standards.
- Better planning, monitoring and infrastructure upgrades to enhance system resilience.

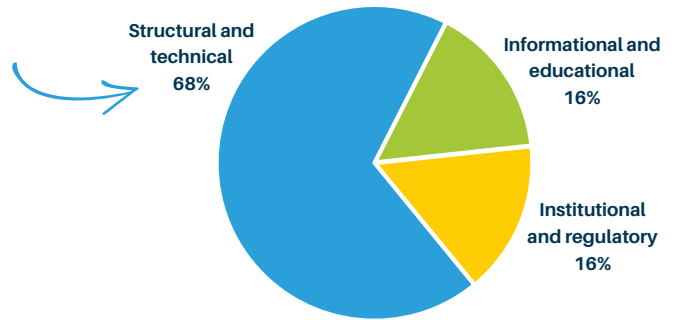
Only NDCs from Iraq, Lebanon, Palestine, Qatar, Syria and the United Arab Emirates contain transport adaptation actions.

These measures focus mainly on structural and technical solutions, especially improving road infrastructure resilience.

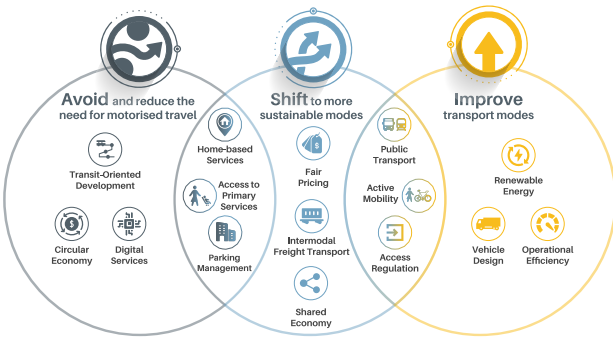


Globally, transport adaptation measures in NDCs largely focus on general structural and technical solutions, especially road infrastructure. This trend is even more pronounced in MENA.

Transport adaptation actions by category



Avoid-Shift-Improve framework



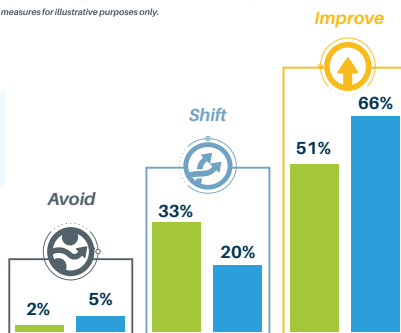
Applying *Avoid-Shift-Improve* measures through integrated, inter-modal and balanced approaches is critical to unleashing the full benefits of sustainable, low carbon transport.

Growing evidence shows that *Avoid* and *Shift* strategies can account for 40-60% of transport emission reductions, at lower costs than *Improve* strategies.

Second-generation MENA NDCs are not well balanced between *Avoid*, *Shift* and *Improve* measures. There is a significantly stronger preference towards *Improve* measures.

Mitigation actions by Avoid-Shift-Improve

- 1st-generation
- 2nd-generation



The trend towards more *Improve* and less *Shift*-related actions can be observed in all regions globally but the changes are more prominent in MENA.

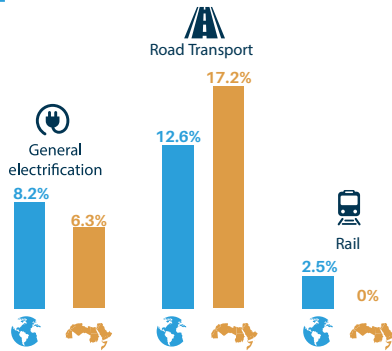


[Learn more about the Avoid-Shift-Improve Framework](#)

Electrification

53% of all second-generation NDCs contain actions on electrification, while in MENA, only 40% of NDCs refer to electrification. Several MENA NDCs also include targets to increase the share of electric vehicles in public transport.

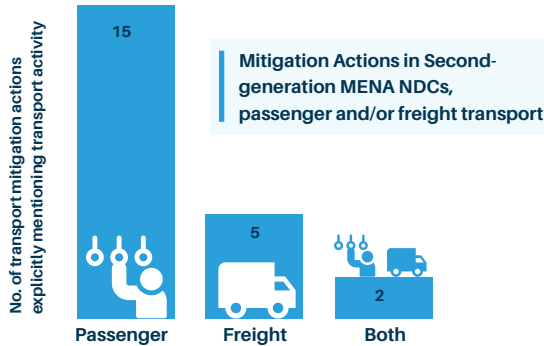
Share of electrification measures by modes



All NDCs MENA NDCs

- Jordan aims to electrify 50% of their public fleet.
- In the United Arab Emirates, Dubai aims to have 30% of all government vehicles electrified by 2030.

Freight



Only 11% of transport actions in second-generation MENA NDCs explicitly refer to freight transport. These actions mainly focus on shifting from road to rail freight and improving vehicle efficiency.

COP26 Commitments

Egypt, Israel and Morocco signed several of the initiatives, most of which are aligned with content in their second-generation NDCs.

Declarations and initiatives	Egypt	Israel	Morocco
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:

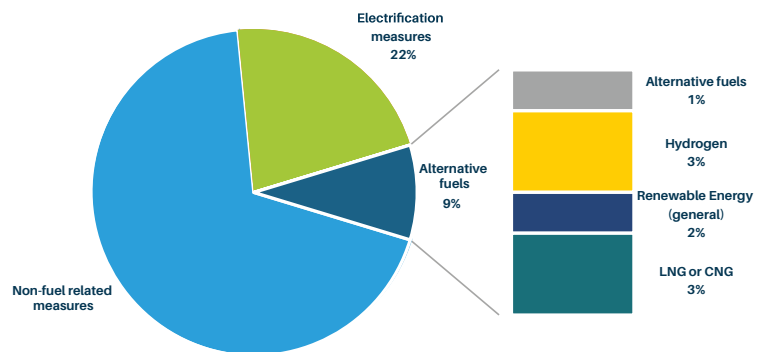


- Jordan's updated NDC includes a diversity of transport measures, including:
 - Compact city planning to avoid unnecessary transport trips.
 - Expansion of public bus services to shift from private vehicles.
 - Electric mobility and freight efficiency to improve vehicle performance.

Renewable energy and alternative fuels

To reduce emissions from the transport sector, it is essential that the electrification of transport is supported by renewable energy.

Alternative fuels and e-mobility compared to other actions



- Only Morocco specifically links transport electrification measures to renewable energy.

Some countries see the use of natural gas as an alternative fuel for vehicles. Biofuels are not covered in any MENA NDCs.