MODULE 2

TRANSPORT PATHWAYS TO REACH CLIMATE AND SUSTAINABILITY GOALS

MODULE 2.1

NATIONAL TRANSPORT PATHWAYS TO REACH CLIMATE AND SUSTAINABILITY GOALS

FIGURE 1. Relevant SDG targets for transport

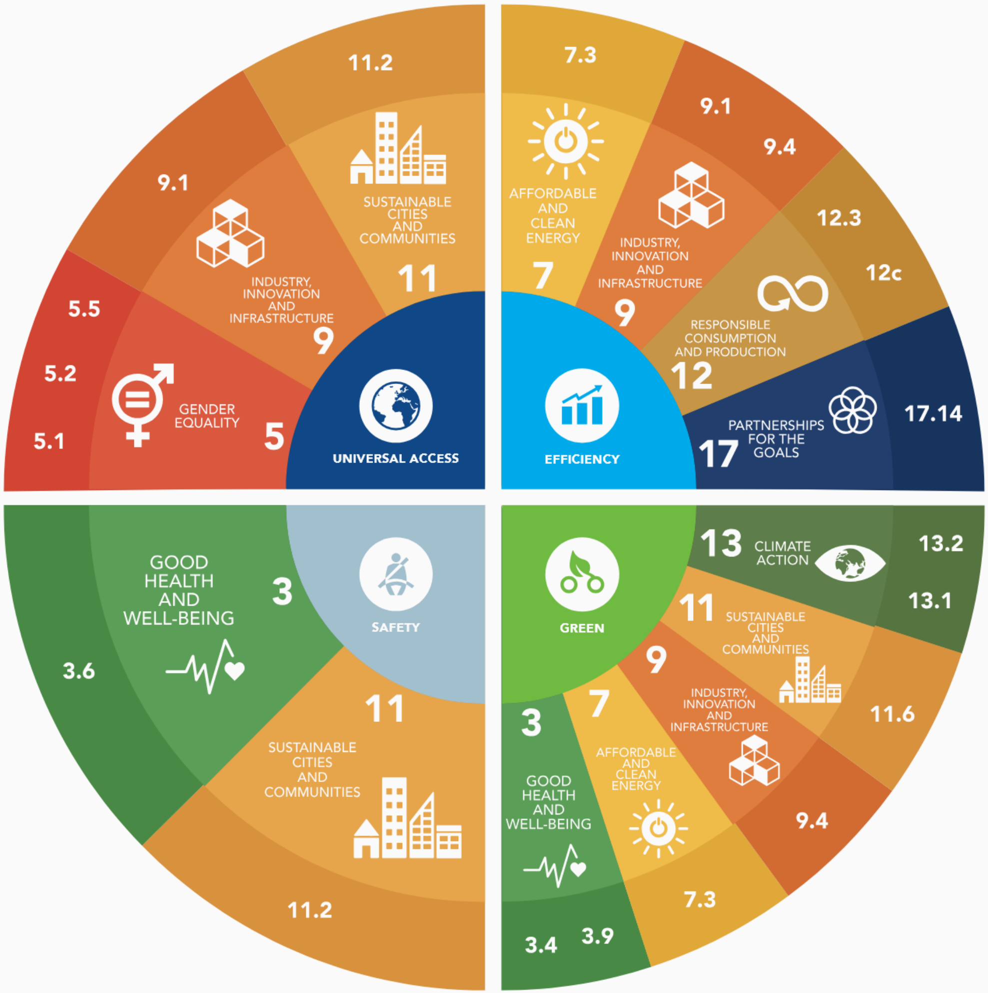


FIGURE 2. What can the UN Decade of Sustainable Transport achieve by 2035?

1

All actors are aligned behind a forward-looking vision, working together to deliver context-specific action

2

National and sub-national governments and businesses have policymaking, organisational, and technical capacities and skills to develop and implement integrated frameworks, particularly in low- and middle-income countries (LMICs)

3

Public and private investments, and revenue streams from transport users are used to fund sustainable transport expansion, particularly in LMICs

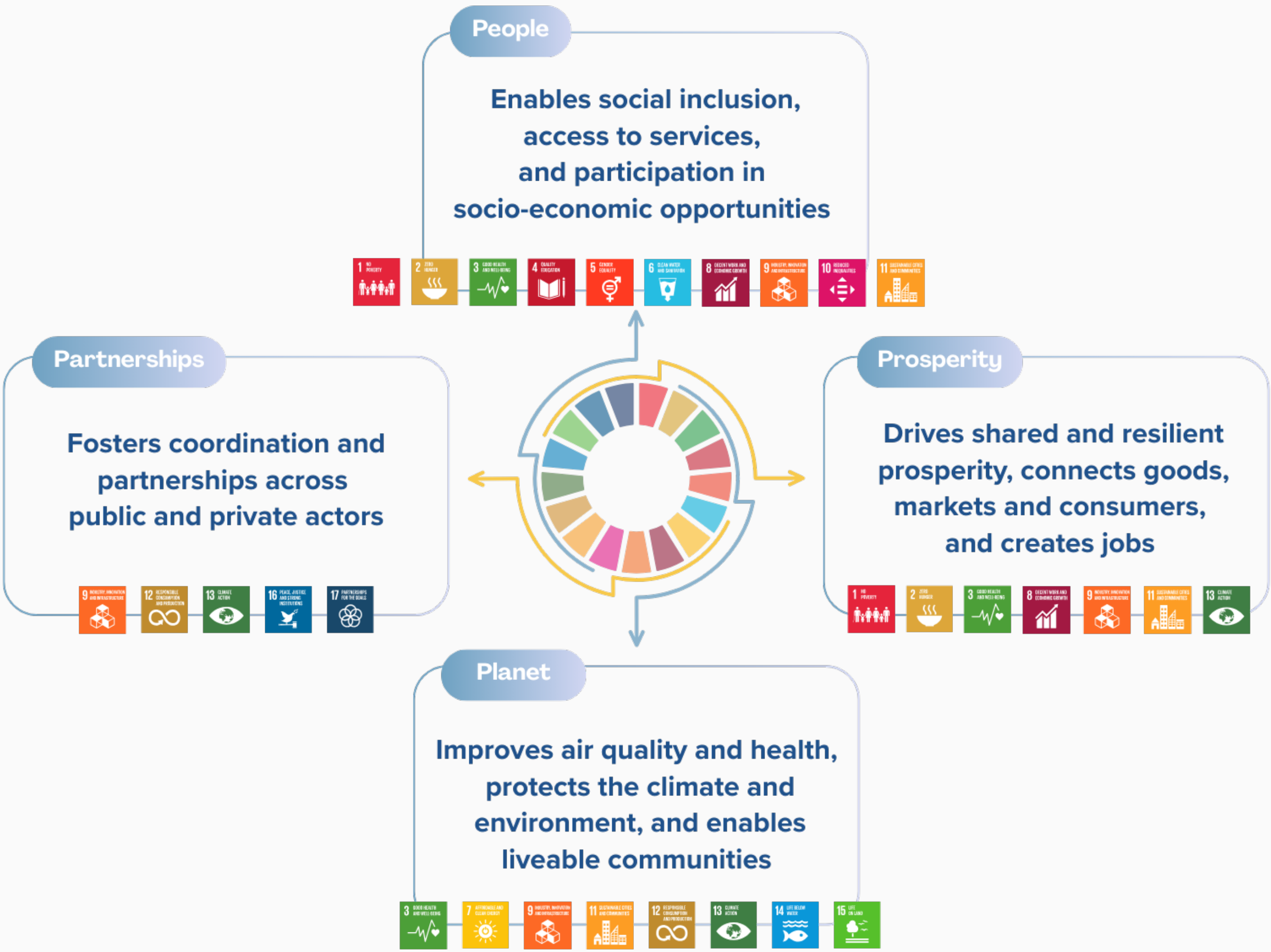
4

Reliable, open-access data informs evidence-based policy, investment, evaluation and improvement

5

Strengthened mechanisms across actors and transport modes, between transport and other sectors, and among UN entities are enabling systemic coordination and international multi-stakeholder cooperation

FIGURE 3. Sustainable transport is the lifeline of thriving communities and economies



MODULE S1

3.0

SPOTLIGHT ON TRANSPORT AMBITION IN NDCS 3.0

FIGURE 1. Benefits of robust transport actions in new NDCs

Boosted investment and prosperity
- Attract funding through robust NDCs
- Create jobs and drive prosperity

Reduced emissions and cleaner cities
- Cut GHG in passenger and freight transport
- Improve air quality and reduce noise pollution

Inclusive, collaborative approaches
- Bring subnational and non-state actors on board
- Ensure more integrated, unified strategies

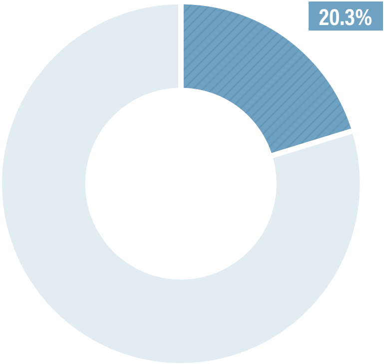
Stronger resilience and energy security
- Move away from fossil fuels
- Better resilience against global shocks

Greater efficiency and cost savings
- Save energy, land, and public funds
- Avoid costly reliance on outdated technologies

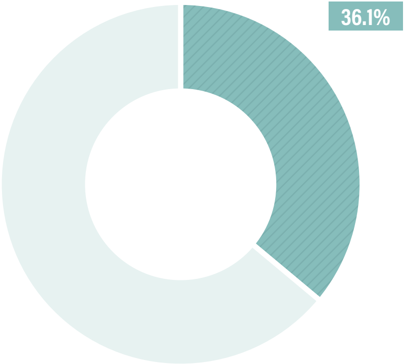
Diversified infrastructure and wider access
- Enhance services for better opportunities
- Build networks that benefit everyone

FIGURE 2. Shares of greenhouse gas emissions covered by third-generation NDCs, as of August 2025

Share of total greenhouse gas emissions covered by 29 third-generation NDCs



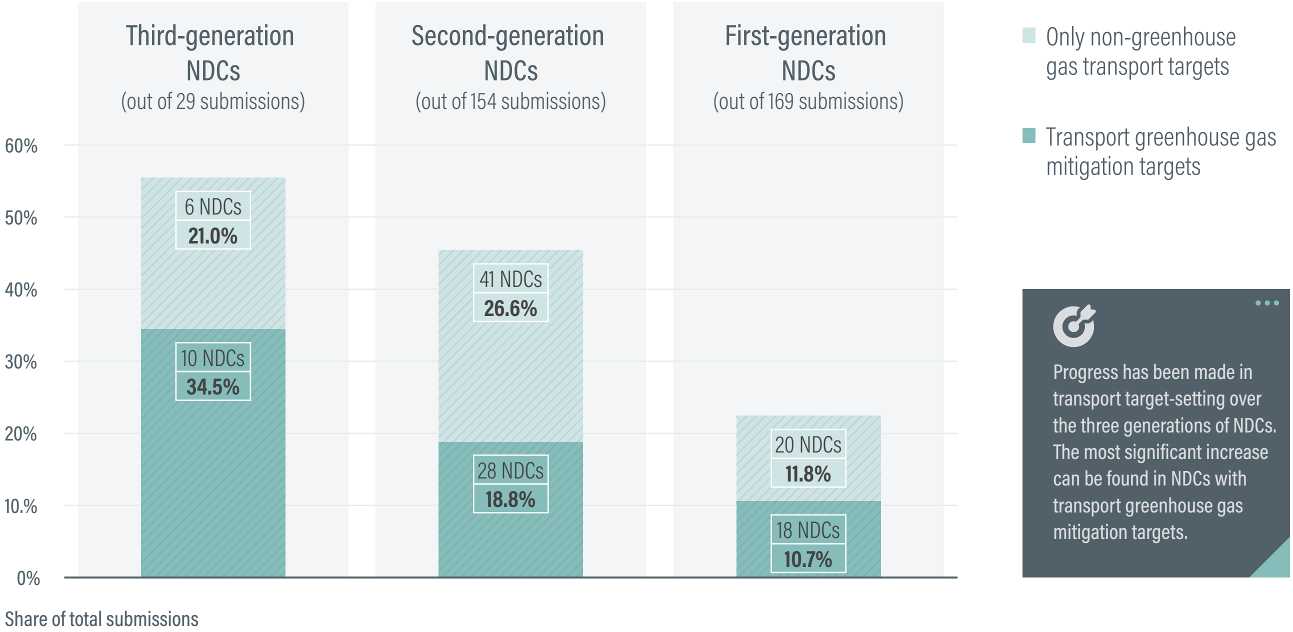
Share of transport greenhouse gas emissions covered by 29 third-generation NDCs



The countries that submitted third-generation NDCs as of August 2025 contributed 20.3% of the world's economy-wide greenhouse gas emissions and 36.1% of global transport emissions in 2023 (excluding international aviation and shipping). This high share of transport emissions was driven by major emitters such as Brazil, Canada, Japan, the United Kingdom and the United States.

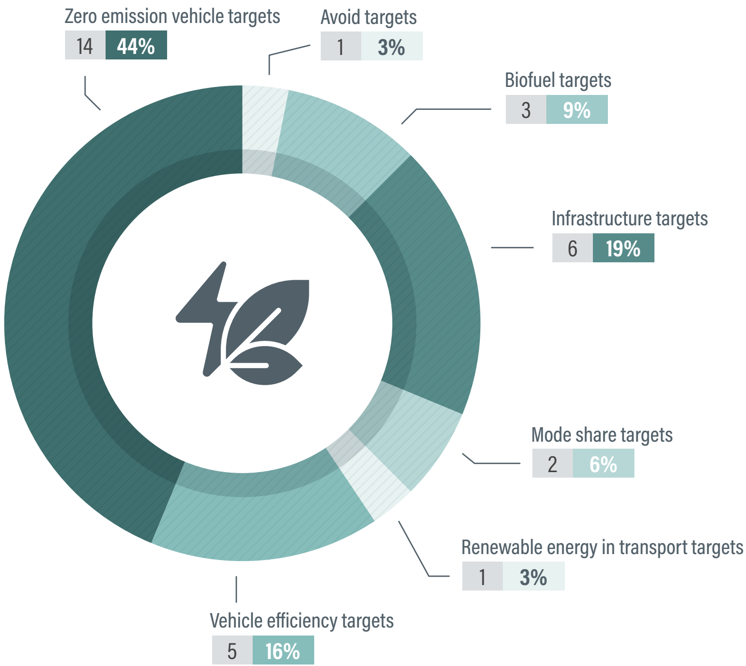
Note: Calculations exclude emissions from international aviation and shipping.

FIGURE 3. Transport targets included in each generation of NDCs, as of August 2025



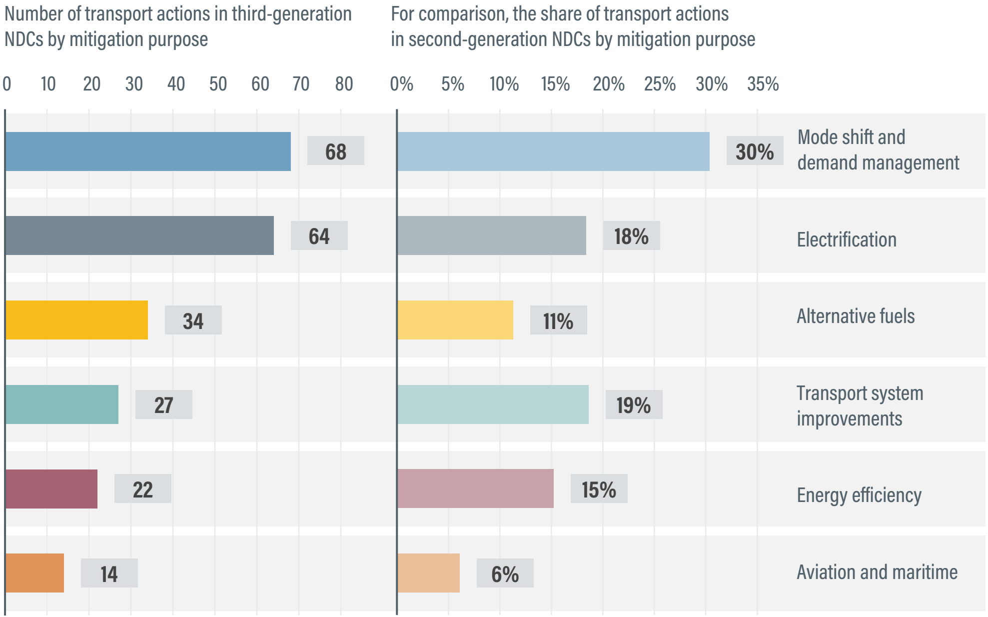
Progress has been made in transport target-setting over the three generations of NDCs. The most significant increase can be found in NDCs with transport greenhouse gas mitigation targets.

FIGURE 4. Non-greenhouse gas transport targets in third-generation NDCs, as of August 2025



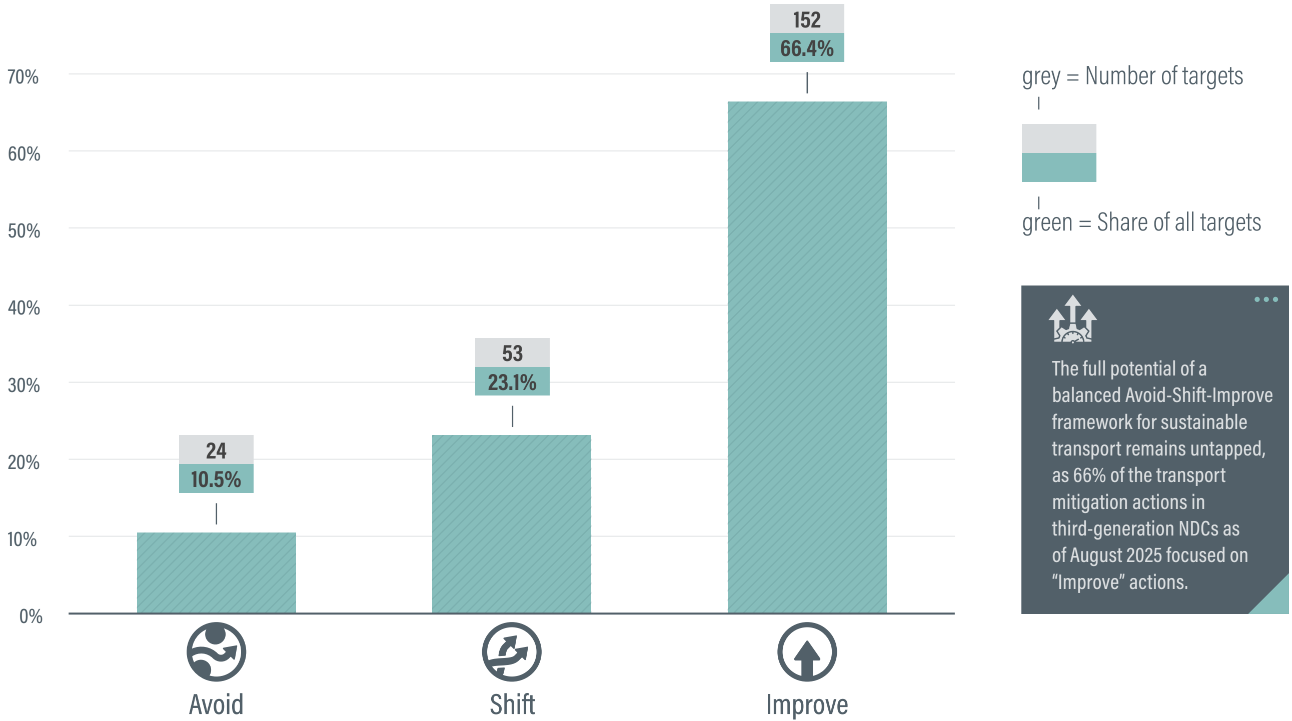
In total, 32 non-greenhouse gas transport targets were included in third-generation NDCs as of August 2025. As with second-generation NDCs, the most common type of non-greenhouse gas transport target was for zero-emission vehicles, accounting for 44% of the total.

FIGURE 5. Emission mitigation actions in third-generation NDCs compared to second-generation NDCs, as of August 2025



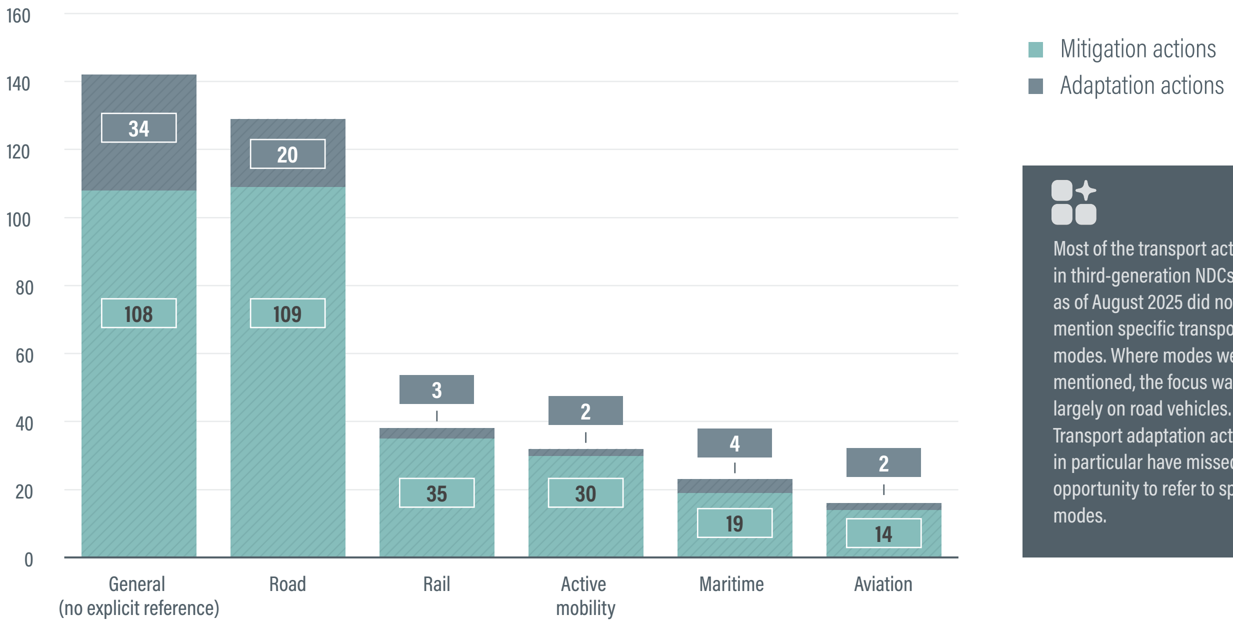
Comparing the second- and third-generation NDCs, as of August 2025, shows that electrification keeps gaining traction, with nearly half of all actions focusing on electrification.

FIGURE 6. Mitigation actions by Avoid, Shift and Improve in third-generation NDCs, as of August 2025



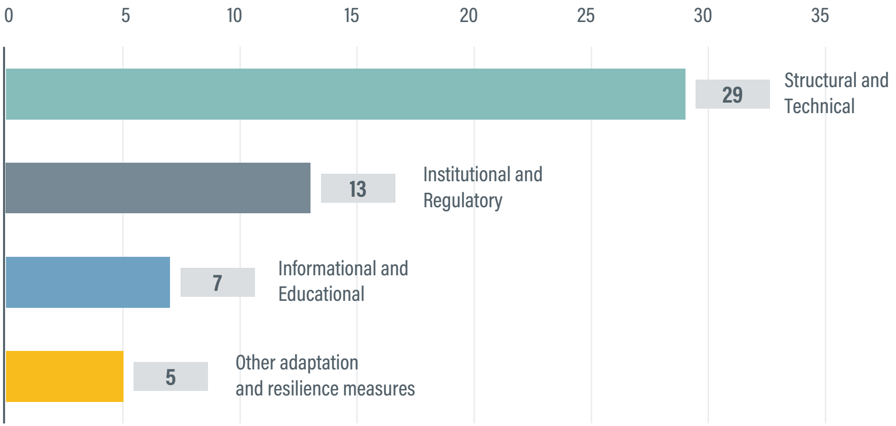
The full potential of a balanced Avoid-Shift-Improve framework for sustainable transport remains untapped, as 66% of the transport mitigation actions in third-generation NDCs as of August 2025 focused on "Improve" actions.

FIGURE 7. Modes referenced in transport actions in third-generation NDCs, as of August 2025



Most of the transport actions in third-generation NDCs as of August 2025 did not mention specific transport modes. Where modes were mentioned, the focus was largely on road vehicles. Transport adaptation actions in particular have missed the opportunity to refer to specific modes.

FIGURE 8. Transport adaptation actions in third-generation NDCs, as of August 2025

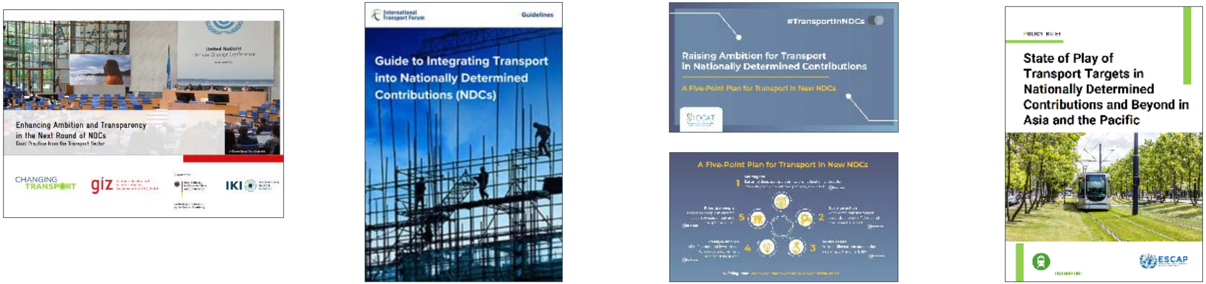


As with earlier NDCs, the transport adaptation actions in third-generation NDCs had a strong focus on structural and technical actions (54% of the NDCs, 29 actions), followed by institutional and regulatory actions (24%, 13 actions).

FIGURE 9. SLOCAT's five-point plan for transport in third-generation NDCs

FIGURE 10. Documents supporting stronger transport actions and commitments in third-generation NDCs

General transport guidance



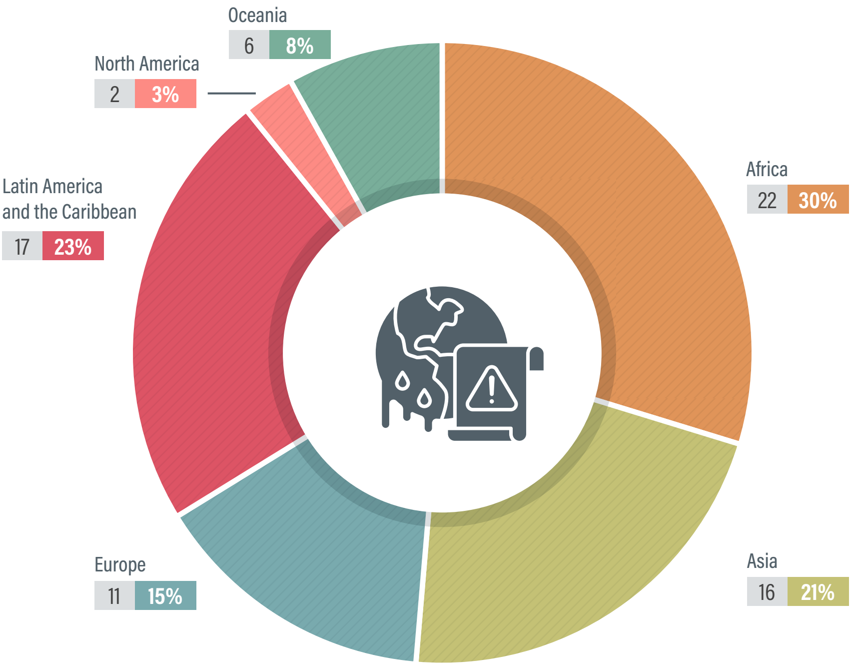
Mode-specific guidance

Active mobility | Popular transport | Public transport | Railways

MODULE S2

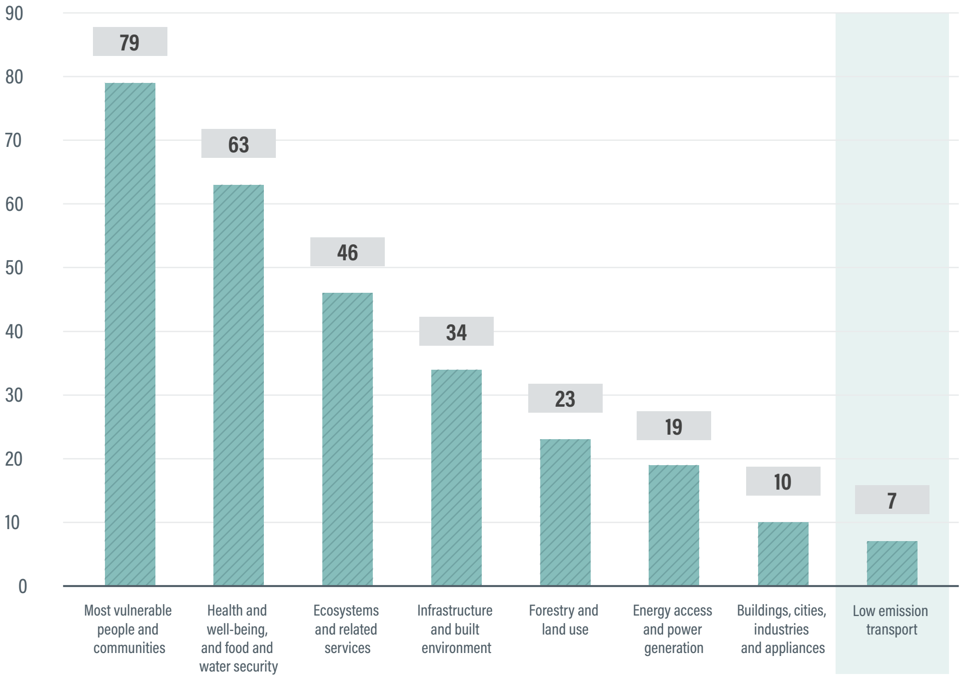
SPOTLIGHT ON TRANSPORT IN NATIONAL ADAPTATION PLANS

FIGURE 1. NAP submissions by region, as of August 2025



As of 1 August 2025, a total of 74 NAPs had been submitted to the UNFCCC. An additional 67 NAPs were in development, and 5 were under draft review.

FIGURE 2. Adaptation projects in countries with NAPs, as of 15 July 2025



While most NAPs include transport, few adaptation projects had been implemented for transport resilience as of 15 July 2025. Despite being well represented in NAPs, low-emission transport accounts for the fewest approved adaptation projects in countries with NAPs.

MODULE S3

SPOTLIGHT ON ASSESSING PROGRESS: THE TRANSPORT DECARBONISATION INDEX

FIGURE 1. The five elements of the TDI's methodological framework

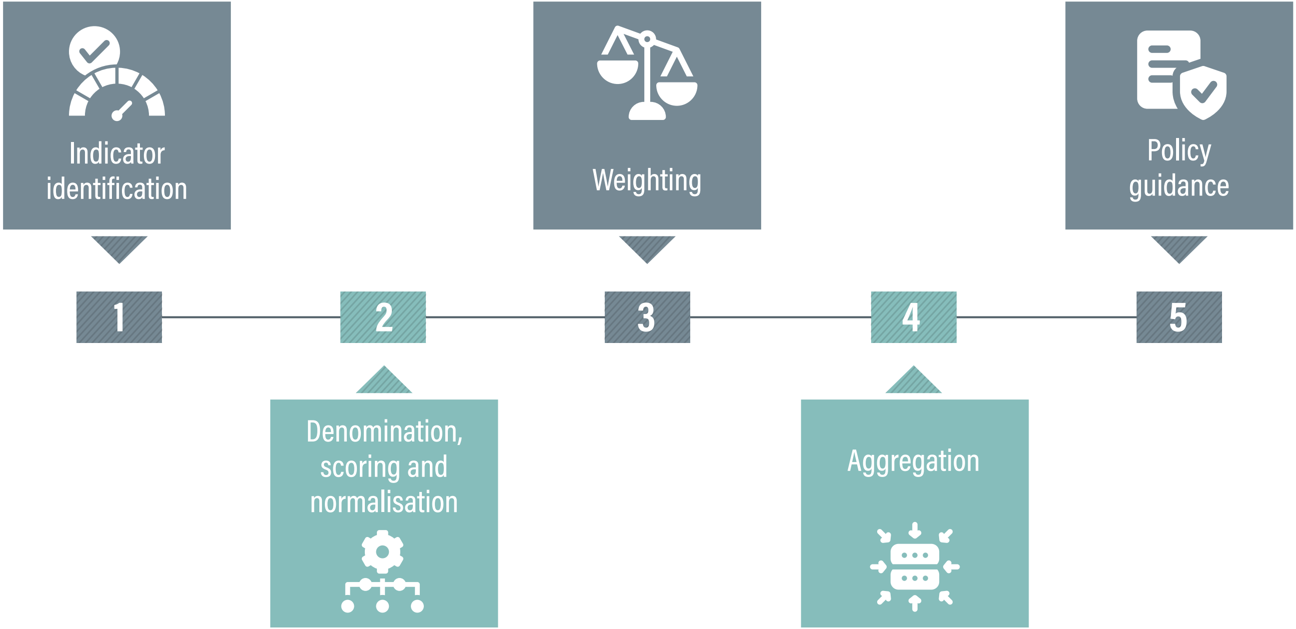
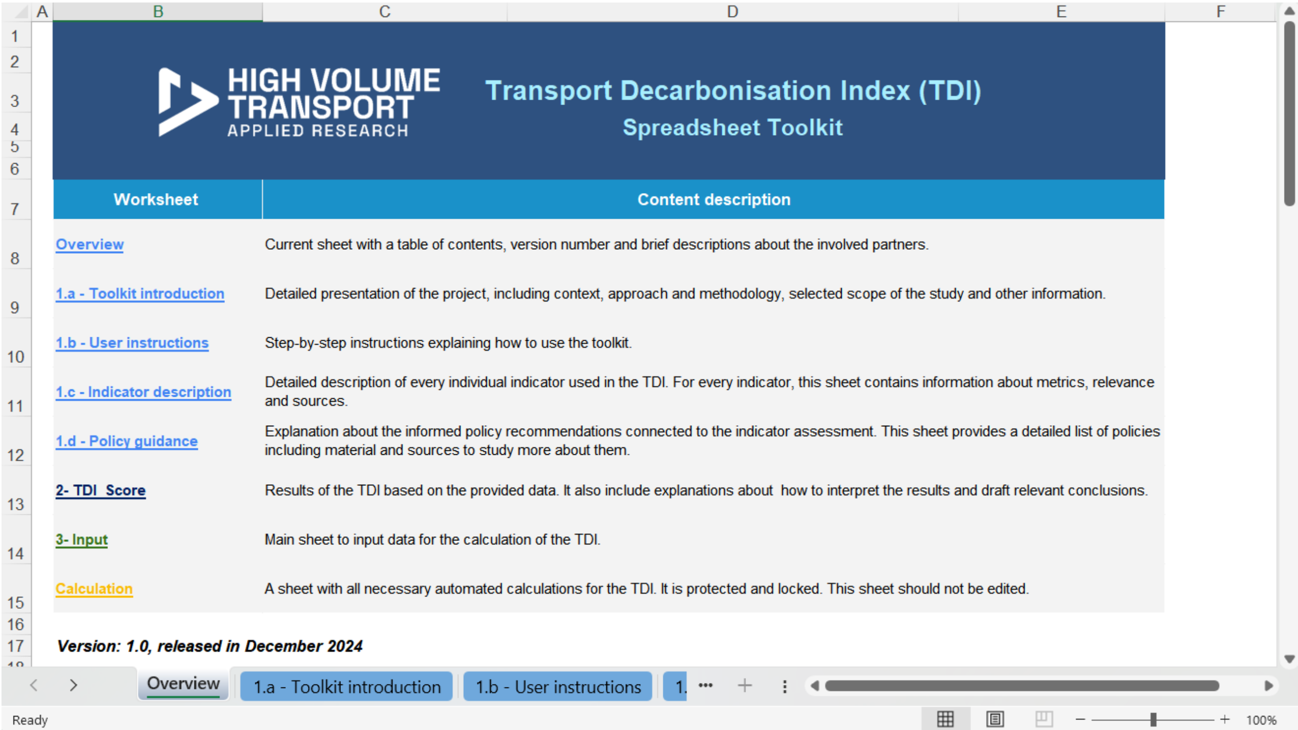


FIGURE 2. Snapshot of the Transport Decarbonisation Index (TDI) Spreadsheet Toolkit



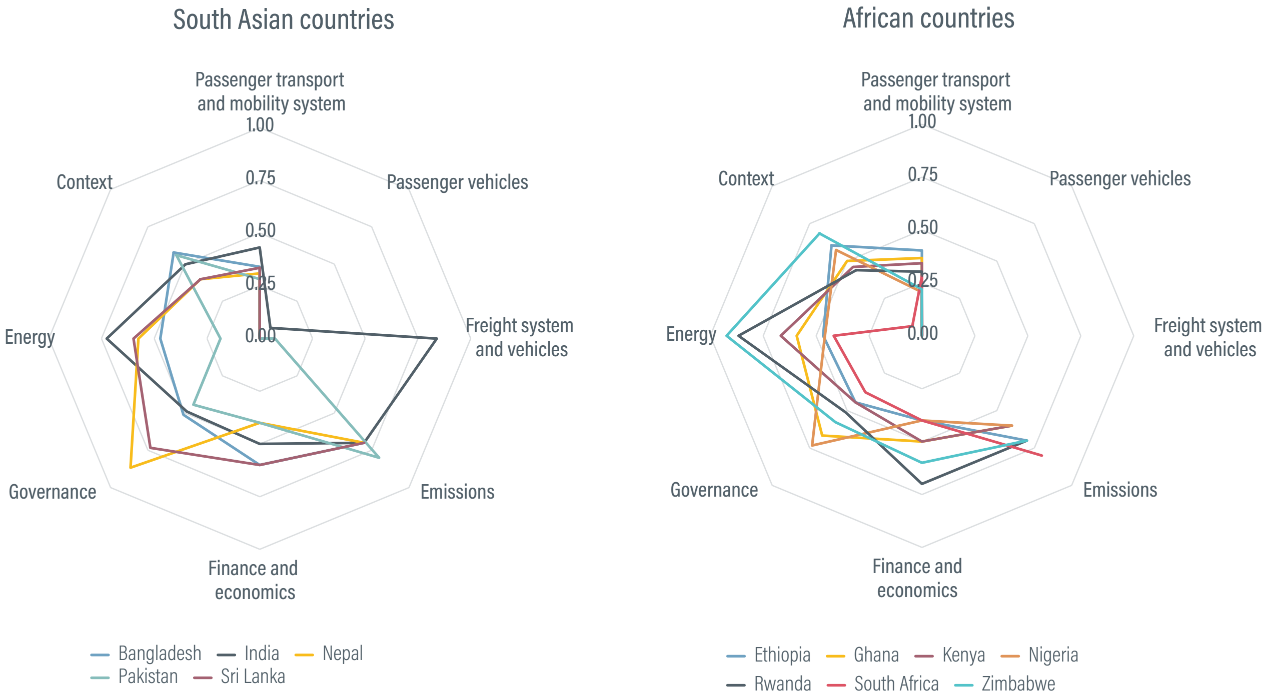
HIGH VOLUME TRANSPORT APPLIED RESEARCH

Transport Decarbonisation Index (TDI)
Spreadsheet Toolkit

Worksheet	Content description
Overview	Current sheet with a table of contents, version number and brief descriptions about the involved partners.
1.a - Toolkit introduction	Detailed presentation of the project, including context, approach and methodology, selected scope of the study and other information.
1.b - User instructions	Step-by-step instructions explaining how to use the toolkit.
1.c - Indicator description	Detailed description of every individual indicator used in the TDI. For every indicator, this sheet contains information about metrics, relevance and sources.
1.d - Policy guidance	Explanation about the informed policy recommendations connected to the indicator assessment. This sheet provides a detailed list of policies including material and sources to study more about them.
2- TDI Score	Results of the TDI based on the provided data. It also include explanations about how to interpret the results and draft relevant conclusions.
3- Input	Main sheet to input data for the calculation of the TDI.
Calculation	A sheet with all necessary automated calculations for the TDI. It is protected and locked. This sheet should not be edited.

Version: 1.0, released in December 2024

FIGURE 3. TDI dimension scores for pilot countries in South Asia and Africa



Higher score is better, which means:

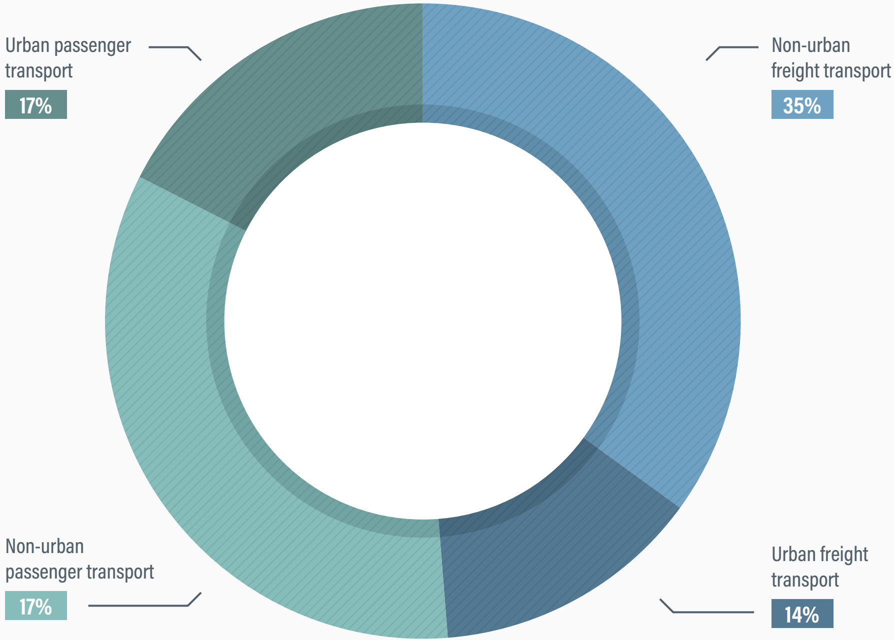
The score ranges from 0 (lowest) to 1 (highest).
A higher score means that a country performs well for the dimension.

MODULE 2.2

SUB-NATIONAL TRANSPORT PATHWAYS TO REACH CLIMATE AND SUSTAINABILITY GOALS

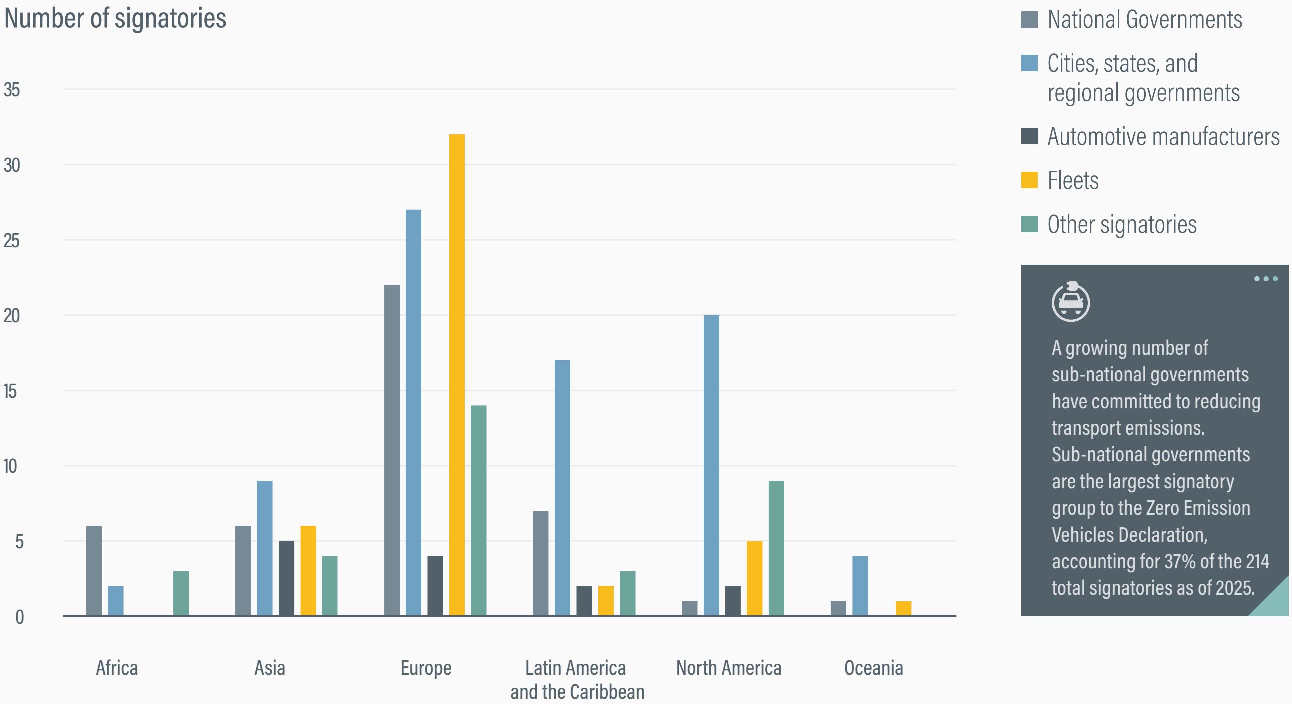
FIGURE 1. Share of urban transport in total transport emissions, 2023

Share of urban transport (passenger and freight) in total transport emissions



Urban transport (passenger and freight) was responsible for an estimated 5% of global greenhouse gas emissions and 31% of total transport emissions in 2023.

FIGURE 2. Signatories of the Zero Emission Vehicles Declaration, by region, as of 2025



A growing number of sub-national governments have committed to reducing transport emissions. Sub-national governments are the largest signatory group to the Zero Emission Vehicles Declaration, accounting for 37% of the 214 total signatories as of 2025.

FIGURES

MODULE 2.3

THE ROLE OF BUSINESS IN CLIMATE AND SUSTAINABILITY ACTION IN TRANSPORT

FIGURE 1. Relationships among private sector actors in the transport system

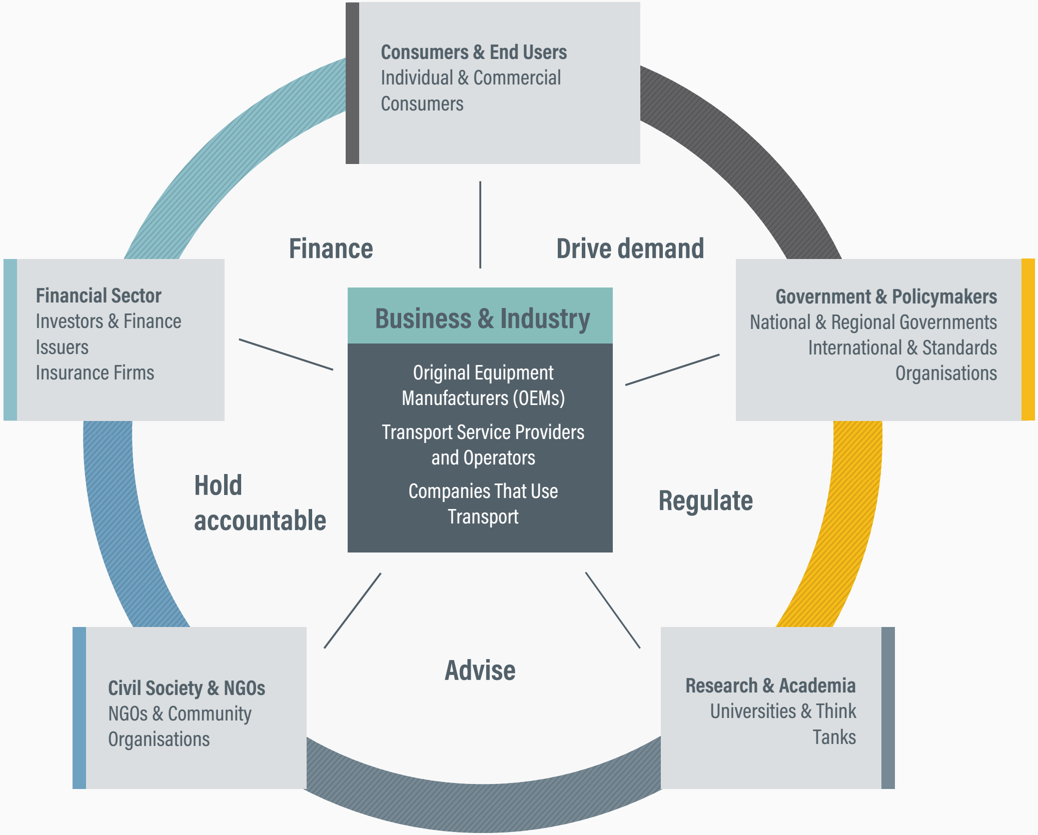


FIGURE 2. The 4 A's of Climate Leadership

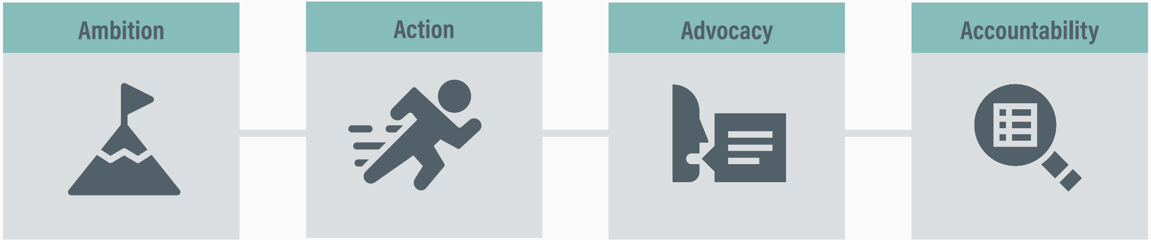
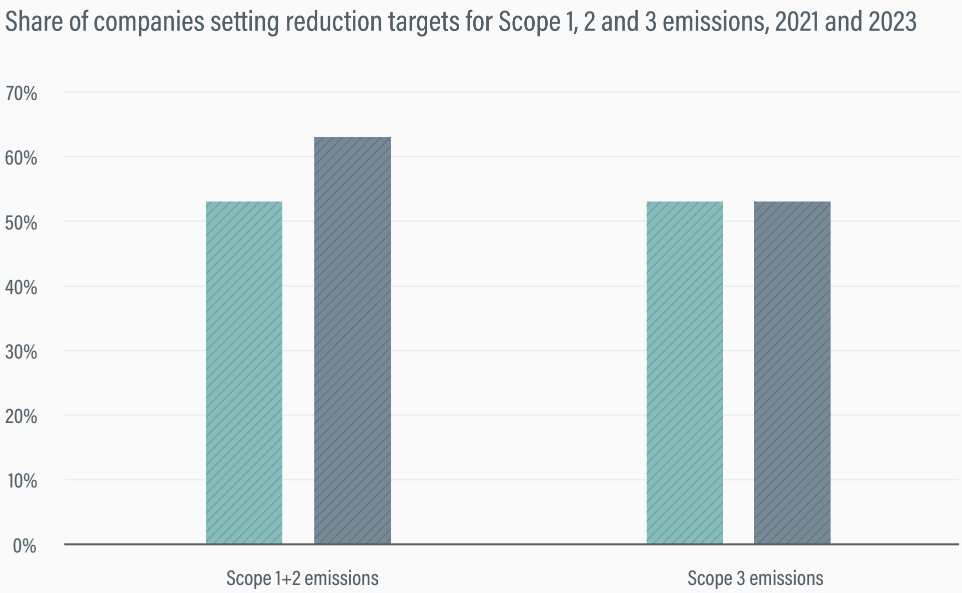


FIGURE 3. Share of automakers setting reduction targets for Scope 1, 2, and 3 emissions, 2021 and 2023



Between 2021 and 2023, the automotive industry saw only a mild improvement in covering emissions from manufacturing (Scope 1 and 2 emissions), while target setting related to emissions from the use of sold vehicles (Scope 3 emissions) stagnated, impeding alignment with 1.5°C pathways.

FIGURE 4. Projected gap in global electric vehicle sales, 2020-2035

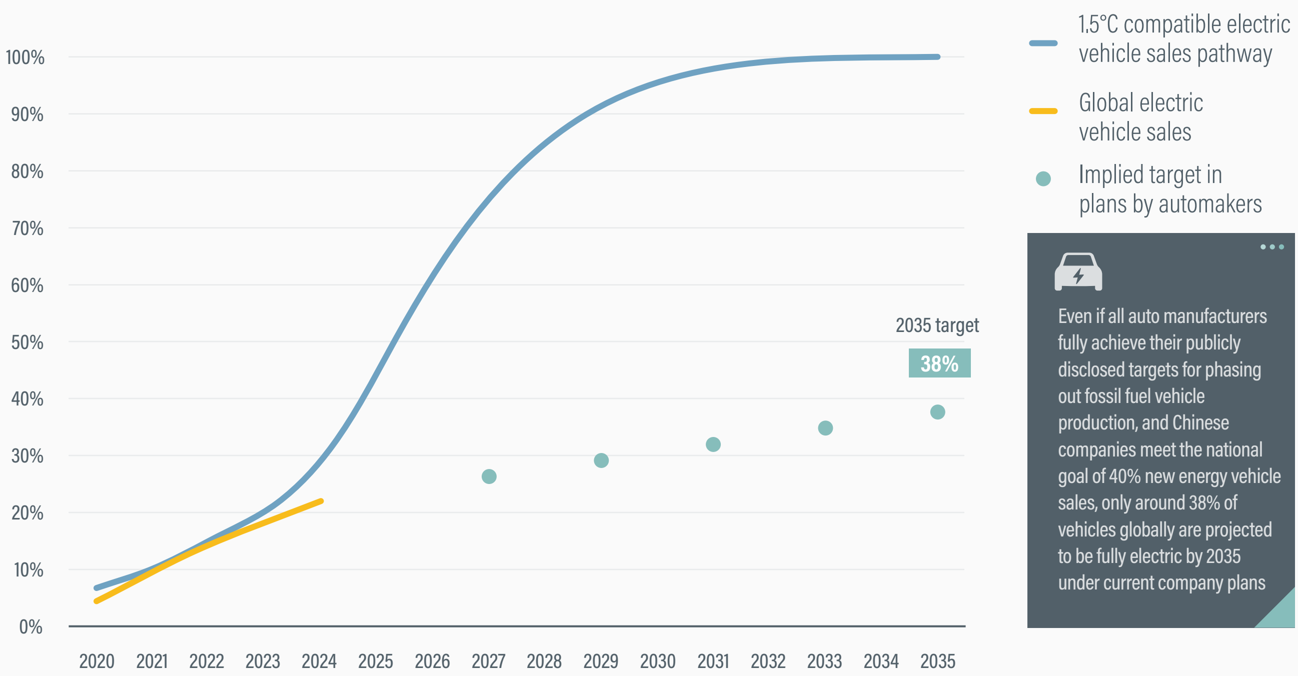


FIGURE 5. Lithium-ion battery manufacturing capacity by region of manufacturer headquarters, 2023

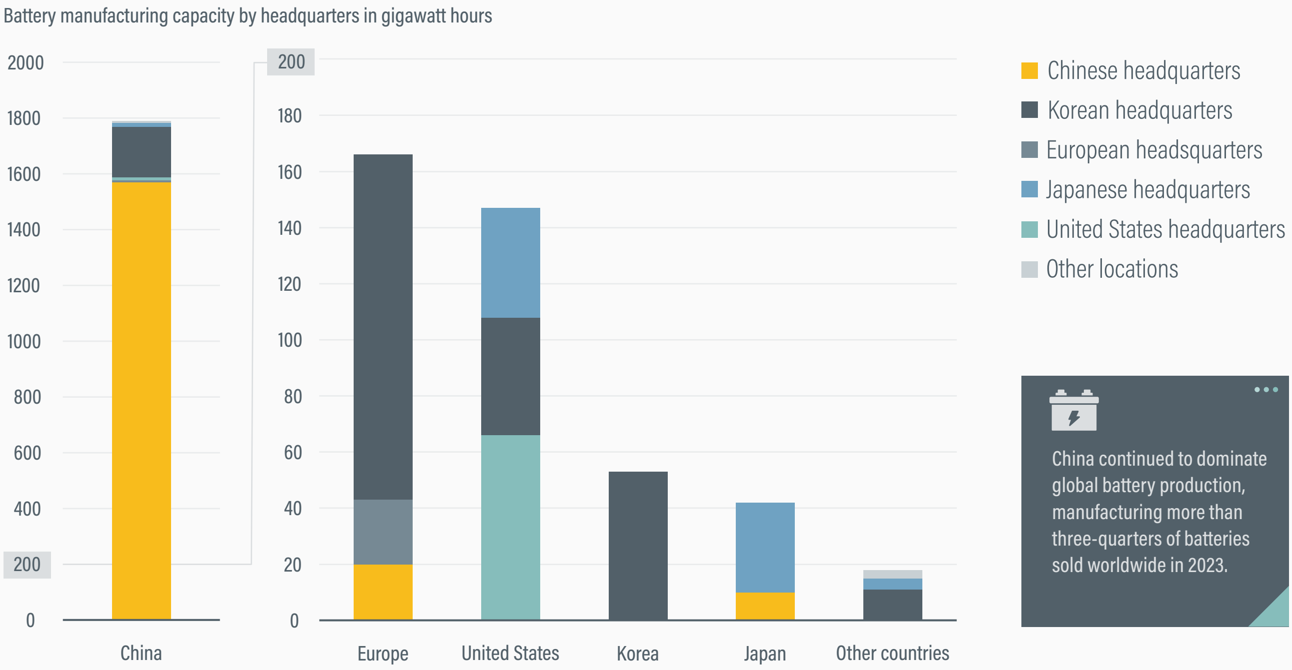
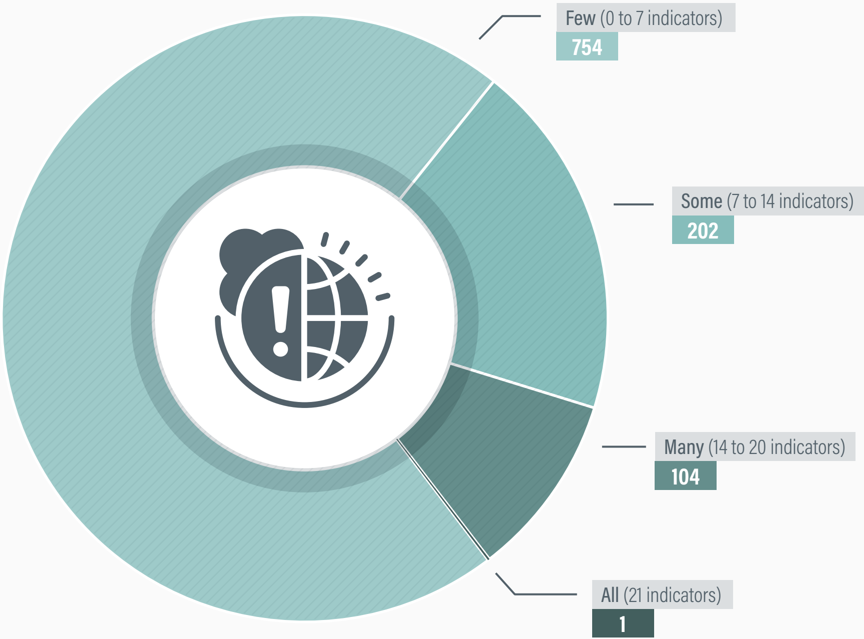


FIGURE 6. Number of key indicators included in Climate Transition Plans of transport service companies



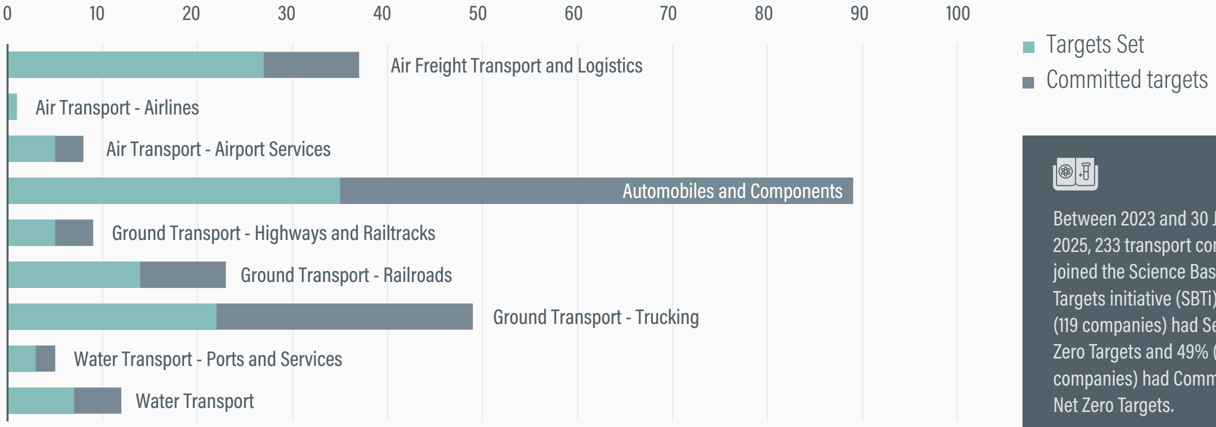
Of the 1,061 transport service companies that disclosed targets to CDP in 2023, only one reported having all 21 key Climate Transition Plan indicators. 71% had few indicators, 19% had some, and just 10% had many.

FIGURE 7. World Benchmarking Alliance scores for policy engagement of transport manufacturers

Type Transport Manufacturer	Country HQ	Company	WBA Indicators score: Company policy on **engagement** with Associations, Alliances, Coalitions or Thinktanks	Associations, Alliances, Coalitions and Thinktanks supported do not have **climate-negative activities or positions**	Position on significant **climate policies**	**Collaboration** with **local public authorities**
Aviation	France	Airbus	50	100	70	50
	USA	Boeing	75	50	70	25
	China	Comac	0	0	0	0
Rail	France	Alstom	40	100	60	75
	China	CRRC Corporation	0	0	0	50
	Switzerland	Stadler Rail	0	50	45	25
Ships	China	China State Shipbuilding	0	0	0	0
	Italy	Fincantieri	0	50	90	50
	South Korea	Hanwha Ocean	0	0	45	0
	South Korea	South Korea Korea Shipbuilding	0	100	30	0
Trucks	Germany	Daimler Truck	40	50	45	50
	USA	PACCAR	50	50	45	25
	Sweden	Scania AB	0	100	70	50
	Sweden	Volvo AB	60	50	90	25

Note: Scores greater than 70-100 = indicators met favourably; scores 40-69 = indicators met averagely; scores 0-40 = indicators met poorly (or unmet if 0).

FIGURE 8. SBTi net zero commitments across transport industry sub-sectors, 2023-2025



Between 2023 and 30 July 2025, 233 transport companies joined the Science Based Targets initiative (SBTi). 51% (119 companies) had Set Net Zero Targets and 49% (114 companies) had Committed to Net Zero Targets.