At a glance

Most Nationally Determined Contributions (NDCs) made by parties to the Paris Agreement lack detail on the sectoral decarbonisation plans and targets required to deliver them.

Transport accounts for 23% of global greenhouse gas (GHG) emissions, making it a vital sector to decarbonise to deliver the goals of the Paris Agreement and close the gap highlighted in the UNFCCC Global Stocktake.

However, only 32% of NDCs include transport carbon dioxide (CO₂) mitigation targets. To deliver the goals of the Paris Agreement, governments need to set out and deliver clear action plans to decarbonise the transport sector.

The ITF has been analysing and tracking transport in NDCs. At COP26, parties were requested to provide yearly updates to their NDCs; therefore, some countries have updated their NDCs ahead of COP28.

Since COP27, only 35 parties have provided an updated NDC in time for COP28.
The transport sector is not on track to decarbonise in line with the Paris Agreement

The UNFCCC Global Stocktake highlighted that while the Paris Agreement has been the driving force behind large-scale ambition and action, the remaining carbon budget will not be met under current plans.

The United Nations notes that countries’ efforts to bend the emissions curve downward are insufficient to limit temperature rises to 1.5°C by 2050. The IEA emphasises that decarbonisation needs to begin immediately, with emissions needing to fall 3% per year until 2030 to achieve Net Zero by 2050.

IPCC analysis suggests that transport needs to decarbonise faster than any other sector and achieve a reduction of 70-80% below 2015 amounts to meet the Paris Agreement commitments. While government and industry have taken action to decarbonise the sector, unfortunately, emissions from the transport sector are not set to fall fast enough to meet the Paris Agreement goals.

The Global Stocktake identifies specific actions for the transport sector to get on track, aligning with the recommendations in the ITF Transport Outlook 2023.

Phasing out internal combustion engine (ICE) vehicles and shifting to electric vehicles are identified as offering the greatest mitigation potential in the sector. Alongside this, governments should implement demand-side interventions, such as shifting to sustainable transport modes (e.g. walking and public transport).

International co-operation on sustainable fuels, energy-efficient design, and data analytics are essential to reduce emissions from international shipping, aviation and freight. ITF analysis has found that countries could still reduce their transport emissions by roughly 80% by 2050.

Furthermore, adopting a “decide and provide” approach for core infrastructure investment as part of a low-carbon pathway will cost 5% less than under the current trajectory.

Governments should provide Paris Agreement-aligned transport emission-reduction targets in their NDCs

Given that the transport sector is not on track to decarbonise in line with the goals of the Paris Agreement, it is unsurprising that transport-related commitments made in first-round NDCs are also insufficient. The chart below shows that while 98% of NDCs now mention transport, only 32% contain specific emission-reduction targets for the transport sector.

Including clear and achievable transport decarbonisation targets in NDCs can help countries enhance their existing NDC ambition and support and bolster their future ambition. Governments should ensure that NDCs include Paris Agreement-aligned transport emission-reduction targets as well as the mitigation measures that will enable the targets to be delivered. This should reflect the importance of “Avoid”, “Shift”, and “Improve" actions.
Transport emission reduction targets must be backed up by domestic action

While incorporating ambitious emissions reduction targets in NDCs underscores a country’s commitment to global decarbonisation, it is crucial to ensure that these targets are effectively implemented through domestic policy.

To deliver a Paris Agreement-aligned reduction of transport emissions, the ITF recommends that governments should:

- set targets to end sales of new internal combustion engine vehicles for both passenger and freight road fleets, roll out sustainable aviation fuels, and encourage the uptake of zero-emission fuels for shipping
- scale up investment in and deployment of infrastructure enabling uptake of more sustainable transport modes
- implement mode-shift and demand-management policies to encourage more sustainable transport modes where they can be most effective
- mobilise finance to support emerging markets and developing economies with their transition.

The 2023 edition of the ITF Transport Outlook examines the impacts of different policy measures on global transport demand and carbon dioxide emissions to 2050. Our analysis covers passenger and freight movement across all transport modes focusing on transport policies that make cities more liveable and on infrastructure investment decisions.