

Proposed Avenues for NDCs

Increasing the Potential of Nationally Determined Contributions (NDCs) for Ambitious Action on Transport and Climate Change

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Proposed Avenues to Increase the Potential of Nationally-Determined Contributions (NDCs) for Ambitious Action on Transport and Climate Change

NDCs represent a unique opportunity to increase bold mitigation and adaptation measures in transport and other sectors, as for the first time, all Parties to the UNFCCC are communicating their commitments to reduce emissions and increase resilience on sectorial scales in the context of the UNFCCC system. SLoCaT has conducted [an analysis](#)¹ to document the treatment of transport in the first generation of NDCs, and to identify key gaps and thus the potential to increase the role of transport in meeting reduction targets.

Among roughly 160 NDCs representing 187 countries that were submitted as of August 1, 2016, 75% explicitly identify the transport sector as a mitigation source, and more than 63% of NDCs propose transport sector-specific mitigation measures. In addition, 9% of NDCs include a transport sector emission reduction target, and 12% of NDCs include assessments of country-level transport mitigation potential.

Transport-related actions in the NDCs are heavily skewed towards passenger transport, which is included in 91% of NDCs identifying specific transport modes. Among these, urban transport measures are mentioned in 74% of NDCs, and heavy rail and inland waterways are also well represented, while strategies such as high-speed rail (2%), aviation (5%), and walking and cycling (14%) have received relatively less attention.

Figure 1 gives a breakdown of relative focus on passenger and freight transport in NDCs, as well as describing the share of NDCs focusing on various transport sub-sectors.

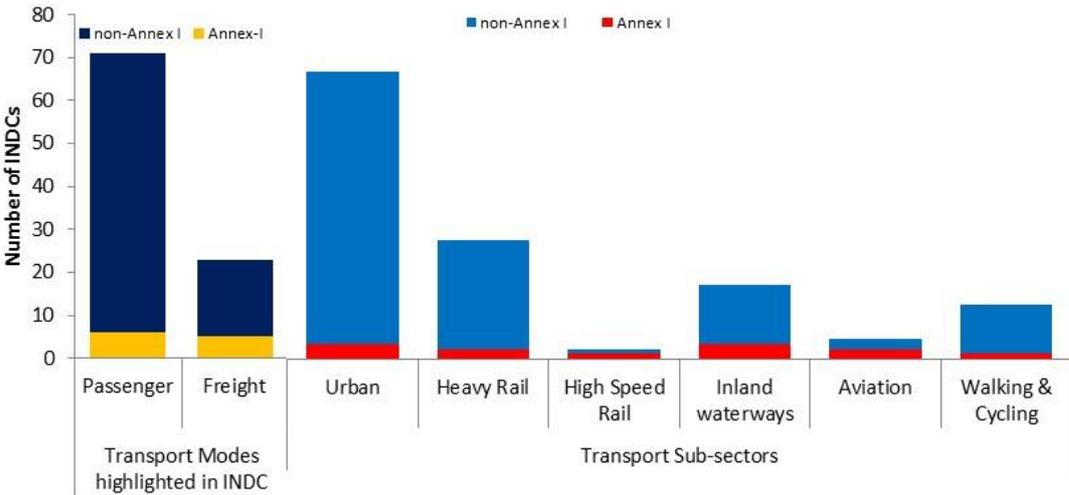


Figure 1: Share of Mitigation Measures in NDCs by Mode and Sub-Sector

¹ http://www.ppmc-transport.org/overview_indcs/

Figure 2 gives a more detailed typology of transport mitigation strategies, as distinguished among countries of different income categories.

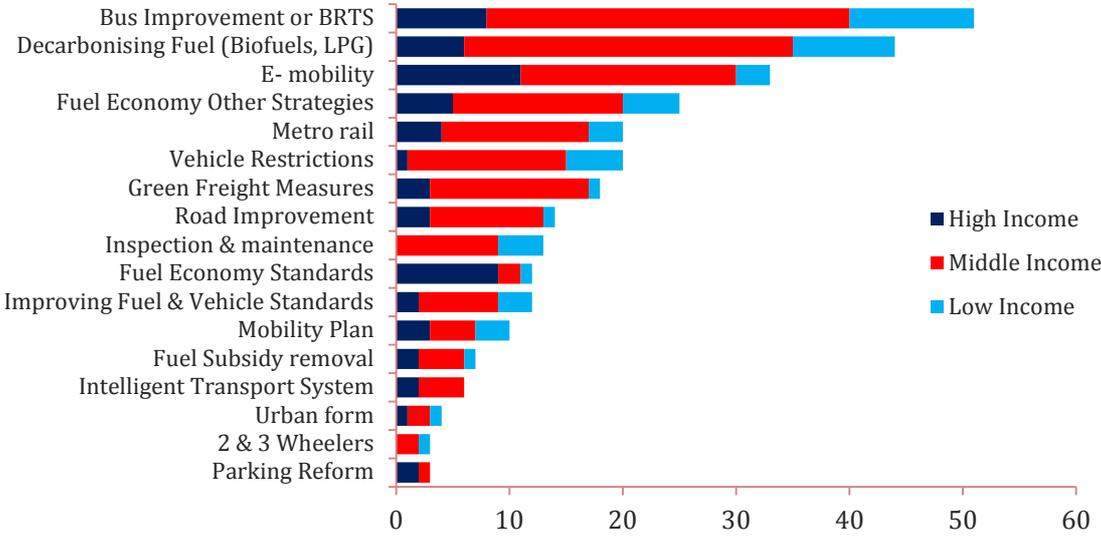


Figure 2: Typology of Transport Mitigation Strategies in NDCs

On an economy-wide scale, mitigation measures proposed in NDCs are expected to fall well short of a 2 degree scenario (2DS), let alone a more ambitious 1.5 degree scenario (1.5DS). Based on existing transport related policies and levels of ambition expressed in NDCs, the transport sector will also not attain a 2DS by 2030 through the targets and measures proposed.² In order to achieve deeper emission cuts that would put the transport sector on track for a 2DS and 1.5 DS, transport mitigation ambition as expressed in NDCs will need to be intensified, and additional transport measures would need to be prioritized in implementation strategies.

Furthermore, climate adaptation, despite being mentioned in an economy-wide scope in 83% of 160 NDCs submitted to date, has generally received much less attention in NDCs than mitigation strategies, as outlined above. As stated, the transport sector is mentioned in general terms among climate adaptation measures in only 16% of NDCs, and an even smaller number of countries (4%) identify transport-specific adaptation strategies.

SLoCaT’s updated NDC report together with the preliminary results of an assessment of transport sector involvement in NDC development processes led by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and funded by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) provide the following set of propositions that can help ensure that current commitments materialize and are further intensified.

² See [“Implications of 2DS and 1.5DS for Land Transport Carbon Emissions in 2050.”](#)

Proposition 1: Improve understanding of the transport sector's GHG reduction potentials and related co-benefits

As presented above, so far only a few countries have included quantified emission reduction targets for the transport sector in their NDCs. Even countries with high-growth projections for the transport sector may neglect future emission impacts of transport and the potential of mitigation measures. One reason for this is seen to be **insufficient data availability and data access that hamper comprehensive assessments of transport GHG emissions** and their development over time. As a result, the transport sector may not be seen as a significant emission source, or effective transport mitigation actions may not have been properly considered in NDCs. In other cases, only conservative estimates of mitigation potential may have been provided, as actual mitigation potential could not be assessed. Better understanding of mitigation potential at national levels will help Parties in ratcheting up transport mitigation targets in successive iterations of NDCs.³

In addition, improved **understanding of additional sustainability benefits of transport sector mitigation actions** (in addition to reducing carbon emissions) may help prioritizing transport actions. Many mitigation measures contribute to better air quality, congestion reduction and increased public health, all of which spur prosperity and well-being but may not be fully considered in the definition of NDCs by government ministries.

Proposed avenues for action

- **Support recurring and periodical data collection** to allow for more comprehensive quantification of national transport emissions and mitigation potential. Establishing rules and responsibilities to set up activity based (**bottom-up**) **transport emission inventories** institutionalize the establishment of a better database over time. This will also facilitate an effective transparency framework and improve measurement, reporting and verification (MRV) of transport sector contributions in NDC implementation. Emerging technologies (e.g. GPS-based devices) could help to improve the quality, frequency, and affordability of collecting and analyzing transport data.
- **Encourage parties to leverage existing methodologies and quantitative tools** for emissions calculations that can help optimize transport sector mitigation ambitions. GIZ, in cooperation with SLoCaT, is developing the Transport Volume to the Compendium on Baselines and Monitoring methodologies, which is coordinated by the UNFCCC Secretariat. The Transport Volume will provide a guidebook to existing quantification methodologies and tools.
- **Promote the sustainability benefits of transport mitigation actions**, especially in light of spurring further economic growth and contributing to increased public health, especially in urban areas. This will also help national policy makers to **better understand the contribution** of transport mitigation actions **to achieving the Sustainable Development Goals**.

³ See "[Implications of 2DS and 1.5DS for Land Transport Carbon Emissions in 2050](#)", Annex III.

Proposition 2: Spur dialogue and cooperation among relevant national and regional stakeholders

Proposed transport mitigation measures in NDCs may not always fully reflect available transport sector expertise, and conversely, many relevant transport sector stakeholders (including non-state actors) may have only had a peripheral involvement in the NDC development processes. As a result, the potential of transport mitigation actions may not be fully understood by all stakeholders, and/or set mitigation targets may not penetrate to the relevant transport sector stakeholders – in either case hampering the implementation of ambitious transport sector targets. Similarly, regional expertise from countries with common demographic trends and development priorities (and which face similar transport challenges), may not have been considered in the short time available before COP21 to produce the first iteration of NDCs.

Proposed avenues for action

- **Stimulate a participatory NDC revision and implementation process** as well as institutional cooperation among relevant stakeholders to increase mutual understanding of transport sector-specific and climate change ambition levels. This will drive long-term mitigation strategies and realistic implementation plans that can be followed and improved. **Participatory sectoral scenario development processes** may be one possible way forward to prepare the forthcoming global stocktake in 2018 and subsequent NDC revision.
- **Spur regional dialogue** among countries so that they can mutually benefit from their respective expertise in developing transport mitigation actions, which can incorporate the important added benefit of driving further economic growth.
- **Leverage global expertise** from non-state actors, including from civil society and the private sector, to help refine and expand country context-sensitive transport-specific mitigation and adaptation strategies.

Proposition 3: Support cost assessments of transport climate action plans and help identify funding avenues for implementation

Without conducting proper cost assessments, **parties may strive for a non-optimal mix of (transport) mitigation actions and/or may be deprived from relevant funds**. Assessing the costs of transport mitigation measures is key to ensuring that stakeholders fully grasp the potential cost-effectiveness (or even cost-negative potential) of relevant transport mitigation measures, so that these can be prioritized and so that well-motivated transport action plans can be established. Cost assessments are also essential to generating needed funding for transport mitigation measures that have been approved and are deemed suitable for implementation.

In the early stages of the NDC revision and implementation process, cost assessments should also explore funding needs for activities that can help develop local expertise and cooperative approaches to implementation of sustainable transport projects among relevant stakeholders.

Proposed avenues for action

- **Develop well-motivated transport climate action plans** that consider financial constraints, requirements on capacity development and needs for knowledge transfer from the international community to local experts, policy makers, and implementing agencies
- **Assess costs of proposed mitigation measures** in climate action plans as first step to generate required funding
- **Identify funding avenues.** National strategies for budget allocation and generation of additional funding could be complemented by the continued elimination of fossil fuel subsidies in national policies. Parties can make use of international support and guidance in accessing international funds for implementing transport mitigation actions.

The Paris Agreement on Climate Change has numerous implications for solidifying the position of NDCs within the UNFCCC framework.⁴ The Agreement's requirement to increase ambition to a target of well below the 2DS and pursuing efforts to reach a 1.5DS is a strong call to accelerate the decarbonization of the transport sector. The Agreement further establishes that all countries should present National Adaptation Plans (NAPs) and that NDCs should contain nationally determined contributions on adaptation.

In summary, if we have weak pre-2020 efforts and inadequate 2020-2025 NDCs, it is likely that the transport sector could follow a trajectory that would make a 1.5DS increasingly unachievable by 2050. This trend sends a clear message that there is need for disruptive change, and crucially greater ambition in NDCs as incremental approaches will be insufficient for needed reductions.⁵

⁴ <http://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf>

⁵ SLoCaT (2015). "COP21 Final Preliminary Report" SLoCaT Partnership. December. Refer [<http://bit.ly/2cyc2hw>].

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