

Inputs to the Mitigation Work Programme - Transport

Prepared by the SLOCAT Partnership Secretariat - February 2023

This document suggests **key topics on mitigation challenges and opportunities in the transport sector**. The suggested topics serve to show that the Mitigation Work Programme must include a robust sectoral approach in its work, consistent with *Decision -/CMA.4*, paragraph 4, which states:

'[The] scope of the work programme should be based on [broad thematic areas](#) relevant to urgently scaling up mitigation ambition and implementation in this critical decade and include all sectors covered in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories of the Intergovernmental Panel on Climate Change, thematic areas in the contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, and relevant enabling conditions, technologies, just transitions and cross-cutting issues'

Thematic Area 1: Thematic areas and sectors with high potential for emission reductions informed by the contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change

- **Topic: Transport carbon emissions reduction pathways.** Scenario literature suggests that global warming targets require economy-wide emission reduction measures, and the mitigation potential of transport electrification in particular depends heavily on the decarbonisation of the power sector. Compared to 2010, transport-related emissions could increase by 65% in 2050 without mitigation measures while could reduce by 68% if the mitigation strategy is successfully deployed, which is also in line with the 1.5°C temperature rise target. (Source: [Interpretation of IPCC AR6 report: transportation carbon emissions reduction pathways strengthening technology and management innovation](#))

Thematic Area 9: 2030 emissions gap for specific sectors

- **Topic: Mitigation potential of transport to reduce sectoral emissions gap.** Low-carbon transport measures are becoming increasingly efficient and lead to a more positive trend than previously projected. Whereas previously (in 2017) the emission gap was estimated to reach 16 gigatonnes of CO₂ by 2050, new estimates (based on studies up to 2019) show a gap of around 12 gigatonnes. (Source: [SLOCAT Transport and Climate Change Global Status Report, 2nd Edition](#))

Thematic Area 25: Support for developing LT-LEDS

- **Topic: Support for low-income countries in development and implementation of NDCs and LTS.** While two thirds of low-income countries have submitted second-generation NDCs, no low-income country has submitted a LTS as of October 2021. NDCs and LTS are an important opportunity for countries to express need for international support, so engagement in this

process is especially important for low-income countries. (Source: [Tracker of Climate Strategies for Transport](#))

Thematic Area 31: Sectoral initiatives proposed at the United Nations 2019 Climate Action Summit and those proposed by subsequent COP Presidencies

- **Topic A: [Climate-friendly Transport Initiative \(ACT\)](#)** - Launched at the 2019 UN Climate Action Summit, the ACT Initiative aims to catalyse transport as an enabler of sustainable development in line with the 2030 Agenda for Sustainable Development and the Paris Agreement.
- **Topic B: [COP26 transport initiatives commitments](#)** - A number of initiatives were launched at COP26, including the Zero Emission Vehicle Transition Council (ZEVTC) and its International Assistance Task Force (IAT), as well as the Global Memorandum of Understanding on Medium and Heavy Duty Vehicles. These initiatives are helping to bring about the transformation of transport in meaningful ways.
- **Topic C: [Low Carbon Transport for Urban Sustainability \(LOTUS\)](#)** - This initiative of the COP27 Presidency included a wide multi-stakeholder consultative process that has convened a coalition of key transport actors working to tackle systemic challenges in the realm of urban mobility.

Thematic Area 32: Global study of mitigation potential to identify least-cost mitigation opportunities

- **Topic: Global study of transport sector mitigation potential.** Many global studies assert that it is difficult for the transport sector to decarbonise and to contribute its proportional share to the ambitious climate targets set by the Paris Agreement. We challenge this argument by establishing that deep decarbonisation is possible in the transport sector, through original research anchored in a global meta-analysis of long-term transport sector emission pathways from over 500 bottom-up modelling estimates from 81 countries, rather than relying on aggregated regional data and modelling efforts. (Source: [Decarbonising transport to achieve Paris Agreement targets.](#))

Thematic Area 46: Decarbonisation of hard-to-abate sectors (e.g. aviation, shipping)

- **Topic: Emission reduction strategies for aviation and maritime transport.** Alternative fuels for marine and aviation require deployment targets, regulatory changes, research and development programs and demonstration trials. For the first time, the IPCC AR6 separates the shipping and aviation sectors to discuss their GHG emissions trends and the decarbonisation opportunities and challenges they face. (Source: [Interpretation of IPCC AR6 report: transportation carbon emissions reduction pathways strengthening technology and management innovation](#))

More information on the full spectrum of global transport emissions and policy solutions are available in the [SLOCAT Transport and Climate Change Global Status Report, 2nd Edition](#).