



Executive Summary

This paper provides key messages for climate change negotiators and policy makers on the potential contribution of the land transport sector to global climate change mitigation strategies. The report summarises key facts on the mitigation potential in the land transport sector for both passenger and freight, institutional and global governance perspectives and financing requirements.

The report argues that the transport sector can make a substantial contribution to global stabilisation pathways that can keep warming below 2 Degrees Celsius above pre-industrial levels. Effective mitigation of Greenhouse Gas (GHG) emissions from land transport requires comprehensive strategies that combine measures to avoid the need for individualized motorized trips with measures to shift passenger and freight transport to the most effective mode, while improving the energy efficiency of fuels and vehicles. Cost-effective climate change mitigations strategies for the transport sector are readily available and have been tested as scale. An integrated approach to sustainable transport not only reduces GHG emissions, but can also make a substantial contribution to other objectives, such as air quality, safety, energy security, mobility access and productivity. This is also reflected in the transport related targets in the proposed Sustainable Development Goals.

The report emphasises that as energy demand in the transport sector is rapidly increasing, it is important to act now. Concerted efforts across all modes of transport are required to move towards a stabilisation pathway that keeps warming below 2 Degrees above pre-industrial levels. Analysis presented in the report concludes that while absolute reductions are required in GHG emissions from land transport in the developed OECD economies that relative reductions in the non-OECD countries would allow for a limited growth in absolute emissions in non-OECD countries. This will enable these countries to meet growing travel demand in support of poverty alleviation, economic growth and social development, but doing so more efficiently.

New evidence is presented on the mitigation potential of mode shifting, in particular for urban passenger transport, which is found to be greater than previously reported. This is in line with the IPCC Fifth Assessment Report, which also concluded that the mitigation potential of transport is greater than in previous assessments.

A shift towards low-carbon mobility could potentially result in savings of up \$100 trillion in public and private spending on transportation vehicle and infrastructure and vehicle capital and operating costs along with fuel costs, primarily from a reduction in road construction requirements and vehicle purchase requirements. This does not yet factor in the economic impacts of co-benefits related to safety, air quality, reduced congestion and energy security.

UNFCCC mechanisms, especially those related to funding, had in the past limited effectiveness in promoting low-carbon transport. Recent changes bode well,



Bridging the gap

Pathways for transport in the post 2020 process

however, for the transport sector. The Intended Nationally Determined Communications (INDC) as well as the NAMA concept can both stimulate the interest in low-carbon transport. The initial conceptual design of the Green Climate Fund, which acknowledges low-carbon transport as one out of four key programs, emphasizes a programmatic approach over a narrower project based approach. This supports the comprehensive mitigation approach recommended in this report.

Although the overall economic impact of low-carbon transport is found to be highly positive there are substantive costs linked to the transformation of the current mostly car dependent transport infrastructure and systems. Part of these transformational costs can be passed on to the users of transport, e.g. in the case of improved fuel economy. In other cases beneficiaries of low-carbon transport will be able to contribute through e.g. capture of increased land values resulting from public transport. The report recommends a change in approach to the financing of low-carbon transport especially in the case of Climate Finance and Overseas Development Assistance. Increasingly such funds should be used to leverage a greater involvement of public and private sector funds for the realization of low-carbon transport infrastructure and services.

The transport related commitments at the Secretary General's Climate Summit on urban electric mobility, railways and public transport under the Transport Action Area; as well as the fuel economy commitment under the Energy Action Area and the Green Freight Commitment under the Industry Action Area aim to make a substantial impact on the future emissions from land transport. The messages in this paper can enhance their scaling up and thereby their impact on both climate change and sustainable development.