

MITIGATING TRANSPORT EMISSIONS IN DEVELOPING COUNTRIES: RECOMMENDATIONS TO THE CLIMATE NEGOTIATIONS IN CANCUN, MEXICO¹

Recommendation 1: Better integrate land transport to prevent developing countries from becoming giant emitters

A new global agreement on climate change is the stake in Cancun. Its implementation will greatly influence progress in addressing climate change in both developed and developing countries. The ambition level in terms of GHG emission reductions should follow the 4th Assessment Report of IPCC, the Bali Action Plan and the Copenhagen Accord, all of which argue in favour of a maximum allowable global temperature increase of 2^o Celsius by 2050. This would require developed countries to reduce GHG emissions 25-40% compared to 1990 levels and developing countries would have to reduce emissions 15-30% below Business as Usual (BAU) by 2020. Applied to land transport in developing countries, this would translate into 0.6-1.3 GtCO₂-eq/yr reduction in 2020². For comparison: the European land transport emissions in 2006 were approximately 1 GtCO₂-eq.³

The current BAU scenario for land transport is however one in which GHG emissions are projected to increase by over 80% by 2050, with the bulk of the increase in transport emissions taking place in

¹ **The Bridging the Gap Initiative (BtG)** was formed at COP14 in Poznan to encourage international recognition that land transport should play a more important role addressing climate change in the post 2012 agreement and to bridge the gap between this sector and climate policy. (see www.transport2012.org). **BtG members are:** German Technical Cooperation, Transport Research Laboratory, Institute for Transportation and Development Policy, International Association for Public Transport and VEOLIA Transport

The Partnership for Sustainable Low Carbon Transport (SLoCaT) was set up in 2009 and works on improving the knowledge on sustainable, low carbon transport, helping develop better policies and catalyze their implementation (see www.slocat.net). **SLoCaT Members are:** African Development Bank (AfDB) * Asian Development Bank (ADB) * Corporación Andina de Fomento (CAF) * Believe Sustainability * Center for Clean Air Policy (CCAP) * Centre for Environment Planning & Technology (CEPT), * Ahmedabad * Center for Science and Environment (CSE) * Center for Sustainable Transport (CTS) Mexico * Center for Transportation and Logistics Studies (PUSTRAL), Gadjah Mada University * Civic Exchange (CE) * Clean Air Initiative for Asian Cities (CAI-Asia) Center * Clean Air Institute (CAI) * German Technical Cooperation (GTZ) * EMBARQ, The WRI Center for Sustainable Transport * Energy Research Center Netherlands (ECN) * Fraunhofer- Institute for Systems and Innovation Research (ISI) * Global Environmental Facility (GEF) * Global Transport Knowledge Partnership (gTKP) * Inter-American Development Bank (IDB) * Interface for Cycling Expertise (I-CE) * International Association for Public Transport (UITP) * International Energy Agency (IEA) * International Transport Forum (ITF) * International Union for the Conservation of Nature (IUCN) * International Union of Railways (UIC) * Institute for Global Environmental Strategies (IGES) * Institute of Urban Transport India (IUTI) * Institute for Transport Policy Studies (ITPS) Institute for Transport and Development Policy (ITDP) * Institute for Transport and Development Policy (ITDP) Europe * Institute of Transport Studies (ITS), University of California, Davis * Korean Transport Institute (KOTI) * Ministry of Land Infrastructure Transport and Tourism, Japan * National Center for Transportation Studies (NCTS), Philippines * Rockefeller Foundation * Society of Indian Automotive Manufacturers (SIAM) * Stockholm Environment Institute (SEI) * The Energy and Resources Institute (TERI) * Transport and Environment (T+E) * Transport Research Laboratory (TRL) * United Nations Center for Regional Development (UNCRD) * United Nations Department for Economic and Social Affairs (UN-DESA) * United Nations Environment Program (UNEP) * University College of London, Department of Civil, Environmental and Geomatic Engineering * University of Transport and Communication (UTCC) Hanoi * VEOLIA Transport * World Street * WWF International

² den Elzen, M. and Höhne, N. (2008) Reductions of greenhouse gas emissions in Annex I and non-Annex I countries for meeting concentration stabilisation targets Climatic Change vol 91, no 3-4, pp249–274

³ IEA (2009). *World Energy Outlook 2009*. ISBN: 978 92 64 06130 9, Paris

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developing countries.⁴ Also, experiences from the developed countries teach us that land transport is one of the toughest sectors to realize emission reductions once high carbon transport patterns are established.⁵

As emissions from transport increase world-wide and especially in developing countries, it will become increasingly difficult post 2012 and especially beyond 2020 to realize emission reduction ambitions without involving land transport. The developing world needs to actively take a low carbon path for their development and transport choices. Transport infrastructure which is being developed now will lock-in emission levels and mobility behaviour for the next decades to come.

Recommendation 2: Combine Avoid-Shift-Improve measures as the basis for effective mitigation action in land transport in developing countries

There is wide spread agreement GHG emissions from the transport sector can be reduced with no impact on economic progress through an integrated and comprehensive approach which **avoids** the need for travel through sound land-use policies and telecommuting, which **shifts** travel to the most efficient modes, e.g. public and non-motorized transport for passenger transport and rail and in-land waterway for freight transport; and which **improves** vehicle and fuel technologies as well as transport facility management and operations to reduce emissions from individual vehicles. Currently, a larger share of carbon neutral trips (NMT, public transport trips) are in the developing countries and the Avoid-Shift-Improve approach has the potential to protect and scale up sustainable, low carbon transport to avoid and arrest future increase in GHG emissions. It is increasingly being used by international organizations to guide their policy and financial assistance to the transport sector in developing countries.

Examples of successful implementation of all three components of the Avoid-Shift-Improve approach are in place now in several developing countries and these are ready for replication and scaling-up, with the help of traditional development assistance, climate financing or by a combination of both. The international development community provides currently already US \$ 25 billion per year to developing countries to improve transport infrastructure and services.

Methodologies have been developed to assess GHG impacts of transport and transport interventions which are now starting to be deployed through the Global Environment Facility, the Clean Technology Fund, or multilateral development banks like the Asian Development Bank and the Inter-American Development Bank.

The land transport community has come together around the theme of transport and climate change to promote the need for comprehensive and coordinated action. Through organizations like Bridging the Gap (BtG) and the Partnership for Sustainable, Low Carbon Transport (SLoCaT), dialogues between the climate change and the transport community have been started which help to create a better understanding of mitigation approaches and financing needs for sustainable, low carbon transport.

⁴ IEA (2009). *World Energy Outlook 2009*. ISBN: 978 92 64 06130 9, Paris

⁵ See : <http://www.eea.europa.eu/publications/towards-a-resource-efficient-transport-system>

Recommendation 3: Raise the profile of sectors, including the transport sector, in the discussion on future agreement on climate change

It is hoped that the climate talks in Cancun will make headway in discussing climate financing and the use of Nationally Appropriate Mitigation Actions (NAMAs) to utilize new and additional climate finance to stimulate changes in transport policy. It is important that the discussions on finance and NAMAs acknowledge the specific and unique characteristics of individual sectors, especially land transport. The negotiations on a future climate change agreement have so far not included a specific sector focus apart from the discussions on Reducing Emissions from Deforestation and Forest Degradation (REDD) and agriculture. Yet, the success of any future global agreement will depend largely on the manner in which the different sectors will implement emission reductions agreed upon in a new agreement.

There are considerable differences between the transport sector and other sectors, such as power and energy, in the sheer number of sources and in the complexity of calculating emissions for the sector. Transport typically has small emissions divided over a large number of individual sources, who all behave in their own individual manner.

It is important to encourage mitigation efforts which deliver long term GHG emission reduction. Many mitigation efforts in the transport sector have emission reduction impacts which take time to be realized, such as land-use planning and the development of supportive public transport systems. If the potential of such measures were not fully captured in the post 2012 regime, these efforts might not be promoted properly.

Failure to address the unique characteristics of the transport sector make it unlikely that the transport sector in developing countries will be able to contribute to sizeable GHG emission reductions required as part of the 2^o Celsius scenario.

Recommendation 4: Ensure that NAMAs are suitable for transport sector

So far the developing countries have given a strong signal that they would like transport to be included in NAMAs as well over half (28 out of 46) of the submitted NAMAs include transport.⁶ This suggests the potential for large improvements over the current situation. Presently, less than 1% of emission reductions realized under the Clean Development Mechanism are from transport. Upfront efforts need to be made to ensure that guidelines for the planning, implementation and reporting of NAMAs, which are expected to be a main instrument in post 2012 global climate agreement, will be fully applicable to the transport sector. Many of the mitigation solutions in the transport sector have medium to long term negative incremental costs, especially when non climate related benefits are taken into consideration. Yet, there are considerable up-front costs linked to the transition of existing transport systems to more sustainable, low carbon transport solutions. Allowing such transition costs to be funded as part of transport NAMAs will enable substantial future emissions from the transport sector to be avoided.

Measurement and verification of GHG emissions in the transport sector is inherently complicated due to the large number of individual sources and the close link to behaviour (as opposed to simply technology changes). In cases where it is not possible to determine with a high level of certainty the GHG emission

⁶ http://www.transport2012.org/bridging/ressources/files/1/913,828,NAMA_submissions_Summary_030810.pdf

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reductions of measures which are known to have occurred, it should be acceptable to accept the use of proxy indicators as part of the MRV arrangements to ensure that emission reductions have taken place.

For transport NAMAs to be an integral part of climate change mitigation in developing countries in the post 2012 period it will be important to undertake pilot transport NAMAs. Contributors to fast-track financing should consider the use these funds to support pilot transport NAMAs.

Recommendation 5: Strengthen the coverage of transport in National Communications

As part of the efforts to intensify climate change mitigation efforts in both developed and developing countries, suggestions have been made to increase the frequency of national communications (NatComs) to UNFCCC and to make changes to the scope of the Nat Coms. In line with the recommendation to increase the sector focus of the climate negotiations and the discussions on new instruments such as NAMAs, it is also recommended that NatComs emphasize the importance of sector specific analysis and details in GHG inventories. It certainly would be helpful if transport is dealt with as a sector in its own right and not as a sub-sector of energy. To strengthen the role of NatComs in mitigation planning and reporting for transport it is important to ensure that emission inventories are updated every 2 years. It is suggested to revise the IPCC guidelines for determining GHG emissions from the transport sector to enable reporting of emission reductions on the basis of transport activity data. Strengthening of NatComs should therefore go hand in hand with efforts to improve activity data for the transport sector. This will also be an essential step for development of effective Monitoring Reporting and Verification (MRV) of transport NAMAs.

Recommendation 6: Acknowledge co-benefits

NAMAs are implemented in the context of sustainable development and many of the mitigation solutions in transport have large development co-benefits which in many cases are important reasons for the implementation of these mitigation measures. It important therefore that such co-benefits are acknowledged in the MRV of NAMAs.

Recommendation 7: Integrate transport in capacity building and technology transfer

There is a broad need for capacity building in support of sustainable, low carbon transport. This capacity building should focus on the replication and scaling up of successful measures under the Avoid-Shift-Improve approach. Such capacity building will also be helpful in the development of transport NAMAs.

The issue of intellectual property rights is less of an issue in the transport sector than in other sectors. The transport sector is therefore well placed to make an early start under any technology transfer mechanism to be agreed in Cancun. There is wide spread agreement now that the best way to reduce GHG emissions from the transport sector is through an integrated and comprehensive approach and technology transfer in the transport sector should reflect this. There is not only a need for the transfer of fuel and vehicle technologies which have been traditional areas of focus, but also for the transfer of approaches on e.g.; land use planning, management of transport services, congestion charging etc. To ensure that transport expertise is fully captured, it is important that the 20 member expert Technology Executive Committee which will be discussed in Cancun has at least 2 or 3 members with a transport background.

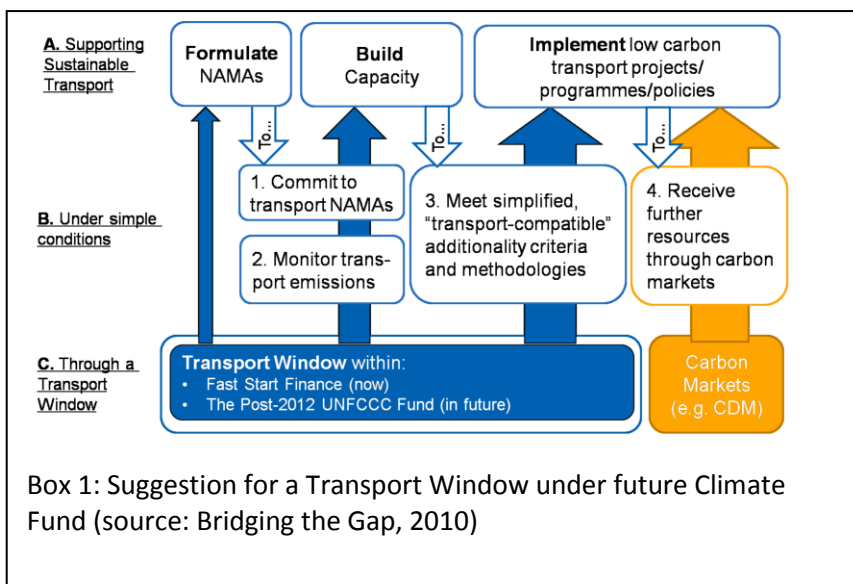
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Recommendation 8: Give transport a place in Climate Financing

For the transport sector to be able to contribute in a sizeable manner to climate change mitigation in the post 2012 period, it is critical that the transport sector receives a significant part of any climate fund that will be established, this in line with the importance of land transport as a source of emissions. It is suggested that this can be achieved by ensuring that the detailed implementation guidelines for NAMAs are fully applicable to the transport sector and by the development and adoption of

sector goals or objectives in the future Copenhagen Green Climate Fund or other financial mechanisms. See Box 1 for an initial proposal for a “transport window” in future climate change funding.⁷

To enable developing countries to develop their transport services in a sustainable and low carbon manner, it is also important that climate finance and development assistance are better aligned in the future.



Box 1: Suggestion for a Transport Window under future Climate Fund (source: Bridging the Gap, 2010)

⁷ See www.transport2012.org