



February 27, 2013

Shanghai, China

To Whom It May Concern:

The Partnership on Sustainable, Low-Carbon Transport (SLoCaT) (www.slocat.net) and the Bridging the Gap (BtG) Initiative (www.transport2020.org) present this submission in response to the call of the Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP) for inputs to its deliberations.

This submission addresses the mitigation potential in the land transport sector and how this can be realized through the wide scale adoption of a new policy paradigm in the land transport sector and the full implementation of the Rio+20 Voluntary Commitments on Sustainable Transport. The intention of this submission is also to suggest and explore ways and means in which the SLoCaT Partnership and the BtG initiative can engage with ADP in the implementation of its work program agreed upon at COP 18 in Doha, Qatar.

The SLoCaT Partnership is a voluntary, multi-stakeholder initiative with over 65 member organizations and is dedicated to improving knowledge and accelerating action on sustainable low-carbon transport. Bridging the Gap is a multi-stakeholder initiative, formed at COP14 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 the land transport and climate change community. Both are independent and representative of the sustainable transport sector including leading organizations from public and private sectors, finance, research across all modes of land transport.¹

Specifically, the inputs included here were developed by the BtG Initiative and the SLoCaT Partnership members Clean Air Asia; ECOFYS; EMBARQ, the World Resource Institute Center for Sustainable Transport; GIZ – the German International Technical Cooperation; the International Council for Clean Transportation; the International Energy Agency; the Institute for Transportation and Development Policy; Transport

¹ See Annex 1 and 2 for an overview of the membership of the SLoCaT Partnership and the BtG Initiative

Research Laboratory; and the University of California Center on Sustainable Transport (Davis).

The submission focuses on work-stream 2, addressing matters related to decision 1/CP.17

According to the IEA, the transportation sector currently accounts for a quarter of energy-related CO₂ emissions.² We suggest that in order to realize a “more practical and results oriented discussions on concrete areas of action for increasing ambition” the mitigation potential of land transport should be included.

This is important because emissions from transport are projected to rise 70% by 2050 from 2010 in a business-as-usual scenario making it the fastest growing source of GHGs.³ Nearly all of this growth will take place in emerging and developing economies. Already in Asia, CO₂ emissions from road transport grew at an annual rate of 10% in the period 2002–2010 vs. 9% annual growth in Gross Domestic Product.⁴ Therefore, as other sectors decarbonize, it will become more important that land transport also plays its role in any global agreement. Increasing ambition to reduce land transport emissions will need the stimulus of an international framework and appropriate incentives, including financial ones.

At the same time there is growing evidence of the significant mitigation potential in the transport sector if Business as Usual (BAU) policies were to be replaced by three linked strategies - **Avoid-Shift-Improve** (ASI) – to: (1) Increase access to jobs, goods and services while enabling users to **Avoid** motorized trips by smarter land use and logistics planning; (2) **Shift** the transport of goods and persons to the most efficient mode⁵; and (3) **Improve** the efficiency and environmental performance of transport systems by improved vehicle, fuel, and network operations and management technologies.

The IEA Energy Technology Perspectives 2012 includes 6, 4 and 2-degree climate scenarios. For transport, achieving the 2-degree scenario requires strong uptake of new vehicle technologies and fuels, but also major shifts in future travel growth. Their Avoid/Shift scenario cuts growth in car and air travel by 25% to 2050, while increasing growth in mass transit and non-motorized modes significantly over baseline levels, in conjunction with better planning and infrastructure investments to reduce the length of some trips. This results in a 20% reduction in passenger transport CO₂ emissions worldwide.

The IEA concurrently investigated the costs of these scenarios and found that, including only the costs of vehicle purchases (across all modes), the cost of fuel, and the cost of transport infrastructure, total global expenditures through 2050 are estimated to be over \$500 trillion. These costs could be reduced by more than 10% by following the

² IEA, *Energy Technology Perspectives 2012*(Paris: 2012)

³ *ibid*

⁴ Clean Air Asia. 2012. “Accessing Asia”. Available at http://cleanairinitiative.org/portal/sites/default/files/Accessing_Asia_2012_Edition_MAIN_REPORT_0.pdf (last date of access: 31 January 2012).

⁵ In the case of persons this is usually mass public transport, walking or cycling and in the case of freight to increase the share of rail or water transport

transport policies of the 2-degree scenario (which includes avoid, shift and improve policies), due to lower fuel demand, slower growth in vehicle purchases, and significant reductions in road and parking infrastructure costs. The IEA details their findings in a recent report that concludes that global adoption of ASI based policies in the transport sector would realize a USD\$ 30 trillion in savings in vehicle and fuel expenditures and a USD\$ 20 trillion in infrastructure savings giving a net savings of USD\$ 50 trillion⁶. In economic terms these figures are impressive and they are enormous in CO₂-terms; by just considering fuel savings, cumulative CO₂ emissions reduction would exceed 130GtCO₂ over the 40-year period from 2011 to 2050.

The International Council for Clean Transportation has built a global model to evaluate the historical and potential impact of transportation policies on worldwide oil consumption and greenhouse gas emissions. Their 2012 study found that policies adopted and formally announced since 2000 will have significant effects: reductions of 14% in global oil consumption and 7% in global economy-wide GHG emissions below the IEA's projected baseline 2030 levels. The report indicates reasonable near-term actions could more than double those reductions, stabilizing 2020 to 2030 global transportation greenhouse gas emissions.⁷ Such a reduction in emissions would require dissemination of advanced regulatory standards and cost-effective technologies throughout all major vehicle markets, market-based measures to reduce emissions from aviation and marine, and fairly ambitious but achievable shifts to low-carbon modes and overall reductions in vehicle activity. All these reductions have policy precedents and are achievable in the near-term but more ambitious reductions will be needed over the long-term to meet global climate goals.

This information gives an indication of the mitigation potential of land transport and its importance, and it also shows that such a mitigation potential could be realized at a lower cost than traditional BAU policies which would also result in higher emissions. However, further work is needed to substantiate in more detail the mitigation potential and the costs associated with such policies and several of the members of the SLoCaT Partnership are planning additional activities in this respect. Such further modeling work, and especially the application of its results, could benefit from closer interaction with ADP and its members. It is the Parties taking part in the work of ADP that have the opportunity to decide on how to better integrate land transport in decision making on future climate change policies both the at the global level and within their countries.

Additional work is required to better assess and understand the mitigation potential of transport and for it to contribute to national economy-wide mitigation targets (e.g. as in the case of Indonesia or Mexico)⁸ as well as the contribution to global emission reduction objectives. On the latter, the IEA work to estimate global transport costs and benefits does not yet include the non-market or co-benefits from Avoid/Shift policies such as reductions in local pollutant emissions, reductions in traffic congestion, safety benefits, and general mobility benefits particularly for low-income groups. Studies that quantify all the environmental, mobility, economic (including job) benefits of these

⁶ Global Land Transport Infrastructure Requirements, IEA, 2012, http://www.iea.org/publications/freepublications/publication/TransportInfrastructureInsights_FINAL_WEB.pdf

⁷ Global Transportation, Energy and Climate Roadmap, International Council for Clean Transportation, 2012, <http://www.theicct.org/global-transportation-energy-and-climate-roadmap>

⁸ Johnson, T., Alatorre, C., Romo, Z., Liu, F., 2009, Low Carbon Development for Mexico, World Bank

policies are sorely needed. But there is a considerable body of evidence suggesting that ASI strategies not only reduce greenhouse gases at net negative costs, but also disproportionately benefit low-income people while promoting more equitable and sustainable development.⁹

With respect to the need for "A focused discussion on how finance, technology and capacity-building can be strengthened to enable greater ambition," we would like to draw your attention to the Voluntary Commitments on Sustainable Transport, which were made at the Rio+20 United Nations Conference on Sustainable Development in June 2012.¹⁰ These Voluntary Commitments (17 in total) combine an ambitious set of efforts in support of more sustainable transport from a wide range of players. We would welcome the opportunity to engage with ADP to explore how these Voluntary Commitments can be used to promote the quick uptake of sustainable, low carbon transport policies in programs.

We believe that time is of the essence when discussing the implementation of mitigation activities in the transport sector. Action in the transport sector is needed quickly in order to avoid negative lock-in effects. Current decisions on transport infrastructure and land-use patterns are shaping transport demand in the long run: Infrastructure built today strongly influences how people and goods will be moved even in 50 to 100 years and thereby also the associated CO₂ emission.

As part of the further modeling of the mitigation potential it is intended amongst others by members of the SLoCaT Partnership to assess the impact of the unprecedented USD\$ 175 billion Voluntary Commitment for more sustainable transport made by eight of the largest Multilateral Development Banks (MDBs). The MDB Voluntary Commitment is the single largest commitment made at the Rio+20 conference and we suggest that linking this commitment to additional climate change finance, e.g. from the Green Climate Fund could help unlocking the mitigation potential that exists in land transport in emerging and developing economies. This is relevant for the discussions on financing by ADP.

The work on transport by members of the BtG initiative and the SLoCaT Partnership has underscored the importance of the need to address climate change in transport in the wider context of sustainable development. In developing and emerging economies where BtG and SLoCaT are most active, few policy or investment decisions in the transport sector are made specifically for climate reasons, but many bring low carbon as a co-benefit. This includes policies as different as the introduction of fuel economy standards in China, which was done mainly for energy security reasons, and improvements in bus- and rail-based public transport, which are primarily intended to improve mobility and reduce congestion. Efforts to reduce air pollution from transport which are gaining momentum in several developing countries will also reduce CO₂ emissions especially if they aim to reduce the demand for travel by individually owned motorized vehicles. The success of bike sharing initiatives in a growing number of cities bring not only the direct transport benefits and emission reductions in an affordable way but also better health from physical activity, and less local pollution.

⁹ Replogle, Michael and Colin Hughes, "Moving Toward Sustainable Transport," *State of the World 2012: Moving Toward Sustainable Prosperity*, Worldwatch Institute, 2012. www.itdp.org/documents/SOW12_chap_04.pdf

¹⁰ See <http://www.slocat.net/rio20-VC>, or <http://sustainabledevelopment.un.org/index.php?menu=1348>

Nationally appropriate mitigation actions (NAMAs) provide significant opportunities for land transport to make a more active contribution to climate change mitigation. However, there are still many outstanding questions on how to develop guidance on NAMAs as well as the requirements for Monitoring, Reporting and Verification (MRV) and financing for NAMAs. MRV procedures have long been a barrier to greater participation of transport sector in UNFCCC provisions.^{11,12}

Transport is the largest or second-largest sector in terms of NAMAs proposals,¹³ and therefore it is important that the transport sector actively contributes to generation of ideas, concepts, and tools to ensure that detailed rules and regulations will work for transport. The failure of the CDM in the transport sector is due to the fact that it was not developed with transport in mind.¹⁴ If a similar constraining framework as applied to CDM is transferred to NAMAs, there are significant risks that transport finds itself in a similar position as in the case of CDM. It has also been suggested that the Common But Differentiated Responsibility (CBRD) should not only apply to the mitigation efforts by countries but also in the manner that sectors are part of such differentiated mitigation efforts.

We have taken note of the intention of ADP to organize further roundtables and workshops and the intention to have a further special event for observer organizations. Members of SLoCaT and BtG would be pleased either to join ADP in organizing a special Roundtable or workshop on sustainable transport or to take part in any special event.

BtG and SLoCaT presently work on several levels to create a better understanding of the potential of land transport and the international climate change negotiations and also intend to organize a Transport Day at COP in 2013–2015. The transport day will take place on Sunday 17 November 2013 and its objectives are:

- To promote the integration of transport in policy making on climate change mitigation and adaptation under the UNFCCC;
- To inform and exchange information on progress in the sector with Parties and those interested in climate change and transport;
- To demonstrate the contribution that transport can make to mitigation and adaptation, specifically in the context of sustainable development; and
- To ensure that modalities for financing, capacity building, and technology transfer under the UNFCCC are appropriate for the transport sector.

It is the intention of BtG and the SLoCaT partnership to organize such a Transport Day at least for the next three years and in this manner provide a focus for the discussions on the integration of sustainable, low carbon transport in the deliberations of the ADP.

We in the BtG initiative and the SLoCaT Partnership are fully prepared to present and discuss these proposals at any time.

¹¹ Lefevre, B., 2012, Incorporating cities into the post 2012 climate change agreements, Environment and Urbanization, International Institute for Environment and Development (IIED). Vol 24(2): 1–21

¹² S. Bakker and C. Huizenga (2010). Making Climate Instruments work for Sustainable Transport in Developing Countries. In: Natural Resources Forum, Vol 34, No. 4. November 2010

¹³ http://www.nama-database.org/index.php/By_sector

¹⁴ OECD, 2010, Working Party on Global and Structural Policies, Cities & Carbon market finance: taking stock of cities experience with CDM and JI, JT03290002

With best regards,

On behalf of the BtG initiative and SLoCaT Partnership

A handwritten signature in black ink, consisting of a large, stylized initial 'C' followed by a horizontal line that ends in a small arrowhead pointing to the right.

Cornie Huizenga
Joint Convener, SLoCaT Partnership

Annex 1: Members Partnership on Sustainable, Low Carbon Transport (SLoCaT)

1. African Development Bank
2. Alliance to Save Energy
3. Asian Development Bank
4. Believe Sustainability
5. Corporación Andina de Fomento
6. Cambridge Systematics
7. Center for Clean Air Policy
8. Centre for Environment Planning & Technology Ahmedabad
9. Center for Science and Environment
10. Center for Sustainable Transport Mexico
11. Center for Transportation and Logistics Studies, Gadjah Mada University
12. China Urban Transport Research Centre
13. Civic Exchange
14. Clean Air Asia
15. Clean Air Institute
16. CODATU
17. Dutch Cycling Embassy
18. German Technical Cooperation
19. Ecofys
20. EMBARQ, The WRI Center for Sustainable Transport
21. Energy Research Center Netherlands
22. European Bank for Reconstruction and Development
23. European Institute for Sustainable Transport
24. European Cyclists' Federation
25. Fia Foundation
26. Fraunhofer- Institute for Systems and Innovation Research
27. Global Environmental Facility
28. Global Transport Knowledge Partnership
29. Global Urban Development
30. HealthBridge
31. Hong Kong Shanghai Bank
32. Innovation Center for Energy and Transportation
33. Inter-American Development Bank
34. International Association for Public Transport
35. International Energy Agency
36. International Road Federation
37. International Transport Forum
38. International Union for the Conservation of Nature
39. International Union of Railways
40. Institute for Global Environmental Strategies
41. The Institute for Transport Studies, University of Leeds, UK
42. Institute of Urban Transport India
43. Institute for Transport Policy Studies
44. Institute for Transportation and Development Policy
45. Institute of Transport Studies, University of California, Davis
46. Korean Transport Institute
47. Ministry of Land Infrastructure Transport and Tourism, Japan
48. Mobility Magazine
49. National Center for Transportation Studies, Philippines
50. Rockefeller Foundation
51. Society of Indian Automotive Manufacturers
52. Stockholm Environment Institute
53. Sub-Sahara Africa Transport Policy Program
54. Tehran Urban and Suburban Railway operation Company
55. The Energy and Resources Institute
56. Transport and Environment
57. Transport Research Laboratory
58. United Nations Development Program
59. United Nations Center for Regional Development
60. United Nations Economic Commission on Latin America and the Caribbean
61. United Nations Department for Economic and Social Affairs
62. United Nations Economic Commission for Europe
63. United Nations Economic and Social Commission for Asia and the Pacific
64. United Nations Environment Program
65. United Nations HABITAT
66. University College of London, Department of Civil, Environmental and Geomatic Engineering
67. University of Transport and Communication Hanoi
68. University of Twente-ITC
69. VEOLIA Transport/Transdev
70. Victoria Transport Policy Institute
71. Volvo Research and Education Foundations
72. World Health Organization
73. World Streets
74. Wuppertal Institute
75. WWF International

The Partnership on Sustainable, Low Carbon Transport (www.slocat.net) is a type II partnership registered with the United Nations Department for Economic and Social Affairs. For further information please contact Cornie Huizenga and Tom Hamlin, Joint conveners of the SLoCaT Partnership ([cornie.huizenga\[at\]slocatpartnership.org](mailto:cornie.huizenga[at]slocatpartnership.org) and [Hamlin\[at\]un.org](mailto:Hamlin[at]un.org))

Annex 2: Members Bridging the Gap Initiative

- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
- Institute for Transportation and Development Policy (ITDP)
- TRL - Transport Research Laboratory
- International Association of Public Transport (UITP)
- Veolia Transdev

The Bridging the Gap initiative is a multi-stakeholder partnership formed in 2009 at COP14 to encourage international recognition that land transport should play a more prominent role in addressing climate change in the Post-2012 agreement. The partners come from the public, private, association, research and NGO sectors and work together at 'bridging the gap' between the sustainable transport community and the climate change negotiations process. Partners actively follow the process and latest developments and frequently organise workshops and side events, publish reports, collecting relevant information on land transport and climate change and promoting sustainable solutions for developing countries.

www.transport2020.org