

### UNITED NATIONS DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS



Commission on Sustainable Development Eighteenth Session 3-14 May 2010



### **Policy options for Transport**

Prepared by

The Partnership on Sustainable, Low Carbon Transport\*

Background Paper CSD18/2010/BP12

<sup>\*</sup> The Partnership on Sustainable, Low Carbon Transport is a voluntary, multi-stakeholder partnership of over 50 organizations registered with the Commission on Sustainable Development and committed to working together to promote and facilitate sustainable, low carbon transport in developing countries.

## Role of transport in promoting economic and social development in developing countries

Transport plays a key role in providing access to markets, jobs, education, health care and services. Without improved access and strengthened transport infrastructure, achievement of the Millennium Development Goals, especially poverty reduction, is unlikely.

In order to achieve convergence socially and economically, the poor need access to jobs, education and health care. They are excluded by systems that require private vehicles, deny them safe space to walk or cycle, or fail to provide public transport at reasonable cost. Planning cities for people first (not cars) improves the well-being of all inhabitants, including the poor.

# Environmental Implications of the growth of the transport sector in developing countries

The overall size of the transport sector in terms of number of vehicles, passenger kilometers and ton kilometers has increased rapidly and is projected to continue growing rapidly in the future. There is not enough space physically for the projected increase in numbers of private vehicles, without serious problems of congestion and pollution. To promote sustainable development, an alternative vision for the transport sector is required which involves a shift away from indefinite heavy reliance on private motorization.

Greenhouse gas emissions and in particular  $CO_2$  are growing faster from the transport sector than most other sectors. In 2006 transport accounted for 13% of global greenhouse gas emissions (GHG) while 23% of global carbon dioxide (CO2) emissions from fuel combustion were transport related. Between 1970 and 2006, global GHG emissions from the transport sector increased by 130% globally.

While developed countries are responsible for the largest share of GHG emissions from the transport sector, emissions from developing countries are growing rapidly. Transport related CO2 emissions are expected to increase 57% worldwide in the period 2005 – 2030, and transport in developing countries will contribute about 80 percent of this increase. Most of the current GHG emissions in the transport sector and virtually all the expected growth in emissions come from private cars, light duty vehicles and trucks.

The transport sector itself is directly impacted by the effects of climate change and, depending on the location, will have to undertake various types of adaption measures to protect transport infrastructure against the impact of climate change.

The growth in transport also increases the total amount of local and regional air pollution. Particulate Matter and Nitrogen Oxide emissions and atmospheric Ozone impact human health and affect agricultural productivity in a negative manner. Black carbon (which is part of Particulate Matter emissions) and ozone in the atmosphere, largely coming from the transport sector, are also a cause for concern as contributors to climate change.

### **Bellagio Declaration on Transport and Climate Change**

Prior to the launch of the SLoCaT Partnership, founding members of the partnership held a retreat in Bellagio from May 12-15, 2009, to discuss the most appropriate policy response to the problem of transport and climate change.

The Intergovernmental Panel on Climate Change in its Fourth Assessment Report had called for a 70-90% reduction of global  $CO_2$  emissions from 1990 levels by 2050. Under such a scenario both developed and developing countries would be expected to help realize these emission reductions within a framework of common but differentiated responsibilities.

The participants in the Bellagio meeting came to a common understanding that the necessary mitigation efforts can be accomplished by embracing the following Principles and Actions:

## Principle 1: Effective Climate Action is incomplete without addressing the overall system performance of the Transport Sector.

- Promote the decoupling of CO2 emissions from economic growth, thereby enabling developing countries to expand access to transport for development while keeping their transport emissions growth low. This requires adopting integrated policies to: (a) avoid or reduce unnecessary trips through integrated land use and transportation planning, (b) effect a shift to more transport-efficient modes through changes in pricing, regulation, and investments, and (c) improve vehicle emissions intensity and fuel technology.
- Develop a policy framework that includes policy instruments, such as planning and regulation; incentives and disincentives; information exchange mechanisms; and communication strategies, which will enable developing countries and cities to align national and local transport mitigation policies with international agreements to be reached under UNFCCC.

#### Principle 2: Climate action in the transport sector should recognize co-benefits

 Acknowledge the importance of co-benefits of low carbon sustainable transport policies, including air pollution abatement, enhanced health protection, reduced congestion, diminished accident rates, improved productivity and increased energy security as being essential to bringing about low carbon sustainable transport. By maximizing such co-benefits together with CO2 reductions, support and incentives for sustainable transport interventions can be institutionalized and locally driven.

## Principle 3: More effective carbon finance mechanisms and associated procedures should catalyze sustainable transport policies, programs and projects

• Promote effective financing for low carbon sustainable transport systems and the full unfettered applicability to the transport sector of funding mechanisms to be agreed upon under UNFCCC, such as CDM, sectoral crediting and Nationally Appropriate Mitigation Actions. This may include the creation of a dedicated

funding facility for low carbon sustainable transport within, or outside, these funding mechanisms. Such funding arrangements should build institutional and technical capacity for planning, measurement, monitoring, and evaluation and provide financial incentives for policy and program implementation proportionate to the scale of the challenge.

 Support improved, simple and transparent evaluation tools suitable to the transport sector, designed to enhance the sector's ability to measure, report and verify GHG reductions at project and national level while simultaneously supporting urban planning and transport system management for the co-benefits associated with policies, measures and projects.

### Recommendations for Consideration by 18<sup>th</sup> Session of CSD

The SLoCaT Partnership would like to offer the following recommendations to the 18<sup>th</sup> session of the CSD for its consideration and endorsement.

#### 1. Empower and Strengthen Institutional Frameworks for Sustainable Low Carbon Transport

The replication and scaling up of sustainable, low carbon transport is often held back by inadequate institutional frameworks and limited organizational capacity. The implementation of sustainable, low carbon transport policies, programs and projects requires proactive coordination and cooperation among departments and levels in governments that do not always coordinate and cooperate well and it requires skills which often are weak in traditionally road-engineering oriented transport departments.

Promising sustainable, low carbon transport projects often start at the local level. Their replication and scaling up require well established coordination and cooperation between local and national level organizations to ensure that broader policy guidance is given and that financial structures are in place to ensure that scaled up programs can be funded across a large number of locations.

#### 2. Improve the Assessment of Sustainable, Low Carbon Transport

Developing and implementing sustainable, low carbon transport policies, programs and projects will require improvements in the collection, analysis and dissemination of access and transport data. Such strengthening will need to focus both on the national and the local or city level. It will be important not only to have a better understanding of the needs for access and number of vehicles but also the activity patterns of the passengers and goods and the energy used by vehicles. To facilitate the sharing of transport data and management tools in different cities and countries, more coordination and cooperation among countries on transport system data is needed.

The increased focus on environmental sustainability of transport systems is resulting in the development of GHG assessment methodologies. The lead in the development of such methodologies is currently taken by the Clean Development Mechanism, the Global Environment Facility and the Multilateral Development Banks. All of these have in common that the methodologies are used for assessment in support of external financing. Less progress has been made with the development and introduction of carbon foot-printing methods and GHG assessment methodologies by countries and cities in the developing world. Taking into consideration the importance of other developmental themes for the transport sector such as air pollution, congestion and road safety, the development of GHG assessment methodologies in the developing world could best be part of an overall approach to develop sustainability indicators.

#### 3. Replicate and Scale-up Successful Experiences of Sustainable, Low Carbon Transport

Since the ninth session of the CSD in 2001 which focused on the transport theme, many successful programs and projects have been implemented, both in developing and developed countries. These include:

- Performance assessment schemes for urban transport systems
- Knowledge Management initiatives which document best practices
  in sustainable transport
- Institutional strengthening through the creation of new institutions specifically in support of sustainable, low carbon transport and through different types of capacity building
- More efficient pricing of roads, parking, fuel, insurance and vehicle registration fees
- Establishment of dedicated funding mechanisms in countries to provide funding for sustainable, low carbon transport
- Promotion of public transport through Bus Rapid Transit schemes of which there are now more than 100 in operation, under construction or planning in Europe, Africa, Asia and Latin America
- Public bicycle schemes of which there are now more than 160 in operation world-wide
- Provision of bike lanes and improved pedestrian facilities to retain the non-motorized transport mode share
- Wide scale use of alternative fuels which reduce both air pollution and GHG emissions<sup>1</sup>
- Tighter vehicle emission and fuel quality standards in many developing and developed countries
- Fuel economy standards in selected countries.

These examples, many of which are already fairly widespread, show that there is an alternative to the pathway of unchecked growth in motorization with its negative effects. These examples provide the building blocks for the development of a comprehensive sustainable, low carbon transport policy at the national and local level which would combine: (a) policy and regulatory approaches, (b) infrastructure development, (c) institutional and financial mechanisms.

<sup>&</sup>lt;sup>1</sup> Taking into account indirect emissions of land-use change

Countries and cities are now encouraged to replicate these examples and to enact policies to scale up their implementation.

### 4. Promote the Integration of transport in climate change talks and post 2012 climate instruments

Policy making on Climate Change has intensified in the years since the last CSD session dedicated to transport. At the international level discussions are ongoing with respect to international climate policies in the period after 2012 when the first commitment period of the Kyoto Protocol comes to an end. In the last year, various developing countries have come out with Climate Change strategies or Action Plans. Some developing country cities have also formulated climate change action plans. Together, these plans at the global, national and local level will shape climate policy in the years to come.

It is important therefore that the outcomes of these global, national and local plans are fully relevant and applicable to the transport sector. This has not always been the case so far.

Over the past years different climate financing instruments have been created to support the implementation of climate change mitigation and adaptation activities. These include the Clean Development Mechanism (CDM), the Global Environment Facility (GEF) and most recently the Climate Investment Funds (CIF) of the World Bank. What these instruments have in common is that the part of funding for transport has been increasing but still relatively modest compared to other economic sectors, not withstanding that many of the mitigation options for the transport sector have a net negative cost when co-benefits (e.g. reduced air pollution and congestion) are included.

With the conclusion of the climate change conference in Copenhagen, the issue of financing has risen to the top of the agenda. New resource mobilization is required to support Nationally Appropriate Mitigation Actions (NAMAs). It will be important to assess how different financing mechanisms can complement each other to support sustainable, low carbon transport. To achieve this it will be important to harmonize the methodologies used under the different instruments to assess GHG reductions from the transport sector.

Co-benefits (air pollution, congestion reduction, access by low income groups, or improved road safety) are of special significance in the case of various transport programs and measures and they can play a decisive role in determining whether a measure with a certain GHG emission reduction potential will be implemented or not. In addition, the co-benefits to be realized can influence the scale of a program. A full acknowledgement of co-benefits however needs to go beyond a mere recognition that co-benefits exist to their valuation and inclusion in a full accounting of investment returns. This could help ensure that the transport sector will participate more fully in climate change control activities.

#### Continued Partnership with CSD process

The implementation of the transport related outcomes of the current cycle of the CSD will require an on-going dialogue among a large range of stakeholders. The SLoCaT partnership with its multi-stakeholder membership is committed to play an important role in facilitating this dialogue. As the partnership further defines its activities, governments subscribing to the principles will be welcomed to join in our collective effort.