United Nations Environment Programme
برنامج الأمم المتحدة للبيئة • 联合国环境规划署
PROGRAMME DES NATIONS UNIES POUR L'ENVIRONNEMENT • PROGRAMA DE LAS NACIONES UNIDAS PARA EL MEDIO AMBIENTE
ПРОГРАММА ОРГАНИЗАЦИИ ОБЪЕДИНЕННЫХ НАЦИЙ ПО ОКРУЖАЮЩЕЙ СРЕДЕ
UNEP

Submission on Transport by the United Nations Environment Programme (UNEP) to the Ad Hoc Working Group on Long-Term Cooperative Action under the Convention (AWG-LCA)

24 April 2009

Recommendations

- Give preferential support for transport projects and policies that reduce GHG emissions and have co-benefits or other sustainable development objectives, such as reductions in air pollution, noise, and congestion.
- Allow to be included in NAMA registries model transport elements, such as fuel efficiency standards, congestion charging and public transport improvements.
- Consider creating a new transport-specific mechanism, such as a Clean Transport Mechanism (CTM), through which countries are financially compensated (for example, through carbon credits) for transport emission reductions below a pre-defined baseline.
- Tailor CDM methodologies to the specific needs of the transport sector, for example through the approval of "first-of-its-kind" projects/programmes, whereby a new project or approach is considered additional if it is not commonly used.
- Move toward an upscale, wholesale approach, for example via a policy-oriented CDM for transport projects that is guided by sectoral targets at the national or even local level.
- Support capacity building efforts on both the national and local scales, including reform of institutional frameworks.
- Consider using the multiple sources of funding, including the Adaptation Fund, to provide adequate coverage of transport in both scale and scope.

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This submission[1] provides suggestions on elements contained in paragraph 1 of decision 1/CP13, the Bali Action Plan, for promoting and implementing low carbon mobility in developing countries, and recommendations on how to integrate land transport, both passenger and freight, into the work of the AWG-LCA. It was jointly developed with support from a wide range of international organisations[2]. The aim is to contribute to an agreement at COP15 that fully recognises the role of transport and that promotes the development of workable policies and measures that reduce CO_2 emissions in this important and rapidly growing sector. Investments in low carbon mobility should focus on bringing about structural changes to transport approaches, with positive, long-term benefits.

[1] The details of this submission will be developed into a strategy paper that will become available around June 2009 at www.sutp.org/bridging_the_gap. The initiative "Bridging the Gap" has been initiated based on joint efforts by a number of international organizations promoting sustainable transport since COP13 in Bali and, has provided substantial inputs to the debate on transport and climate change in particular to strengthen the importance and accountability of transport in the climate negotiation process. The "Bridging the Gap" process is ongoing and will provide support to the climate negotiation debate throughout the remaining year

[2] This includes the Transport Research Foundation (TRF), the Deutsche Gesellschaft fuer Technische Zusammenarbeit (GTZ), the International Association of Public Transport (UITP), ICLEI-Local Governments for Sustainability, Energy Research Centre of the Netherlands (ECN), and the Institute for Global Environmental Strategies (IGES).

Background

The transport sector accounts for around one quarter of global carbon dioxide (CO_2) emissions[3] and global transport energy-related CO_2 emissions are predicted to increase by 1.7% a year from 2004 to 2030[4]. The predicted road transport growth to 2030 is driven largely by increased demand for mobility in developing countries, where growth rates are predicted to average 2.8% a year[2]. Coupled with rapid urbanisation, transport related emissions from urban areas are set to rise significantly.

Under the present international climate change agreement, the incentives to create sustainable transport networks as a part of national commitments to climate change are weak. Sustainable transport is one of the most urgent challenges in tackling climate change, and yet transport currently only plays a minor role in the negotiations. There are signs that this is beginning to change with a sizeable group of transport related organisations supporting a set of recommendations to improve the position of land transport within the climate change discussions. The recommendations contained within this submission aim to support an agreement at COP15 that would better incorporate transport in agreed actions taken by governments.

The Road to COP15 Copenhagen

An effective response to the findings of the Intergovernmental Panel on Climate Change (IPCC) and the necessary reduction in global GHG emissions to avert severe climate change will need to include a focus on transport. The recommendations in this submission link actions needed in the transport sector with the four building blocks in paragraph 1 of decision 1/CP13, the Bali Action Plan:

- national/international action on mitigation of climate change, including Nationally Appropriate Mitigation Actions (NAMAs)
- action on the provision of financial resources and investment , including financing mechanisms beyond 2012
- action on technology development and transfer, including capacity building, and
- action on adaptation.

Actions taken on these four building blocks should be closely coordinated and mutually enforcing, with an understanding of the importance of capacity building and measurable criteria within mitigation, adaptation, technology and finance.

Mitigation

Mitigation actions in the transport area generally follow one or more of three fundamental strategies: avoiding the need to travel, shifting travel to more sustainable modes, or improving the sustainability of modes. The IPCC[5] has suggested key mitigation options for the transport sector and explored both those that are commercially available and those that are yet to be commercialised (but that are expected to be before 2030). These include more fuel-efficient vehicles, modal shift, land-use and transport planning, and second generation biofuels and advanced hybrid vehicles.

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[3] **IEA (2005)** CO_2 Emissions from Combustion 1971-2003. OECD/IEA
[4] **IEA (2006)** World Energy Outlook 2006, International Energy Agency. Accessed from http://www.worldenergyoutlook.org/2006.asp
[5] **IPCC (2007)** Climate Change 2007 Synthesis Report. Accessed from http://www.ipcc.ch/ipccreports/ar4-syr.htm

Mechanisms could be devised to grant preferential support for transport projects and policies that realise co-benefits or other sustainable development objectives, such as reductions in air pollution, noise, and congestion. Such mechanisms should be accompanied by an institutional arrangement that allows for a simple and standardised measurement and rewarding/crediting process.

Mitigation efforts by developing countries that are supported by financing, technology transfer and capacity building could have significant potential to bring about sustainable transport. For example, NAMAs could provide a framework for (no-lose) sectoral targets, both in developed and developing countries, which given large uncertainties and market fluctuations would provide a better incentive for the transport sector to reduce emissions.

As suggested by a number of countries, NAMAs could comprise elements that were pledged voluntarily, including those for which some sort of international support was needed[6]. These could be measured, reported and verified under common rules set by the UNFCCC and rewarded through a crediting mechanism. NAMA registries could include model transport elements, such as fuel efficiency standards, congestion charging and public transport improvements.

These ideas should be piloted in targeted policy areas and countries, and developed further based on the results obtained. They should also be coupled with the development of transport specific data sources and measurement methodologies that fully acknowledge the wide range of transport emission sources. There is a need as well for research to be conducted to this end.

Financing Mechanisms

The currently available flexible mechanisms of CDM, JI and ETS provided within the Kyoto Protocol have not succeeded in promoting sustainable transport. Their application to transport has so far been extremely limited. As of 1st March 2009, out of 4,541 CDM projects sent for validation/determination, only 9 (0.2%) were in the transport sector,[7] and prior to this date only two had been approved.

Transport projects under the current CDM face particular difficulties *inter alia*:

(1) Methodologies (setting baselines and proving additionality)
(2) High transaction costs, and
(3) CERs are often (or usually) only a small part of sustainable transport benefits.

To overcome these difficulties under the existing arrangements, methodologies can be tailored to the specific needs of the transport sector, for example through the approval of "first-of-its-kind" projects/programmes, whereby a new project or approach can be considered "additional" if it is not commonly used already. Standard methodologies that could be applied to Programmes of Activities (PoAs) could also be developed and shared amongst developing cities.

Under a post-2012 framework, financing should move towards an upscale, wholesale approach, for example via a policy-oriented CDM, guided by sectoral targets at national or even local level for the transport sector. Scaling up financing for sustainable transport must be complimented

[6] Relevant country proposals include those provided by the Republic of Korea, India, and South Africa.
[7] **UNEP Risoe Centre (2009)** CDM pipeline overview. Accessed from http://www.cdmpipeline.org/cdm-projects-type.htm

with sound pricing practices. Efforts must be taken to promote full cost pricing that reflects all environmental externalities including the cost of carbon. Efforts must be taken to remove subsidies on fossil fuels. This could be part of a crediting mechanism for Nationally Appropriate Mitigation Actions (NAMAs). A prerequisite to the upscaling of CDM is for industrialised countries to be committed to substantial greenhouse gas reduction targets. Discounting credits to incorporate the large uncertainties involved in quantifying NAMAs could also be discussed.

Furthermore, a new transport-specific mechanism could be devised, such as a Clean Transport Mechanism (CTM) in which countries can be financially compensated (e.g. through carbon credits) for transport emission reductions below a pre-defined baseline. Further assessment and piloting is needed to develop these ideas further.

In addition to crediting mechanisms, the role of climate funds such as the Global Environment Facility, the Climate Investment Fund, bilateral funds and any future mitigation-related funds under the UNFCCC in supporting sustainable transport can be acknowledged. Such funds can be instrumental in providing support for technology/knowledge transfer, capacity building and policy development to set transport on a sustainable path. They can also be used to leverage funding and investments by the private sector.

Technology Transfer

Significant increases in the reduction of emissions from transport in developing countries could be achieved from adopting a leapfrogging approach to the development of transport technology. Developing countries could embrace low carbon mobility with energy efficient transportation options, through accelerated deployment, diffusion and transfer of technologies, and learn from the technology progress within developed countries.

Technology transfer and development should include a range of support, including financial and capacity building. Technologies in this regard should range from existing affordable environmentally sound technologies such as non-motorised transport vehicles, to new and upcoming technologies in demand management such as Intelligent Transport Systems (ITS) and smart cards for use on public transport.

Transfer could also take place in the form of knowledge, for example through the dissemination of good practices, standards and scientific evidence. The development of soft measures, skills and behaviour are critical to the successful implementation of sustainable transport policies and projects, and need to be supported by knowledge transfer. The highest potential for addressing reductions at an affordable cost comes from a combination of land use policies and technology. International guidelines and examples of best practise with accompanying methodologies for managing emissions from transport over a significant time period could be part of this action. Efforts by the Expert Group on Technology Transfer (EGTT) should ensure holistic coverage of transport technologies, not only transport fuels and vehicle engines, but those for infrastructure, demand management and public transport systems.

The barriers to the effective transfer of technology and knowledge need to be addressed by capacity building in different transport sectors, particularly within developing countries. There is a need to build capacity on both the national and local scales, and the key component of any strategy to do so will require a reform of institutional frameworks. It will also be essential for adequate knowledge mechanisms to be put in place, and for all actors to be appropriately trained. In the short-term, capacity building to support the integration of land-use and transport planning, enhancement of public participation and the integration of environmental effects (for

example using tools such as Strategic Environmental Assessment) should be focused upon in the transport sector.

Adaptation

With 45% of the world's population living on or near coastal regions and river beds, transport is particularly vulnerable to water related climate extremes. A fully integrated transport strategy is required that ensures support for both adaptation and mitigation actions, and which ensures climate resilient development in the most vulnerable areas. Transport infrastructure and services, both existing and planned, need to be evaluated against their vulnerability to climate change. These risks need to be incorporated into transport decision making processes as with any other risks that are reasonably foreseeable.

Assessment of climate risks need to include the impacting event (climate hazard), the likelihood of an impact occurring (its probability), the consequences of an impact if it does occur (the likely degree of impact), and the resilience of the planned or present infrastructure. The assessment can take place within existing needs assessments, for example National Adaptation Programmes of Action (NAPAs).

To facilitate this process, the overall framework should be set at the UNFCCC level, with levels of support suited to the respective adaptive capabilities of Parties provided through financial assistance, technology transfer and capacity building. Guidelines, assessment tools and studies on adapting transport infrastructure could be developed at the UNFCCC level. Consider using the multiple sources of funding, including the Adaptation Fund, to provide adequate coverage of transport in both scale and scope.

Conclusions

An upscale targeted strategy is needed in all building blocks of the Bali Action Plan to have an impact on future sustainable transport development in developing countries. This will need to be coupled with substantial emission reduction targets for Annex I countries alongside appropriate actions by developing countries.

The present flexible mechanisms are playing only a minor role in supporting low carbon mobility in developing countries. A post-2012 agreement must therefore include a combination of instruments that, together with local, regional and national applications of transport policies, work for all sectors including transport.

Mitigation efforts could be guided by NAMAs, part of which could be credited through an upscaled crediting scheme, e.g. a sectoral/policy CDM, and supported by technology/knowledge transfer, capacity building and robust measurement methodologies. Financing and capacity building for adaptation needs to increase in size and scope, to adequately address the vulnerability of existing and new transport infrastructure and services.

The transport sector does not operate in a vacuum and impacts on many other sectors and the efficient use of resources. Its role as an enabler of economic growth cannot be neglected in the developing world, and developing countries should pursue a 'leapfrogging' approach to low carbon mobility, learning from the experience of the developed world. The transport sector therefore represents an opportunity to make significant reductions to global emissions, stabilise the impacts of climate change and introduce mechanisms that provide paths to social and economic development as well as to environmental protection.