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## NAMA submissions to the UNFCCC: An overview from a transport perspective

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### Introduction

In the lead-up to the Post-2012 climate regime, Nationally Appropriate Mitigation Actions (NAMAs) are increasingly being seen as the framework under which Non-Annex 1 countries are to mitigate their greenhouse gas emissions and to receive international support for their efforts.

There is currently no restriction on the nature of climate change mitigation activities that can be submitted to the UNFCCC as a NAMA. They are not limited by sector and can include any local, regional and national policies and measures that will reduce greenhouse gas emissions from a business as usual scenario.

### History and overview of NAMA submissions in the transport sector

Non-Annex I Parties to the UNFCCC were first invited to submit NAMA proposals to the UNFCCC in the Copenhagen Accord of December 2009.<sup>1</sup> A year later NAMAs were prominent in the Cancun Agreements,<sup>2</sup> which repeated the invitation to Non-Annex I Parties to submit NAMA proposals to the UNFCCC Secretariat. The Bridging the Gap Initiative has continued to review NAMA submissions from a transport perspective over this period.

In February 2010<sup>3</sup> after the initial deadline for NAMA submissions set in the Copenhagen Accord, 25 Parties had made NAMA submissions, although the level of detail provided varied significantly between Parties. The number of submissions continued to increase to 36 in May 2010<sup>4</sup> and to 43 in September 2010,<sup>5</sup> the date of the last Bridging the Gap analysis of NAMA submissions.

The number of NAMA submissions appears to have now stabilised as eight months later only one additional Party (Tajikistan in January 2011) has made a submission to the UNFCCC, bringing the total number of Parties to make a submission to 44.<sup>6</sup> Submissions have therefore been made by 29% of all Non-Annex I Parties to the Convention.<sup>7</sup>

The submission by Tajikistan, like those from many other Non-Annex I Parties, proposes a number of relatively vague economy-wide mitigation actions. These, for example, include an intention to conduct 'projects on capacity building and technology transfer' and the 'development of low carbon growth through the introduction of renewable energy sources.' This does not

<sup>1</sup> Conference of the Parties (2010) Decision 2/CP.15. Available from <http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf#page=4>.

<sup>2</sup> The Cancun Agreement Decisions and an overview of the Cancun Agreements can be accessed from [http://unfccc.int/meetings/cop\\_16/items/5571.php](http://unfccc.int/meetings/cop_16/items/5571.php).

<sup>3</sup> Dalkmann and Binsted (2010) Copenhagen Accord NAMA Submissions: Implications for the Transport Sector. February 2010. Bridging the Gap. Available from [http://www.transport2012.org/bridging/ressources/files/1/586,NAMA-submissions\\_080210\\_final.pdf](http://www.transport2012.org/bridging/ressources/files/1/586,NAMA-submissions_080210_final.pdf).

<sup>4</sup> Binsted and Sethi (2010) Copenhagen Accord NAMA Submissions: Implications for the Transport Sector. May 2010. Bridging the Gap. Available from [http://www.transport2012.org/bridging/ressources/files/1/720,NAMA-submissions\\_additional-submissi.pdf](http://www.transport2012.org/bridging/ressources/files/1/720,NAMA-submissions_additional-submissi.pdf).

<sup>5</sup> Binsted, Davies and Dalkmann (2010) Copenhagen Accord NAMA Submissions: Implications for the Transport Sector. September 2010. Bridging the Gap. Available from [http://www.transport2012.org/bridging/ressources/files/1/913,828,NAMA\\_submissions\\_Summary\\_030810.pdf](http://www.transport2012.org/bridging/ressources/files/1/913,828,NAMA_submissions_Summary_030810.pdf).

<sup>6</sup> The NAMA submissions made under Appendix II of the Copenhagen Accord can be accessed from [http://unfccc.int/meetings/cop\\_15/copenhagen\\_accord/items/5265.php](http://unfccc.int/meetings/cop_15/copenhagen_accord/items/5265.php). They have also been compiled in UNFCCC (2011) Compilation of information on nationally appropriate mitigation actions to be implemented by Parties not included in Annex I to the Convention. Available from <http://unfccc.int/resource/docs/2011/awglca14/eng/inf01.pdf>.

<sup>7</sup> There are currently 152 Non-Annex I Parties to the Convention. A list of these Parties can be accessed from [http://unfccc.int/parties\\_and\\_observers/parties/non\\_annex\\_i/items/2833.php](http://unfccc.int/parties_and_observers/parties/non_annex_i/items/2833.php).



preclude activities in the land transport sector, particularly given the relatively high energy consumption of the sector. This document, however, only considers Parties to have submitted transport NAMAs where the NAMA proposals have explicitly stated an intention to conduct climate change mitigation activities in the land transport sector.

On this basis, 28 of the 44 NAMA submissions (64%) to date refer to activities in the transport sector. Table 1 below gives an overview of the nature of NAMA proposals in the transport sector and Table 2 summarises the content of the land transport NAMAs submitted. Table 4 in the Appendix contains more details of the transport NAMA submissions made to the UNFCCC.

**Table 1 : An overview of the nature of NAMA proposals for actions in the land transport sector of Non-Annex I Parties to the Convention**

Non-Annex I Party	Nature of transport NAMA submitted					
	Full sector strategy	Sub-sector strategy	Programme of Activities	Policies	Single projects	Unknown
Republic of Armenia				✓		
Benin		✓				
Botswana				✓		
Central African Republic				✓		
Chad				✓		
Colombia					✓	✓
Republic of the Congo					✓	✓
Costa Rica						✓
Cote d'Ivoire					✓	
Eritrea						✓
Ethiopia				✓	✓	
Gabon		✓				
Ghana		✓		✓		
Indonesia						✓
Israel						✓
Jordan				✓	✓	
Madagascar				✓		
Mauritania				✓		
Mexico		✓		✓	✓	
Mongolia				✓		
Morocco				✓	✓	
Papua New Guinea						✓
San Marino					✓	✓
Sierra Leone				✓		
Singapore				✓		
The former Yugoslav Republic of Macedonia		✓		✓	✓	
Togo				✓		
Tunisia		✓		✓		



**Table 2 : A summary of the content of NAMA proposals in the land transport sector**

Non-Annex I Party	Infrastructure											
	Technology oriented	Systems management	Integrated land-use planning	Economic	Regulation/ enforcement	Mass transit	Non-Motorised Transport (NMT)	Other road	Unspecified	Public campaigns	Additional unspecified activity	No details
Republic of Armenia	✓											
Benin						✓						
Botswana						✓					✓	
Central African Republic			✓								✓	
Chad	✓											
Colombia												✓
Republic of the Congo									✓		✓	
Costa Rica												✓
Cote d'Ivoire										✓		
Eritrea												✓
Ethiopia	✓					✓						
Gabon	✓				✓	✓						
Ghana	✓				✓	✓	✓	✓		✓		
Indonesia												✓
Israel												✓
Jordan	✓				✓	✓		✓				
Madagascar	✓					✓					✓	
Mauritania										✓		
Mexico				✓		✓		✓			✓	
Mongolia				✓	✓							
Morocco	✓	✓	✓		✓	✓				✓		
Papua New Guinea												✓
San Marino										✓	✓	
Sierra Leone					✓	✓						
Singapore	✓	✓		✓			✓			✓	✓	
The former Yugoslav Republic of Macedonia	✓	✓	✓			✓		✓			✓	
Togo	✓											
Tunisia	✓	✓	✓			✓					✓	



## A promising start for transport NAMAs

***The NAMA submissions made to the UNFCCC so far reflect the aspiration of many Non-Annex I Parties to conduct climate change mitigation activities in the land transport sector.***

The fact that 64% of Non-Annex I Party NAMA submissions have registered a demand for land transport NAMA highlights the appropriateness of interventions in this sector to control emissions in a diverse range of countries and circumstances.

The aspiration of Parties to develop sustainable transport infrastructure and behaviours could also be seen to reflect recognition within Non-Annex I Parties of the wider social, economic and environmental benefits that can result from the development of a sustainable transport system.

***Countries are also developing transport NAMAs that have not been submitted to the secretariat.***

The transport NAMA activities proposed by the Parties are not exhaustive. Several Parties state that actions submitted are preliminary and an ‘initial list’ that will require more detailed analysis and that will be extended.

A pre-session workshop on NAMAs in Non-Annex I Parties preceded the first negotiation sessions of 2011 (the 14<sup>th</sup> AWG-LCA and the 16<sup>th</sup> AWG-KP), which took place in April in Bangkok, Thailand.<sup>8</sup> This workshop demonstrated that Parties who have made an official NAMA submission to the UNFCCC have further developed and elaborated NAMA proposals since making the submissions. It also highlighted that Parties that have not responded to the Copenhagen Accord’s call for NAMA proposals are developing, and in some cases implementing, land transport climate change mitigation activities in the context of NAMA.

The workshop was scheduled to engage Parties with the provisions of the Cancún agreements and to highlight and understand the diversity and support requirements of NAMAs. Twelve Parties provided presentations at this session, half of which explicitly referred to actions in the transport sector. An overview of these activities is provided in Table 3 below.

**Table 3 : Planned and existing NAMA actions presented at the April pre-session workshop of NAMAs.**

Non-Annex I Party	Action
<b>Bangladesh</b>	<ul style="list-style-type: none"> <li>• Replacement of inefficient vehicles and engines</li> <li>• The expansion of mass transport.</li> </ul>
<b>China</b>	<ul style="list-style-type: none"> <li>• Reform pricing mechanisms related to oil, natural gas and electricity</li> <li>• Subsidies and incentives for clean energy vehicles</li> </ul>
<b>Mexico</b>	<ul style="list-style-type: none"> <li>• Accelerated penetration of mass public transit systems</li> <li>• Expansion of technology additional to BRTs (such as electric or hybrid vehicles)</li> <li>• Replacement of old vehicles</li> <li>• Route optimisation in medium-sized cities</li> </ul>
<b>Republic of Korea</b>	<ul style="list-style-type: none"> <li>• Green transport infrastructure</li> </ul>
<b>Singapore</b>	<ul style="list-style-type: none"> <li>• Promotion of public transport</li> <li>• Adoption of less carbon intensive fuels.</li> </ul>
<b>South Africa</b>	<ul style="list-style-type: none"> <li>• Advanced transport options and sustainable transport development.</li> </ul>

<sup>8</sup> See [http://unfccc.int/meetings/intersessional/bangkok\\_11/items/5887.php](http://unfccc.int/meetings/intersessional/bangkok_11/items/5887.php).



The workshop identified a number of challenges to the development of NAMAs, many of which relate to the need for a clear framework for their development, submission, registration, support, implementation and Measuring, Reporting and Verification (MRV). This reflects the fact that while NAMAs remain prominent in the UNFCCC negotiations the concept, as well as the associated conditions, rules and modalities, have not yet been agreed upon.

***The design of the NAMA Registry will be central to catalysing the development of further NAMAs in the transport sector.***

The Copenhagen Accord and its call for NAMA submissions were designed as an interim step to facilitate climate change mitigation activities in Non-Annex I countries, but now over a year later there is still uncertainty over how the required technical, financial and technical support for NAMA actions will be delivered. NAMAs were officially recognised in the Cancún Agreements in December 2010 but their framework and modalities remain unclear.

The NAMA Registry is one of the provisions that is yet to be developed, but which could catalyse the submission of NAMA proposals and if adequately linked with support could up-scale climate change mitigation activities in all sectors of Non-Annex I countries. The Copenhagen Accord stated that NAMAs seeking international support should be recorded in a registry that could be used to match the proposals with the necessary finance, technology and capacity building support. The Cancún Agreements confirmed that the UNFCCC will set up such a registry but the UNFCCC has not yet decided what form this registry should take, nor what the rules and modalities for NAMA submission should be. Similarly, the MRV requirements for unilateral and supported NAMAs need to be developed. Their development will be a particularly crucial step for the ability of NAMAs to support actions in the land transport sector as methodological requirements of the CDM have limited the ability of transport interventions to obtain support.<sup>9</sup>

***A community of international experts are ready to support the further development of transport NAMAs.***

The international dialogue on NAMAs has been continuing for some years but there are indications that it is gathering momentum. This has been driven in part by the wide support of Parties to the NAMA concept and by the engagement of experts. Bridging the Gap, as part of the Partnership on Sustainable Low Carbon Transport (SLoCaT), has been active in this process with one activity being the establishment of a joint Transport NAMA Working Group. The first meeting of the Working Group in April 2011 was well received by participants<sup>10</sup> and a second has been scheduled for June 2011. The Working Group can facilitate the exchange of experience, strengthen Party activities, and inform the UNFCCC process of transport NAMA. The outputs could therefore contribute to the development of a NAMA framework that is conducive to the effective support of interventions in the transport sector.

<sup>9</sup> For a report on a recent UNFCCC Workshop on CDM and transport see Replogle and Bakker (2011) available from [http://www.transport2012.org/bridging/ressources/documents/2/1165.UNFCCC-CDM-Workshop-Bonn-3\\_3\\_11-Out.pdf](http://www.transport2012.org/bridging/ressources/documents/2/1165.UNFCCC-CDM-Workshop-Bonn-3_3_11-Out.pdf)

<sup>10</sup> The event details are available from <http://www.transport2012.org/transport-climate-change-news/2011-04-15,NAMAWorkshop-seoul.htm>.

## Appendix

**Table 4 : Details of transport NAMAs submitted**

Non-Annex I Party	Action
Republic of Armenia	<ul style="list-style-type: none"> <li>• 'Improvement of energy efficiency in all sectors of the economy'</li> <li>• 'Expansion of electrical transport and increase of the natural gas share in motor transport's fuel'</li> </ul>
Benin	<ul style="list-style-type: none"> <li>• Develop public transport in the city of Cotonou and its suburbs</li> </ul>
Botswana	<ul style="list-style-type: none"> <li>• Policies in the transport sector (only 'mass transport systems' are specified)</li> </ul>
Central African Republic	<ul style="list-style-type: none"> <li>• 'Programme design of new urban areas, integration of principles of optimization of energy consumption and limiting urban sprawl</li> <li>• 'Controlling emissions from vehicles in large urban areas'</li> </ul>
Chad	<ul style="list-style-type: none"> <li>• 'Develop less polluting modes of transport'</li> <li>• Promoting the use of biofuels in the transport sector</li> </ul>
Colombia	<ul style="list-style-type: none"> <li>• [Colombia is currently anticipating studies of mitigation and abatement cost curves for the transport sector, which will be incorporated in the national strategy for low-carbon development]</li> <li>• Implementation of CDM in the transport sector (it cites the 'successful mass public transport system')</li> </ul>
Republic of the Congo	<ul style="list-style-type: none"> <li>• 'Control emissions from vehicles in large agglomerations'</li> <li>• 'Rehabilitation of transport infrastructure.'</li> </ul>
Costa Rica	<ul style="list-style-type: none"> <li>• The country is in the process of identifying concrete policies, sectors and measures that will be specific NAMAs. On a preliminary basis efforts will focus on sectors that specifically include the transport sector.</li> </ul>
Cote d'Ivoire	<ul style="list-style-type: none"> <li>• 'Conduct awareness campaigns in the transport sector to support sustainable production and consumption.'</li> </ul>
Eritrea	<ul style="list-style-type: none"> <li>• Research, develop, demonstrate, apply, diffuse and transfer of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol (MOP) in sectors including the transport.</li> </ul>
Ethiopia	<ul style="list-style-type: none"> <li>• 'Biofuel development for road transport'</li> <li>• 8 railway projects with trains to run from electricity generated by renewable sources</li> <li>• 1 light railway project with trains to run from electricity generated from renewable sources.</li> </ul>
Gabon	<ul style="list-style-type: none"> <li>• Develop a quality public transport with buses running on more energy efficient fuel</li> <li>• Import and sell used vehicles that are less than 5 years old (promote scrapping, green label cars, and import new vehicles operating with liquefied natural gas).</li> </ul>
Ghana	<ul style="list-style-type: none"> <li>• Improve road conditions by increasing the percentage of paved road</li> <li>• Expand road and develop infrastructure and promote rail, maritime, air and inland water transportation systems</li> <li>• Expand infrastructure for non-motorised transport</li> <li>• Develop and improve facilities for public transport</li> <li>• Incentivise the use of public transport and promote car pooling</li> <li>• Enforce road worthiness certification requirements</li> <li>• Retrofit existing refinery infrastructure and ensure that new refinery produce non-metallic based gasoline</li> <li>• Substitute the use of gasoline with CNG, LPG and electricity for public transport</li> <li>• Promote the production and use of bio-fuels as transport fuel</li> <li>• Promote the use of Euro III and above as well as use flexi vehicles</li> <li>• Institute measures to promote and switch from the use of gasoline and diesel fuels to use of CNG, LPG and electricity for public transport.</li> </ul>
Indonesia	<ul style="list-style-type: none"> <li>• 'Shifting to low-emission transportation modes'</li> </ul>
Israel	<ul style="list-style-type: none"> <li>• A National Action Plan will be prepared to reduce emissions with a focus on energy efficiency, renewable energy, green buildings and transportation</li> </ul>
Jordan	<ul style="list-style-type: none"> <li>• Railway project (start design and feasibility study)</li> </ul>



Non-Annex I Party	Action
	<ul style="list-style-type: none"> <li>Amman to Zarqa light rail project to improve urban transport standards in greater Amman to Zarqa metropolitan area, reduce pollution and cut back vehicle emissions by introducing an environmentally friendly transport system</li> <li>Modernise the Freight Transport Fleet operating in Jordan, stop importing old trucks and transform gradually into a modern efficient fleet.</li> <li>Build and Develop the Amman dry port south of the city on an 80 m new ring road to create a new corridor which aims to reduce congestion of trucks and pollution.</li> <li>Aqaba Port Project. By moving the port south to the Saudi border, thus cutting back significantly the distance for the ships to travel in Jordan water and congestion in the city of Aqaba.</li> </ul>
Madagascar	<ul style="list-style-type: none"> <li>Promote the exploitation of biofuels in the transport sector</li> <li>'Introduce and develop the least polluting mode of transport (means of transport intermediaries, urban rail, reduce transport vectors).'</li> </ul>
Mauritania	<ul style="list-style-type: none"> <li>Promote public transport (as a component of their strategy to enhance energy efficiency and reduce energy consumption in urban and rural areas).</li> </ul>
Mexico	<ul style="list-style-type: none"> <li>'Mexico adopted its Special Climate Change Program in 2009 including a set of nationally appropriate mitigation and adaptation actions to be undertaken in all relevant sectors'</li> </ul>
Mongolia	<ul style="list-style-type: none"> <li>'To promote the import of fuel efficient vehicles, it can be used economic measures such as implementation of used vehicle import standards and vehicle registration tax.'</li> </ul>
Morocco	<ul style="list-style-type: none"> <li>Enhance the role of technical inspection centres in controlling the vehicles in circulation to reduce emissions.</li> <li>Renewal of vehicle fleets for road freight, taxis, and 'premium renewal vehicles.'</li> <li>Promote and develop railway transport by enhancing the Tanger to Casablanca route and by electrifying the Fès to Oujda route.</li> <li>Develop a regional suburban express train service in Casablanca.</li> <li>Commission a tram service in Rabat</li> <li>Implement urban travel plans as well as long-distance/inter-urban plans to ensure consistency and to support land-use planning.</li> </ul>
Papua New Guinea	<ul style="list-style-type: none"> <li>No NAMAs specified but an intention outlined to conduct NAMAs in the transport sector.</li> </ul>
San Marino	<ul style="list-style-type: none"> <li>Reduction of energy consumption in the transport sector through energy saving and rational use and 'information campaigns to favour implementation thereof.'</li> </ul>
Sierra Leone	<ul style="list-style-type: none"> <li>Development and enforcement of regulations on regular maintenance of vehicles.</li> <li>Improvement of the use of mass transport for passengers and freight.</li> </ul>
Singapore	<ul style="list-style-type: none"> <li>It contains no specific NAMAs but refers instead to 'mitigation and energy efficiency measures announced under the Sustainable Singapore Blueprint in 2009.'</li> </ul>
The former Yugoslav Republic of Macedonia	<ul style="list-style-type: none"> <li>Improvement of the overall efficiency in the transport sector and energy efficiency of vehicles (revitalisation, extension and better maintenance of road and railway infrastructure; extension spreading of the electrification of the railway network; modernisation of the vehicle fleet; motivation for wider use of alternative fuels and other power systems (i.e. LPG, CNG, biodiesel, hybrid vehicles)</li> <li>Improvement of the public urban and inter-city transport (improvement in the planning, organisation and control of traffic; measures for regulation of the traffic in central urban areas; modernisation of the transport equipment for the public traffic; synchronisation of the road signalisation in towns; introduction of electronic pay toll charging; introduction of electrically driven types of transport (i.e. tramways); electrification of the railway network.</li> <li>Harmonisation of the national transport legislation with EU Directives (energy and climate package – biofuels; regulation on fuels quality in accordance with EU norms).</li> </ul>
Togo	<ul style="list-style-type: none"> <li>Reduce energy consumption of public transport</li> </ul>
Tunisia	<ul style="list-style-type: none"> <li>Develop public transport in cities (metro, bus and train)</li> <li>Use land-use planning and logistics to ensure that economic hubs are well served by transport</li> <li>Develop multimodal transport</li> <li>Land-use planning to reduce the demand for transport</li> <li>Develop an energy efficiency programme for the transport sector.</li> </ul>