



Summary

The NAMA SUTRI aims to advance sustainable transport in Indonesian cities by providing financial and technical support, capacity building as well as recognition for urban transport policies. The NAMA covers the following activities:

- At a national level, development of a Policy Framework for Sustainable, Low-carbon Urban Transport, comprising a regulatory framework, co-financing of local measures, capacity building, practical guidelines for local planning and overall MRV of the actions.
- At the local or provincial level, development, implementation and MRV of Comprehensive Urban Low-carbon Mobility Plans. The sustainable transport policies covered include a mix of 'push' and 'pull' measures, including high quality public transport, non-motorised transport, parking management, traffic management, spatial planning, alternative fuels and vehicle efficiency.

It is envisaged to be implemented in two phases: piloting in 2–3 cities from 2013 to 2020 full-scale implementation in at least 10 cities from 2016 to 2025. Based on this Concept Note, a detailed NAMA proposal for the pilot phase will be developed in 2013.

Policy identification

Policy framework The NAMA SUTRI brings together the transport and climate change agenda by putting forward a policy programme on low-carbon, sustainable urban transport in Indonesia that can be developed as an internationally supported NAMA.

In 2011 Indonesia released the National Action Plan for Reducing Greenhouse Gas Emissions (RAN-GRK) which includes activities in the transport sector. The urban transport agenda is already linked to in the RAN-GRK as well as the Indonesian Climate Change Sectoral Roadmap (ICCSR). RAN GRK and ICCSR are also listed in National Medium Term Plan (RPJMN) which is valid for every 4 years. This RPJMN serves as the President's vision during his/her presidential duty.

Stakeholders In order to further develop and implement transport related actions of the RAN-GRK, the Ministry of Transport (MoT) set up a working group to facilitate the coordination of climate change mitigation actions in the transport sector. The **Working Group of Transport and Climate Change** was formalised by a Minister Decree in November 2011. The head of the working group is the Vice Minister of Transportation. Members of the working group are high-level decision makers of different sub sectors (land, rail, sea and air transport) as well as of cross-cutting directorates. The implementing body is the Center for Studies of Partnership and Transportation Services (PKKPJT, directorate of MoT), which is the direct counterpart to the GIZ TRANSfer project.

One of the objectives of the working group is the development of NAMAs that attract international support for implementation. The leadership of the NAMA development is taken by the Advisor for Environment to the Minister of Transportation.



Cycling woman on a car-free day
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Process (I)	<p>Step i) Analyse emissions and mitigation potential A study on NAMA development in the transport sector in Indonesia was conducted in March 2011. It includes an overview of transport emissions in the transport sector, summarises existing climate change policies and identifies relevant stakeholders and their roles. (link)</p> <p>Step ii) Identify Possible NAMAs Several meetings with representatives of different Ministries were held between March and October 2011 to discuss potential mitigation actions and to agree on a process of NAMA development. Based on the discussions with different stakeholders, a long list of potential mitigation actions in the transport sector was compiled including projects and policies in the land, rail and air transport subsectors. (link)</p> <p>Step iii) Select and Refine In addition, a NAMA identification workshop was held in October 2011 in Jakarta. The aim of this workshop was identifying and discussing different options for transport NAMAs. Workshop participants included Directorate Generals of the MoT, National Council on Climate Change (DNPI), Ministry of National Development Planning (BAPPENAS), GIZ, and a state-owned public transport company of the MoT. Since MoT had a clear preference to develop a programme rather than a single project as a NAMA, several mitigation measures were grouped into four programmes (fuel efficiency, urban transport, rail, and road freight). These measures could potentially be developed as pilot supported NAMAs, and for each of these a 'Potential NAMA factsheet' was made. (link)</p> <p>Step iv) Elaborate Data and consider funding options To clearly evaluate which of these programmes would be most suitable to be developed as a pilot supported Transport-NAMA, a screening was done. The criteria were developed by members of the working group and GIZ TRANSfer and included the following issues:</p> <ol style="list-style-type: none"> 1. Likelihood of successful implementation in 1-3 years 2. Mitigation potential in 2020, 3. Co-benefits 4. Costs and finance 5. Feasibility of MRV 6. Showcase potential for Indonesia and the transport sector <p>For further explanation of these criteria, as well as the method on the application of these criteria, see NAMA Screening Tool in the TRANSfer Toolbox. The assessment of the criteria was done by the working group. The highest rating was given to the Sustainable Urban Transport Programme.</p> <p>After this, a concept for such programme was discussed with different departments of MoT and an implementation in two phases was decided. In a NAMA concept note, partners of the project agreed on the framework of a Sustainable Urban Transport Programme in July 2012. In a first phase, a national urban transport framework will be developed and three pilot cities will develop and start implementing mitigation actions. During a selection process, the MoT decided to support the following cities: Medan, Batam and Manado. In February 2013 Cooperation agreements between the Local Governments, the Provincial Governments and the MoT have been signed as a legal basis for implementation.</p>
Type and status of the mitigation action/policy	<p>The Sustainable Urban Transport Programme (NAMA SUTRI) is a new programme which builds up on existing initiatives and covers the following activities:</p> <ol style="list-style-type: none"> 1) At the national level, development of a National Sustainable, Low-carbon Urban Transport Framework, comprising the following elements: <ol style="list-style-type: none"> a) Supporting policies; b) Capacity Development and Guidance for local Governments; d) Overall MRV. 2) At the local level, for each participating city: <ol style="list-style-type: none"> a) Policy development and planning towards comprehensive strategies; b) Implementation of the appropriate actions, according to these plans; c) Monitoring of actions, and reporting to national and provincial level. <p>The specific measures in each city at a local level are going to be selected during a pilot phase. Basically, everything that contributes to avoiding, shifting and improving transport towards low-carbon development can be considered. This reflects the need to apply appropriate measure in each city. During the further progress, there may be further guidance regarding the measures that can be implemented and supported within the programme.</p> <p>In a second phase further cities in Indonesia can implement mitigation actions under the umbrella of NAMA SUTRI and benefit from international support.</p>

Lessons learned	<p>The development of a new programme gives the opportunity to consider different donor priorities during the design.</p> <p>Every city has different transport challenges and there is no one-fits-all solution. Since policy packages (combining push- and pull-measures) are more effective than single measures, the NAMAs design should leave a certain level of flexibility.</p> <p>This flexibility however, may lead to different interpretations and expectations between the stakeholders involved.</p> <p>The involvement of local governments leads to certain expectations and the wish to quickly move towards implementation of actions with international support. It is therefore important to communicate the risks and expectations clearly.</p>
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MRV

Key parameters	<p>The MRV concept will build up on an existing monitoring system for transport in cities which focusses on public transport and non-motorised transport.</p> <p>This monitoring framework will be the basis for the MRV framework of NAMA SUTRI. In addition to the existing indicators, the MRV framework of NAMA SUTRI will also cover indicators on the overall transport situation, travel behaviour and co-benefits of the local population. This is relevant for local decision makers and helps to evaluate the impact of certain measures. A monitoring framework for RAN GRK is currently under development. Since the GHG mitigation related activities are all coordinated by the same department in the Ministry of Transport it will be ensured that both concepts are in line.</p>
Available data & data needs	<p>Transport data is mostly limited to motorised transport and infrastructure, <i>e.g.</i> vehicle fleet, road length, traffic accidents. Vehicle registration data is recommended to be verified.</p> <p>Only scattered information is available on freight, public transport (ridership, quality), non-motorised transport and transport behaviour. Data on Public Transport is available at the National Level for the last 5 years (Evaluation 'Sistem Transit').</p> <p>Information is decentralised and accessibility is partially restricted.</p>
<i>Ex-ante</i> estimations	<p>Since the actual measures as well as most of the participating cities are not known yet, the mitigation impact cannot be determined at this stage. The following explanations will describe an order of magnitude of the potential mitigation impact of NAMA SUTRI.</p> <p>The main urban transport measures as listed in Annex 1 of RAN-GRK indicate an emission reduction potential of approximately 4.7 MtCO₂-eq until 2020, with further reductions possible by implementing internationally supported measures.</p> <p>Road transport baseline emissions are estimated to be 77 Mt per year for urban areas in 2020. This translates into approximately 0.6 t CO₂-eq <i>per capita</i> and year for urban dwellers, average across Indonesia. Generally speaking an overall emission reduction potential of over 25 % for urban transport appears to be possible for a comprehensive package of policies, as suggested by literature (TRL <i>et al.</i>, 2010^[1]). Assuming 10 cities will participate in the NAMA, 3 metropolitan, 4 large and 3 medium sized, with estimated baseline emissions of 5.9 MtCO₂-eq per year in 2020, this would lead to 0.6–1.2 Mt/yr emission reduction in 2020, based on a conservative scenario of 10 % reduction and an optimistic scenario of 20 %. Based on these assumptions the emission reduction may range between 3 and 6 MtCO₂-eq until 2025.</p>
MRV process	<p>The MRV process will be embedded in the Monitoring Framework Indonesia is establishing for RAN GRK. This framework requires a biennial update report.</p> <p>In addition, there will be a more frequent update for cities that receive support under the NAMA framework. It is envisaged to develop a common framework for urban transport data at a national level in order to receive comparable information.</p>

^[1] *Comparative international review of third country measures to reduce the climate impact of transport.* Report by TRL, ISIS, Embarq, ECN, GTZ, CAI-Asia, December 2010, <http://www.sutp.org/t-mapper>.

Lessons learned	<p>In many cases, the available data on urban transport is limited to motorised transport and infrastructure. The main incentive for MRV at local level is to get a better understanding how to solve transport problems and use budget most effectively.</p> <p>It is advisable to focus on the establishment of a common framework and methodology at a national level and start collecting data for selected cities (<i>e.g.</i> modal share, load factors, emission factors) which can be used as default data throughout the country at the beginning.</p> <p>The MRV framework for an urban transport NAMA should consider the need for data required for good policy making at local level on one hand and the ASIF framework to calculate emission reductions on the other hand.</p>
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Contribution to sustainable development

Expected co-Benefits	<p>The improvement of urban transport conditions leads to several co-benefits for the local population and environment: <i>e.g.</i> reduced congestion, improved air quality, liveability, and improved competitiveness.</p> <p>The specific co-benefits for each city will be elaborated once the policies have been decided.</p>
Monitoring of co-Benefits	<p>Co-Benefits are an essential element of the MRV framework. There will be national guidance but each city can adapt the framework to their needs.</p>
Lessons learned	<p>Co-Benefits are the main incentive for local governments to implement NAMAs.</p>

Implementation

Status and next steps	<p>The legal framework for implementation has been set up in a cooperation agreement between the MoT and three pilot cities as well as the respective provinces. Next steps towards implementation cover the design of policy packages and discussion with potential donors on opportunities to support the implementation. The design of measures is depending on available resources and conditions of cooperation.</p>
Lessons learned	<p>The high level of flexibility of NAMA SUTRI as well as the uncertainty regarding the availability of international support is challenging at an early stage of cooperation with sub-national partners.</p>

Applied tools	<ul style="list-style-type: none"> ■ Study on NAMA Options ■ Long-List ■ Fact Sheets ■ NAMA Screening Tool ■ Concept Note ■ List of Urban Transport Data (under development)
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BRT Ride in Jakarta
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