Screening Tool

Screening Potential Transport NAMAs – A Decision Support Tool

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Part of the Handbook 'Navigating Transport NAMAs'

TRANSfer Project – Towards climate-friendly transport technologies and measures

Introduction

This note summarises current thinking about the process of screening and selecting policy options to be developed as NAMAs. It aims to provide a tool for transport policy-makers for screening and selecting suitable NAMAs in the transport sector, so that these policy options are 'nationally appropriate' and reduce greenhouse gas (GHG) emissions. It gives guidance to structure the process of screening potential NAMAs, rather than a template approach with objective outcomes. In the end, selecting potential NAMAs is a political decision.

In addition to transport policy-makers, other stakeholders from government, private sector and consultancies/academics may be involved. Although the selection process is ideally based on sound analysis this tool is particularly useful in contexts where few climate policies are implemented and in-depth studies on emission reductions are rare. It is based on recently published reports and draft documents, and developed in the framework of the TRANSfer Project: www.TRANSferProject.org.

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Review of potential selection criteria

Table 1 gives a brief overview of criteria mentioned in recent literature, grouped in main categories.

Table 1: *Overview of criteria*

Criteria groups	Tilburg et al. (2011)[1]	Situmeang and Lubis (2011)[2]	Sakamoto et al. (forthcoming)	TRANSfer additional criteria
Mitigation potential	Direct and indirect	Contribution to national emission reduction target; long-term impact; Replicability at different geographical levels	Mitigation potential at different timescales	Potential for transformation of sector
Co-benefits	Health, education, energy security, etc	Poverty reduction, job creation, sustainable economic growth and social development	'National appropriateness': economic, environmental and social benefits	
Costs	Investments, financial risk, transaction costs, costs per tonne CO_2-eq	Cost effectiveness	Costs and cost effectiveness	Access to financing options
Ease of implementation	Barriers, diversity of stakeholders, relation to current regulation, awareness and acceptance, lead time	Consistency with national development and environmental, data availability and quality, political and social feasibility; technical practicality	Political acceptability and technical feasibility	Likelihood of successful implementation
MRV			Sectoral appropriateness: data collection effort	Ease of MRV
				Showcase potential
				Avoiding overlap with other international programmes

[1] Tilburg, X. van, L. Cameron, L. Würtenberger, S. Bakker (2011) *On developing a NAMA proposal*. Discussion paper ECN-O--11-053.

[2] Situmeang, H., S. Lubis (eds, 2011) *Development of Indonesia NAMAs Framework*. Report II, 19 July 2011.

The modalities and procedures of NAMA are still under development, however broadly it can be said that any policy measure that reduces greenhouse gases below business as usual is in principle eligible. Several authors have suggested that this could include options that only indirectly result in reduced emission, e.g. capacity building, data collection or strategy development[3].

One of the key issues is the measurement, reporting and verification of NAMAs in terms of GHG emission reductions, which may pose challenges particularly in the transport sector due to data availability and uncertainty. For the current pilot-NAMA it would be recommendable to make sure up front that data availability for MRV is not a problem[4].

Another consideration could be to secure buy-in from the relevant Indonesian policy-makers and other stakeholders regarding feasibility and implementation of the proposed NAMA. This can be time-consuming[5].

In addition, this NAMA may be (one of the) first that Indonesia is going to develop and submit and therefore this could play a showcasing role for the country at the international level. For the transport sector specifically, as the CDM has not been successful, the pilot-NAMAs have a role to play.

On the international support side, donor countries (Annex I) are likely to be most interested in measures with large GHG benefits, however considering the early stage of NAMAs currently there may not much to choose for them (i.e. it may be a supply driven market for the foreseeable future).

Recommended criteria

Based on the previous section, the following criteria for the NAMA screening and selection process are recommended[6]:

1. Likelihood of successful implementation:
    - Stage of development (status) of the measure: idea, existing regulation, included in budget plan, implementation started, etc

[3] Bakker, S., and C. Huizenga (2010) Making climate instruments work for sustainable transport in developing countries. *Natural Resource Forum* 34 (4), pp 314-326.
[4] We assume that MRV requirements are going to be flexible: if measurement in GHG emission reductions is not possible, other indicators that show the successful implementation of a NAMA is sufficient (see Bakker & Huizenga, 2010 and references therein). See Situmeang and Lubis (2011) for a brief discussion on current data availability in Indonesia
[5] Jung et al, 2011. http://www.ecofys.nl/documents/Policy_Update_NAMAs_Ecofys_12_2010.pdf

[6] Acknowledging each country is unique and the framework for the NAMA selection process will differ, criteria can be added, deleted and/or modified to the specific context

- Number and diversity of stakeholders, social acceptance and stakeholder buy-in
- Technical and operational feasibility

2. Mitigation potential in 2020:
    - What are the anticipated direct and indirect impacts?

3. Co-benefits:
    - Social: access to transport, road safety, comfort increase
    - Economic : economic growth, job creation, congestion reduction, security of energy supply
    - Environmental: air quality, noise reduction

4. Costs and finance:
    - Abatement cost per tonne of CO_2-eq
    - Transaction costs
    - Access to financial resources
    - Financial risks

5. Feasibility of Measurement, Reporting and Verification (MRV) (in terms of GHG emission reductions):
    - Complexity in methodology
    - Current data availability
    - Need for new data

Optional 6. Showcase potential (only for early NAMAs)

- For the host country
- For the global transport sector

All potential options from a long and short list of transport measures can be ranked according to these criteria. As quantification is difficult, a scoring scale can be used (++, +, 0, - and --). The screening process can then take place based on a table as shown below. For a short listing process the analysis could be of a lower level of detail than the final selection of one (pilot-)NAMA. It should be noted that ‘Feasibility of MRV’ refers to the extent to which the GHG reductions of the NAMA can be

estimated with reasonable certainty. However if this is difficult it should not be a reason to not select a certain NAMA, as MRV can also be done by other indicators that show implementation of, i.e. MRV is an aspect of transport-NAMA development rather than a strong selection criterion. Table 2 gives broad guidance on the scoring of each criterion.

Table 2: *Scoring guidance*

Score	Likelihood of successful implementation	Mitigation potential ($MtCO_2$-eq/yr)	Co-benefits	Cost/finance	MRV
++	High chance of success	>1	Very high	Low cost and good access to finance	Proven easy method, low data need
+	Good chance of success for at least the main parts	0.5 – 1	High	Low cost but some financial barriers	Feasible
0	Medium-good chance for most parts	0.1 – 0.5	Average	Medium cost and/or financial barriers	Medium data needs but feasible
-	High barriers for several parts	0-0.1	Low	High cost and/or financial barriers	High data needs, medium complexity
--	Very high implementation barriers	0 (only indirect)	Negative	Very high cost and/or financial barriers	Very high need for new data, high complexity

The evaluation can be completed here, and used as a basis for discussion with stakeholders, on which decisions can be taken. See Table 2 for an example assessment. This is a pragmatic approach, and considered the most suitable for the current process.

Alternatively, a ranking of options can take place, in which each option receives an ‘overall score’. The overall score across the six criteria can be based on a weighted average of the individual scores. However determining the weights is inherently subjective and difficult, and may only be appropriate if the time to reach agreement on that is limited.

Table 3: *Example of scoring and evaluation of transport NAMA options*

Title of option	Brief description	Success chance	Mitigation potential	Co-benefits	Costs/ finance	MRV	Comments
Aa	Abdc	0	+	0	-	-	
Bb	Dcba	+	+	+	+	0	
Cc	Cdea	+	0	-	-	-	

Dd	Dabad	0	+	-	+	0	
Ee	Ecda	0	+	+	-	0	
Ff	Faaa	+	0	0	-	-	
Gg	Gada	0	+	0	0	+	

Box 1. Selecting an internationally supported pilot-NAMA in Indonesia

One aim of the TRANSfer project is to develop a pilot supported transport-NAMA in Indonesia. In order to identify a suitable transport policy measure, the following screening and selection process was used by the project team and the Ministry of Transport in October 2011.

As a starting point, existing policy documents and strategies were used, most notably the National Action Plan on GHG reduction (RAN-GRK), which contains specific actions to be developed as unilateral or supported NAMAs. These were discussed in meetings with subsectors (land, rail, sea and air transport) and high-level stakeholders within the Ministry of Transportation. In addition, a NAMA identification workshop was held, to discuss possible options for transport NAMAs with stakeholders within and outside of the Ministry. After the workshop a long list with over 40 mitigation actions in the transport sector was made, including projects and policies in the land, rail and air transport subsectors.

Based on broad consideration of the options in the long list as well as initial screening, options in land and rail transport were grouped into four programmes (fuel efficiency, urban transport, rail, and road freight) that could be developed potentially as pilot supported NAMAs in the TRANSfer project, and for each of these a one page 'Potential NAMA factsheet' was made. For air transport the ideas were preliminary, and fact sheets could be made in the future. To clearly understand the development potential and select the most feasible option, a screening procedure was undertaken for these four options. The screening criteria followed the 5 criteria as described in this note, with two additions specifically related to the fact there are no transport-NAMAs yet, resulting in a need for early examples. To the first criterion, likelihood of successful implementation, 'in 1-3 years' was added, and sixth criterion was added: 'Showcase potential for Indonesia and the transport sector'.

Application of the criteria to the four options is shown the following table.

Title	Fuel efficiency programme	Sustainable urban transport	Rail programme	Freight programme
Likelihood of success (1-3 yrs)	-	+	-	0
Mitigation potential	++	++	+	++
Cobenefits	0	++	0	0
Costs / finance	++	0	++	0
MRV	+	-	+	0
Showcase potential	+	++	-	0
Overall score	0/+	+	0	0
Note: scoring from -- (very bad), - (bad), 0 (not good not bad), + (good) to ++ (very good)				

The criteria and overall scoring were seen as a basis for discussion rather than resulting in absolute outcomes. Based on this process and discussions with stakeholders, the Sustainable Urban Transport Programme was selected as the most suitable option for the pilot supported NAMA in the TRANSfer project. This programme would cover and expand/replicate urban transport actions already included in the RAN-GRK, including public transport, switch to alternative fuels, traffic impact control, etc. The selection of a pilot NAMA does not mean that other measures are not suitable to be submitted as NAMAs. E.g. a fuel efficiency programme might be perfectly fitting to the concept and has great emission reduction potentials. Instead, the approach to start with a pilot NAMA intends to demonstrate applicability and facilitates actions in other sectors.