



TRANSPerú – Perú's Sustainable Urban Transport NAMA

An Overview

Supported by:



NAMA Facility

On behalf of:



of the Federal Republic of Germany

On behalf of:



of the UK Government

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Motivation and Objective

Peru's total GHG emissions amount to approximately 140 MtCO₂eq, reflecting only a small part of global emissions. However, Peru is experiencing significant economic and population growth, indicating that emissions will rapidly increase in the future. While 40.9% of emissions result from the forestry sector, transport contributes with 14.9 MtCO₂eq per year, representing the largest share of overall energy-related emissions (40%).

While public transport in the Metropolitan Region of Lima and Callao still enjoys a modal share of 60%, individual motorization has been rapidly increasing over the last years, without a corresponding improvement of traffic management and driver attitudes, resulting in severe problems with congestion (average traffic flow at 14km/hr), air pollution and traffic accidents. Already

today, the societal cost of congestion in Lima alone, sums up to USD 7 billion per year. Current problems will be aggravated if the trend towards car-dominated urban conglomerates is not stopped.

The average age of the Peruvian vehicle fleet is 14 years resulting in high specific emission levels; the count of vehicles has almost doubled between 2000 and 2014. As a result, transport-related emissions increased by almost 50% during the last decade.

The NAMA aims to reverse the trend towards car-dominated urban conglomerates based on two building blocks: the provision of high-quality public transport and the optimization of the vehicle fleet. The impact will be broadened by explicitly targeting selected medium-sized cities next to the Metropolitan Area and the national level.

| | | | |
|----------------------|---|--|---|
| Type of action | Policy NAMA based on a comprehensive policy matrix | Type of NAMA | Supported NAMA with unilateral elements |
| Subsector | Urban land based passenger transport, all modes | Geographical scope | National and subnational elements |
| Type of organisation | Ministry of Transport and Communications (MTC); Coordination by Steering Committee supported by Technical Secretariat | | |
| Timeframe | Phase 1: Preparation of the NAMA (2013-2015) Phase 2: Implementation of the NAMA (2015 onwards) | GHG mitigation effect and other benefits | 5 MtCO ₂ eq (2015-2025); only part of the measures considered Less congestion, reduced air pollution, better access to public transport, enhanced social equity, less traffic accidents |

The NAMA at glance

In order to transform the urban transport sector in a sustainable manner and achieve long term positive impacts, the NAMA's focus is the introduction of key structural changes:

- improved framework conditions (e.g. Vehicle Technical Homologations, Fuel Economy Standard and Technical Inspections),
- adequate infrastructure (e.g. Metro lines, optimized bus fleet, cycle lanes), and
- a strong institutional set-up (e.g. dedicated Transport Authority for Lima/Callao).

TRANSPerú's core element is the innovative policy matrix, reflecting a sector transformation agenda which addresses the major challenges in the sector in a structured manner. The policy matrix is developed and implemented commonly by the inter-institutional Steering Committee of the NAMA and foresees the following main elements:

1. Integrated mass public transit system in the Metropolitan Area of Lima/Callao

Installation of a second Metro line of 27 km and a network of 5 formalized bus lanes with corresponding feeding lines. Introduction of a unified fare-and ticketing system.

2. Non-motorized transport in the Metropolitan Area of Lima/Callao

Construction of 60 km of additional cycling lanes and 16 000 bicycle parking spots at public transport stations. Capacity building and awareness campaigns to promote respect for cyclists and pedestrians.

3. Institutional set-up for urban transport management

Key element of the institutional reinforcement is the establishment of a Metropolitan Transport Authority for Lima/Callao, with the objective to plan and coordinate urban transport issues, improving coordination and continuity of planning.

4. Control and mitigation of greenhouse gas emissions and local pollutants by the vehicle fleet

Implementation and enforcement of emission standards and introduction of a labelling system for light duty vehicles.

5. Modernization of the public transport fleet

Reduction of the size of the public transport fleet in the Metropolitan Area of Lima and Callao by scrapping 6000 units and replacing these by 1800 modern vehicles with higher capacity. Scrapping of additional 6000 units in medium sized cities.

6. National Program to support local governments in sustainable urban transport

Support to local governments by a newly established service unit on the national level, granting technical advice and financial support for the development and implementation of sustainable urban transport plans or measures of urban planning (such as the implementation of green zones).

Supportive and organizational measures

Flanking of the implementation of the measures by supporting measures with the objective to overcome existing barriers (lack of access to state-of-the art knowledge, lack of capacity, etc.):

- Technical studies, capacity building measures and training courses to support the implementation of the measures outlined in the policy matrix
- Support in the development and implementation of an appropriate MRV system for the NAMA
- Support in the coordination of the transformation process (e.g. Steering Committee, Technical Secretariat)

Mitigation Potential

The mitigation potential was calculated following a bottom-up approach and resulted in a CO₂ mitigation effect of 5 MtCO₂ accumulated over the period 2015-2025. It is important to note that this preliminary estimation does only consider part of the measures to be implemented under the NAMA. Further, given the transformational character of the measures, positive impacts can be expected also long after the measures have been implemented.

| Scenario | Urban transport in Lima/Callao | Emission Standard outside Lima/Callao | Fleet renewal in two further cities | Total |
|--|--------------------------------|---------------------------------------|-------------------------------------|-------|
| Emissions (MtCO ₂) | | | | |
| Baseline in 2015 | 3.32 | 1.50 | 0.09 | 4.91 |
| BAU in 2025 | 3.59 | 1.67 | 0.09 | 5.34 |
| Mitigation scenario in 2025 (conservative) | 3.43 | 1.57 | 0.09 | 5.09 |
| Accumulated emission reduction 2015 -2025: | 2.53 | 0.54 | 0.02 | 3.09 |
| Mitigation scenario 2025 (optimistic) | 3.32 | 1.49 | 0.08 | 4.89 |
| Accumulated emission reduction 2015-2025: | 3.81 | 1.07 | 0.04 | 4.92 |

Co-benefits

Socio – economic

- High decrease in travel times (18 million hours) and associated economic benefits by extension and formalization of public transport system
- Reduced health costs associated with reduced stress levels from traffic noise/air pollution
- Reduced casualties and injuries by reduction in traffic and modernized fleet

Environmental

- Reduced air pollution by stringent vehicle and fuel standards
- Rational use of scarce resources, e.g. fossil fuels by stringent vehicle and fuel standards

Costs and Financing

The Government of Peru has allocated significant amounts to the policy matrix, mainly to the integrated mass transportation system in Lima (roughly USD 7 billion). Additional amounts are planned for other measures. Several development banks (CAF, IADB, KfW) and technical cooperation agencies have pronounced their strong interest and have committed certain amounts (USD 700 million for Metro line 2) or are currently in the approval process (e.g. USD 250.000 for the National Programme)

With GIZ and KfW as delivery organizations the NAMA was pre-approved for support by the NAMA Facility (a NAMA fund commonly established by the German and British Governments) for the initial implementation phase (EUR 9 million plus loans >EUR 250 million) and submitted a proposal for additional

support for the set-up of the National Programme (EUR 11 million plus loans > EUR 60 million).

International support is needed to ensure full implementation of the NAMA. An estimation of the detailed financing needs for each measure, including costs, revenues and social cost savings, is currently being elaborated.

Implementation of the measures will further open up a number of investment opportunities for private actors, such as concessions for the operation of restructured bus routes (1800 modern buses will be necessary in Lima), or tenders for transport infrastructure (cycling infrastructure, parking facilities, etc.).

Next Steps

- MRV-set-up: Definition of monitoring indicators, assignation of responsibilities
- In-depth definition of project design (further definition of measure 6, elaboration of more detailed budget, etc.)
- Acquisition of further funding



Contact and Further Information

Ministry of Transport and Communications:

Telmo de la Cruz tdelacruz@mtc.gob.pe

Technical secretariat (GIZ):

Jill Velezmoro jill.velezmoro@giz.de

For further information also refer to NAMA Concept Document (download via GIZ Transfer Project homepage)

<http://transport-namas.org/projects/transfer-partner-countries/peru/>



Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Sitz der Gesellschaft
Bonn und Eschborn

Dag-Hammarskjöld-Weg 1-5
65760 Eschborn
Telefon: +49 61 96 79-2636
Telefax: +49 61 96 79-802636

E-Mail: transport@giz.de
Internet: www.giz.de/transport

Contact
André Eckermann
E transfer@giz.de
| www.transport-namas.org

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