



Unilateral NAMA: Sustainable road-based freight transport Colombia

An Overview

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

On behalf of:



Federal Ministry
for the Environment, Nature Conservation,
Building and Nuclear Safety



MinTransporte
Ministerio de Transportes

of the Federal Republic of Germany

Motivation and Objective

Colombia's total GHG emissions have risen to 180 MtCO₂eq per year (0.37% of total worldwide emissions). The transport sector accounts for 12.1% of total national GHG emissions and 39% of Colombia's total energy demand. With 30% of transport emissions, interurban road-based freight is a major emitter within the sector.

Interurban road freight transport in Colombia is characterized by a very old vehicle fleet with an average age of 18 years, a low level of business development and inefficient logistic operations. The sector depends on a large number of small and partly informal business entities, which provide their services in an uncoordinated

manner, resulting in overcapacities and inefficient processes (e.g. 34% of dead mileage). The limited financial resources of the small business entities further reinforces the steady ageing of the vehicle fleet.

The policies summarized under the NAMA have the objective to reduce and rejuvenate the vehicle fleet, to promote the development of modern freight transport businesses, and to enhance the efficiency of logistic operations. The NAMA supports the implementation of the policy measures by providing technical support, and by developing an appropriate MRV system in order to monitor effectiveness and identify improvement potential.



Bogotá, Colombia; Photocredit: Ravi Gadepalli/2006

Type of action	Policies and Program: Economic incentives and regulations	Subsector	Interurban road-based freight transport
Geographical scope	National	Type of NAMA	Unilateral
National implementing entity	National implementing entity: Ministry of Transport (MdT); Further involved parties: Ministry of Environment and Sustainable Development (MADS), National Planning Department (DNP)		
Timeframe	<p>1st phase (until 2018)</p> <ul style="list-style-type: none"> Fleet renewal scheme (PRRPAC) (2008 -2018) EURO IV emission standards as of 2015 <p>2nd phase (2015 onwards)</p> <ul style="list-style-type: none"> Logistics and sector organization: implementation has started, no clear timeframe defined 	GHG mitigation effect and other benefits	<p>In a first estimation of the mitigation impact for the fleet renewal program, results show a mitigation effect of 0.52 MtCO₂eq per year in 2018.</p> <p>Further benefits include: Formalization of labor, reduction of traffic accidents, efficient use of resources, reduction of O&M vehicle costs</p> <p>An estimation does not exist for the 2nd phase of the NAMA</p>

The NAMA at glance

The NAMA consists of 4 mitigation measures and one associated measure outlined in Figure 1. The measures will be detailed below.

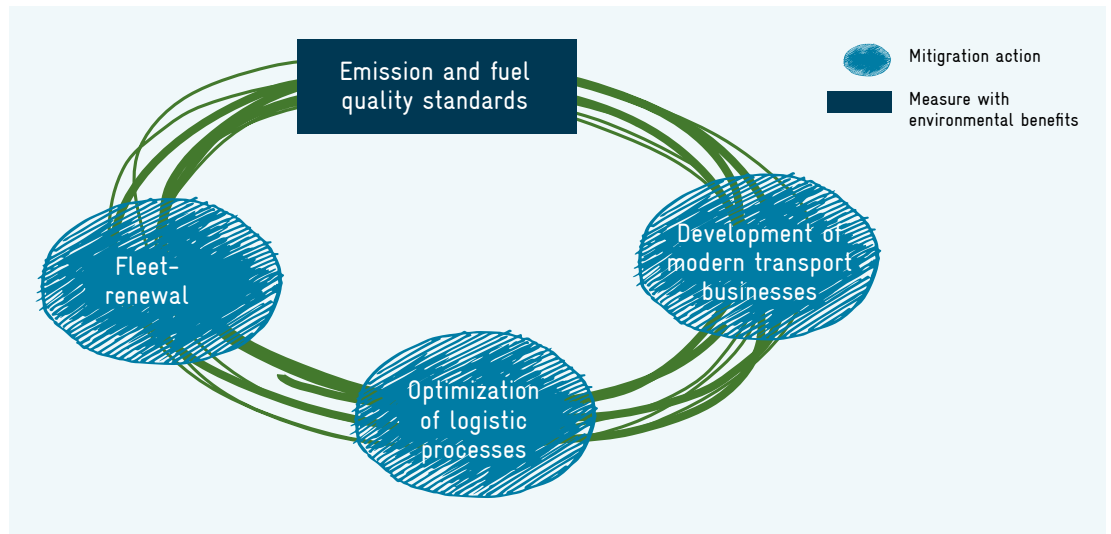


Figure 1: Schematic overview of the NAMA

1. Economic incentives to promote scrapping (PRRPAC Program)

The MdT has attributed USD 530 million to the program for the period 2013-2018, with the target to scrap 20 000 additional vehicles. All freight vehicles >25 years and >10.5tons are eligible to receive a scrapping bonus, which is differentiated according to vehicle size (USD 14 400 – 33 600). Half of the incentive is offered as a purchase bonus in case the vehicle owner wants to buy a new freight vehicle.

2. Regulation of the vehicle fleet size (Regulation “1 for 1”)

The fleet size was frozen in 2003 and the scrapping of an old vehicle was made obligatory for the purchase of a new vehicle. In 2005 a flexibility mechanism was introduced that allowed vehicle owners to buy an additional vehicle without scrapping an old one, in case of paying a deposit until actual disintegration took place. As most of the entities did not redeem their deposit, the collected money was used to establish the fund for the PRRPAC system. The possibility to pay a deposit was retracted in 2013, denoting an actual freezing of the fleet size.

3. Limit on sulphur content in Diesel fuel and emission standard

Start of limit to 50ppm sulphur content in 2013 and start of EURO IV emission standards in 2015.

4. Regulatory changes to promote modern businesses

More efficient vehicle use (reduction of dead mileage), lower average age of fleet and labor formalization by requiring fleet administration by transport companies and promoting small-scale vehicle owners to become part of larger transport companies. In addition, establishment of a maximum vehicle age between 20 and 25 years depending on the vehicle type.

5. Policies to improve the efficiency of national logistics processes

Set of policies to improve the efficiency of the national logistics system, including the implementation of a National Freight Dispatch Registry (RNDC) and a system of national logistic platforms in order to reduce dead mileage and increase efficiency.

Supporting and organizational actions

The implementation of the measures is flanked by supporting measures with the objective to overcome existing barriers:

- Provision of technical support to improve the processes under the PRRPAC program
- Support in the development and implementation of an appropriate MRV system for the NAMA
- Support in the coordination of the implementation

Mitigation Potential

A first estimation of the PRRPAC Program identified a GHG emission reduction of 0.52 MtCO₂eq for the year 2018. While this figure can be considered a good initial estimate, it has to be noted that the estimations are currently being improved. The mitigation effect of phase 2, sector organization and promotion of modern businesses and optimization of logistic processes, still has to be estimated.

Co-benefits

Co-benefits calculated for the PRRPAC Program:

Co-benefit	Amount/year
Reduction of traffic accidents	> 4.000
Reduction of fuel consumption	93 mio. gallons
Reduction of O&M costs of road freight vehicles	USD 700 mio.
Reduction of PM emissions	1.4 kton

The organization of the logistic sector will further significantly improve labor conditions, especially those of the drivers of freight vehicles, who are often employed in an informal manner. The restructuring of logistic businesses will reduce the number of precarious work situations and enhance social security.

Costs and Financing

The Government has guaranteed financial resources for the PRRPAC program in the amount of approximately USD 530 million between 2013 and 2018 in order to meet the goal of scrapping 20 000 additional vehicles. The Government has received technical support for the preparation of this NAMA from the German Cooperation Agency (GIZ), the Interamerican Cooperation Agency (IDB) and the United States Agency for International Development (USAID). For the first phase of the NAMA no international support is required. The second phase is still under preparation.



Next Steps

- Improvement of the Ex-Ante GHG emission calculations and MRV set-up
- Detailed planning for the second phase of the NAMA (sector organization and optimization of logistic processes)
- Planning of activities to be carried out in 2015



Contact and Further Information

Ministry of Transport of Colombia:

Ana Maria Zambrano amzambrano@mintransporte.gov.co

Technical support (GIZ):

Carolin Capone carolin.capone@giz.de

For further information, refer to NAMA Concept Document (download via Transfer Homepage <http://transport-namas.org/projects/transfer-partner-countries/colombia/>)



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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