



Road Freight Transport NAMA in Mexico

Background

The governments of Mexico and Germany jointly designed four Nationally Appropriate Mitigation Actions (NAMAs) for Mexico's major GHG emission sectors: in new and existing housing, small and medium enterprises (SMEs), and road freight transport. The Project is part of the German Government's **International Initiative on Climate Change** and was commissioned by the **German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety** (Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit, BMUB). A NAMA is a voluntary mitigation measure for developing countries, not subject to mitigation commitments under the United Nations Framework Convention on Climate Change (UNFCCC).

Mexico's transport sector and its GHG emissions

The transport sector accounts for **approximately 50% of energy consumption** and 31% of total CO₂ emissions in Mexico. It is the largest and fastest-growing sector in terms of GHG emissions in Mexico. Road transport accounts for 94% of the sector's GHG emissions. The road freight transportation sector in Mexico is responsible for more than 40 Mt CO₂eq per year. This is similar to yearly GHG-emissions of Switzerland.



Objective of the road freight transport NAMA

The purpose of the NAMA is to reduce GHG emissions in Mexico's road freight transport sector focusing on the 'man-truck' (owner operator, up to five vehicles) and smaller fleet carriers (up to 30 vehicles). These two groups make up over 60% of the total number of heavy duty vehicles (HDV) on the road. Many have old vehicles that fall below current average efficiency levels. Poor vehicle maintenance and inadequate driving reduce fuel efficiency. Old vehicles have bad combustion processes and increase GHG emissions and other pollutants.

On behalf of:



Actors of the road freight transport NAMA

The principal Mexican partners in the Road Freight Transport NAMA are the Ministry of Environment and Natural Resources (SEMARNAT) and the Ministry of Communication and Transportation (SCT). The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) acts as a technical advisor and promotes knowledge transfer at national, regional and international level. SEMARNAT, SCT and GIZ make up the Steering Group and hold monthly meetings. The Steering Group receives additional support from the National Commission for Efficient Energy Use (CONUEE), the Mexican Institute of Transport (IMT), and the National Institute for Environment and Climate Change (INECC).

Transport-NAMA

The NAMA is based on the following two existing government programs which are aimed at modernizing the fleet and improving fuel efficiency.

- “Transporte Limpio” (SEMARNAT):** A voluntary market-driven partnership program which promotes eco-driving courses and fleet upgrades with various fuel saving technologies and by reducing idling time.
- Scrapping Scheme and Financial Scheme (SCT):** These schemes promote the renewal of old trucks with modern ones.

Based on these programs, the NAMA consists of three main mitigation actions described in the following table.

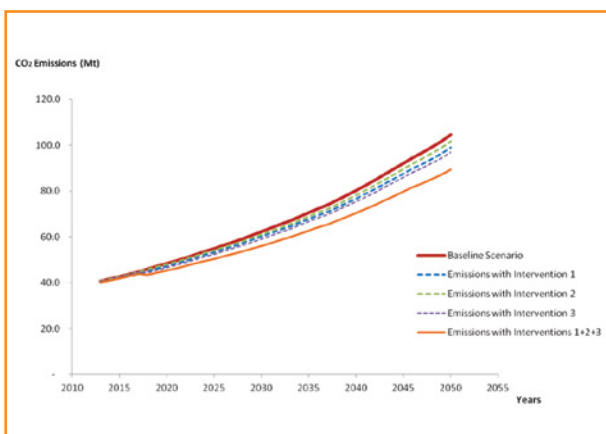
Table 1: Mitigation Actions of the Road Freight Transport NAMA

	Eco- Driving Courses	Fuel-saving technologies	Modernization of the fleet (NOM-044)
Description	<p>The introduction of eco-driving courses as a mandatory part of the license process taken by road hauliers every two years.</p> <p>Making these courses obligatory would not only reduce GHG emissions significantly but would also allow an important increase in entrepreneurs’ income.</p>	<p>The massive implementation of fuel-saving technologies, such as aerodynamics, automatic inflating systems (AIS) and energy-efficient tires.</p> <p>Acquiring those technologies offer excellent cost-benefit conditions, the pay-back period usually lies in less than one year.</p>	<p>The improvement of new entering HDV due to the improvement of existing emission standard regulation for new vehicles from EPA 2004/ EUR III to EPA2010/EURO VI.</p> <p>Mexico would be one of the first countries besides the USA and EU to adopt such strict regulations.</p>
Mitigation Potential	<p>GHG Mitigation potential per participant: 5-35%</p> <p>Average GHG Mitigation per year (2018-2050): 4Mt</p>	<p>GHG Mitigation potential per technology: 0.8- 10%</p> <p>Average GHG Mitigation per year (2013-2050): 2.5Mt</p>	<p>GHG Mitigation potential per truck: 8-15%</p> <p>Average GHG Mitigation per year (2018-2050): 1.4 Mt</p>
Supporting Activities (Technical, MRV and financial concept)	<ul style="list-style-type: none"> Video about eco-driving Creation of a national network of trainers and infrastructure of centers. Brochures about maintenance, vehicle selection, logistic and fuel control. Bank credits to finance infrastructure of centers. 	<ul style="list-style-type: none"> Technology calculator Promotional material and dissemination of technologies. Non-banking sector credits to finance fuel-saving technologies 	<ul style="list-style-type: none"> Scrapping calculator Parri-Passu: credit guarantee for small entrepreneurs. Increase incentive to scrap.



Based on these three mitigation actions, the following graph shows the mitigation potential of the NAMA.

Graph1: CO₂ Mitigation Potential of the NAMA (2013-2050)



This graph shows the mitigation potential between 2013 and 2050 for the following three main mitigation actions of the Road Freight Transport NAMA in Mexico:

1.) The massive implementation of fuel-saving technologies,

2.) The modernization of the fleet (NOM-044) and

3.) The introduction of eco-driving courses as a mandatory part in the license process.

Mitigation via intervention 1 starts in 2013 and for the other two ones in 2018. Based on these numbers, the calculated total GHG emission mitigation for the three interventions between 2013 and 2050 equals approximately 270 Mt with an average annual mitigation of 7 Mt GHG-emissions, which is equivalent to yearly GHG emissions of Frankfurt.





Mexican Counterparts:

Ministry of the Environment and Natural Resources (SEMARNAT)
Ministry of Communication and Transportation (SCT)

Commissioning agency:

German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)

Contribution from the German Government:

7 million Euros (entire Mexican-German NAMA Program)

Duration:

11/2011-10/2015

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