Freight Transport NAMAs in COL and MEX

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GIZ

who we are
GIZ worldwide

• GIZ’s purpose is to promote international cooperation for sustainable development.

• GIZ is a 100% federally owned, public-benefit enterprise.

• GIZ operates in more than 130 countries worldwide with an annual turnover of approx. 2 billion EUR (in 2011)

• GIZ employs approximately 17,000 staff members worldwide

• GIZ is active in a variety of sectors, including e.g. education; health care; agriculture; Infrastructure (water, energy, transport)
Ongoing GIZ Transport and Mobility Projects

- **Germany:**
  - Transport Policy Advisory Services
  - Project TRANSfer – Implementing Nationally Appropriate Mitigation Actions (NAMAs) in the Transport Sector
  - "Twinning"-Projects

- **Ukraine:**
  - Ivano Frankivsk Mobil (PPP)
  - Advisory Services for Municipal Administrations of EURO 2012 Host Cities

- **PR China Programme:**
  - Sustainable Transport in China:
    - Electro-Mobility and Climate Protection
    - Sino-German Climate Change Programme – Component 2: Low Carbon Transport Development
    - Transport Demand Management in Peking – Emission Reduction in Urban Transport
    - Green Logistics
    - Low Carbon Mobility Management (PPP with Deutsche Telekom AG)
    - Standardization of Electric Vehicles

- **Afghanistan:**
  - Strengthening Air Traffic Control in Mazar-e-Sharif

- **Saudi Arabia:**
  - Advisory Services to Saudi Ports Authority (SEAPA)

- **Liberia:**
  - Capacity Development in the Transport Sector

- **Burkina Faso:**
  - Project Management and Technical Assistance for Road Maintenance

- **Costa Rica:**
  - Low Carbon Mobility (Support of Costa Rica’s Strategy of Carbon Neutrality as a Model for Low-Carbon Development)
  - Road Rehabilitation and Management (Advisory Services to the Costa Rican Ministry of Transport on the Rehabilitation and maintenance of the Cantonal Road Network)

- **Indonesia:**
  - Emission Reductions in Urban Transport Sustainable Urban Transport Improvement Project (SUTIP)

- **South Africa:**
  - TRANSfer Partner

- **Mexico:**
  - Nationally Appropriate Mitigation Actions (NAMAs) in the Transport Sector

- **Colombia:**
  - TRANSfer Partner

- **Peru:**
  - TRANSfer Partner

- **Namibia:**
  - Strengthening of Institutional and Management Capacity in the Road Sector
  - Urban Transport Masterplan Windhoek

- **Malaysia:**
  - Road Safety and Eco Driving in the Malaysian logistics and transportation sector (PPP with TÜV Rheinland and AHK Malaysia)

- **Congo DRC:**
  - Support of the CICOS in the Regulation of the River Navigation and the Transboundary Water Management

- **Asean:**
  - Programme Cities, Environment and Transport in the ASEAN Region Projects:
    - Clean Air for Smaller Cities
    - Energy Efficient Transportation
    - Sustainable Port Development

- **Timor-Leste:**
  - Maritime Transport Services Development (MTSD)
TRANSfer and ProNAMA

our projects
TRANSfer II
Towards climate-friendly transport technologies and measures

- **Objective**: Developing and emerging economies increasingly contribute to GHG mitigation in transport using NAMAs.
- **Budget**: €7 million (2010-2016, BMUB funded)
- **Partners**: COL, SA, IDN, PERU + associated countries
Components of “Programa NAMA mexicano-alemán (ProNAMA)”

**Programa NAMA mexicano-alemán**
(Duration: 11/2011 – 10/2015; German support 7 Mil. Euros)

**Objective:** Developing of 4 NAMAs (up to implementation); including technical concept, MRV-system and financial concept.

**Componentes**

- **SMEs (SENER)**
- **Housing (new) (Conavi, Inofnavit)**
- **Housing (existent) (Conavi)**
- **Freight Transport (SCT)**

Transversial Component: NAMA office in Mexico (Semarnat)
ProNAMA - Mexico
Permanent Working group consists of members from:

- CONUEE
- Steering Group (SCT, SEMARNAT and GIZ)
- INECC
- IMT
- Interest groups
- NGOs
- Academic sector
- Financial sector

**Objective:** To lower GHG emission generation and other pollutants from small transportation companies and owner-operated trucks.
The fleet of the small enterprises has an average age of 15 years in Mexico.²

² Source: SEPSA, GIZ (2014): Diagnostic study on the current situation of the transport sector of cargo with a focus on HC y PT.
### Existing programs in Mexico to improve the efficiency of freight transport

<table>
<thead>
<tr>
<th><strong>Scraping scheme</strong></th>
<th><strong>Transporte Limpio</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>SEMARNAT’s Transporte Limpio Program is a voluntary market-driven partnership aimed at helping businesses move goods in the cleanest most efficient way possible. The main components of the program are: 1) <strong>Energy-efficient driving courses</strong> and 2) <strong>Fuel saving technologies</strong></td>
</tr>
</tbody>
</table>
| **Achievement**     | - The program started in 2004 and was expanded in 2012 until 2018 with additional 300 Mio. USD.  
- As a result of the program more than 22,000 trucks have been scrapped and almost 47,000 new trucks have entered the fleet. Due to the program **approximately 1.5 Mt. CO\textsubscript{2}eq** have been mitigated. |
| **Challenges**      | - In Mexico, the **scraping scheme is not connected with the renewal program**. As a result, much more trucks have entered the fleet than have been scrapped.  
- Program **participation of small enterprises** is very poor. |
## Eco-Driving Courses

**Description**
The introduction of eco-driving courses as a **mandatory** part of the license process taken by road hauliers **every two years**. Making these courses obligatory would not only reduce GHG emissions significantly but would also allow an important increase in entrepreneurs’ income.

**Mitigation Potential**
- GHG-Mitigation potential per participant: 5-50%
- Average GHG-Mitigation per year (2018-2050): **6.6Mt**

## Fuel-saving technologies

**Description**
The **massive implementation of fuel-saving technologies**, such as aerodynamics, automatic inflating systems (AIS) and energy-efficient tires. Acquiring those technologies offer excellent cost-benefit conditions, the pay-back period usually lies in less than one year.

**Mitigation Potential**
- GHG-Mitigation potential per technology: 0.8-10%
- Average GHG-Mitigation per year (2014-2050): **3.6Mt**

## NOM-044

The improvement of new entering HDV due to the **improvement of existing emission standard regulation** for new vehicles from EPA 2004/ EUR II/III to EPA2010/EURO VI.

Mexico would be one of the first countries besides the USA and EU to adopt such strict regulations.

**Mitigation Potential**
- GHG-Mitigation potential per truck: 8-15%
- Average GHG-Mitigation per year (2018-2050): **1.4 Mt**
# Mitigation Actions (Part II)

<table>
<thead>
<tr>
<th>Supporting Activities (Technical, MRV and financial concept)</th>
<th>Eco-Driving Courses</th>
<th>Fuel-saving technologies</th>
<th>NOM-044</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Video about eco-driving</td>
<td>- Technology calculator</td>
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<tr>
<td>- Creation of a <strong>national network of trainers</strong> and infrastructure of centers (GEF?)</td>
<td>- Promotional material and dissemination of technologies.</td>
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<tr>
<td>- Brochures about maintenance, vehicle selection, logistic and fuel control.</td>
<td>- Non-banking sector credits to finance fuel-saving technologies</td>
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<tr>
<td>- Bank credits to finance infrastructure of centers.</td>
<td>- Scapping calculator</td>
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<td></td>
<td>- <strong>Parri-Passu</strong>: credit guarantee for small entrepreneurs.</td>
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<td></td>
<td>- Increase incentive to scrap.</td>
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</table>
Example: MRV; Scrapping Calculator

Scrapping without renewal?

TRANSfer project – Towards Climate-Friendly Transport Technologies and Measures
**CO₂ Mitigation Potential of the NAMA (2013-2050)**

**Barriers/obstacles/challenges**
- Improve data quality (i.e. emission factors)
- Fuel quality (ULS)
- Fuel Efficiency Standard
- Finance (Eco-Driving Courses)
TRANSFER Partnert-Countries
## Colombia’s NAMA Programme

<table>
<thead>
<tr>
<th><strong>NAMA owner</strong></th>
<th>Government of Colombia (MinTransporte)</th>
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<tbody>
<tr>
<td><strong>Focus</strong></td>
<td>• Fleet Renovation: Freight</td>
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<td>• Efficiency Improvements</td>
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<td></td>
<td>• Enhancing Competitiveness</td>
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<td><strong>Status</strong></td>
<td>• development of an initial MRV concept</td>
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<td></td>
<td>• improving the reliability of data available</td>
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<td><strong>Further Information</strong></td>
<td>• cargo fleet consists of 225,000 vehicles, whereof one third is older than 30 years</td>
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<td></td>
<td>• $ 600 million provided by the government</td>
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</table>
- Modernization
- Profinalization and Formalization
- Best practices Logistics
- Reduce costs of operation
- Market regulation
- Efficiency and Competitiveness
Freight NAMA in Colombia

1. Scrapping Programm MRV

2. Demand Management (freightbrokers) MRV + Pilot

3. Eco Driving MRV + Pilot
Conclusions:

General:

- Huge mitigation potential in the Freight Sector in Latin America.
- Co-Benefits are even more impressive.
- Scrapping Schemes alone are not enough, however with a smart design recommendable.

MRV:

- Data need to be collected and updated, but expenses in general for MRV approach are limited.
- MRV can be built and improved step-by-step
- MRV helps to improve public policy.

Finance:

- Both NAMAs will be financed mostly due to domestic resources. As haulers are the biggest beneficiary, they are also the biggest payers.
Thank you for your attention!

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