



of the Federal Republic of Germany

Handbook 'Navigating Transport NAMAs'

## **Case Study Colombia**

## Summary

# Renovation of cargo vehicle fleet in Colombia

Transport related GHG emissions in Colombia result to 40% from road freight transport. The cargo vehicle fleet comprises of 225 000 vehicles of different capacities and ages. About one third of this fleet is more than 30 years old and is responsible for the largest share in sectoral emissions of  $CO_2$  and air pollutants. Using a mix of regulatory and economic incentives, the Government of Colombia (GoC) strives to accelerate the renovation of the cargo vehicle fleet with the aim to improve economic competitiveness and environmental performance of the freight transport sector.

Policy identification		
Policy framework	The GoC established the fleet renovation process as one of its top agenda items in their National Development Plan 2010–2014. It was also financed by the national government and strengthened by the implementation of various data systems by the Ministry of Transport. It also has the support of the Ministry of Environment and Sustainable Development as one of the main NAMAs in the transport sector.	
Stakeholders	<ul> <li>Ministry of Transport;</li> <li>Ministry of Environment and Sustainable Development;</li> <li>National Department of Planning;</li> <li>GIZ (Technical support through TRANSfer project);</li> <li>Private sector (freight vehicle owners, fuel suppliers).</li> </ul>	
Process	The <b>initiative</b> of the development of this NAMA was catalysed by TRANSfer in consultation with decision makers in the Ministry of Transport and the Ministry of Environment and Sustainable Development in Colombia.	
	A stakeholder consultation process (public sector, private sector, academia, NGOs, consultants, experts) took place in September 2011, resulting in a decision to develop this policy towards a NAMA. A working group on NAMAs in Colombia was established under the Colombian Low Carbon Development Strategy with the aim to agree on MRV approaches, and to register NAMAs under the UNFCCC pilot NAMA registry.	
	The <b>main criteria</b> to select this NAMA approach were political will, existing policies, and results from domestic consultation processes.	
Type and status of the mitigation action/policy	The FRVC has been in operation since 2005. The fuel quality specifications went into force on 1 January 2013. The MRV component for CO <sub>2</sub> emission reductions and other co-benefits was developed during 2012.	
Barriers for implementation	The identified <b>barriers</b> to implement the NAMA were  political changes at the level of decision makers, and coordination arrangements with other cooperation agencies.	
Lessons learned	The administration of the economic incentive (scrappage premium) needs to be closely coordinated with municipal administrations in charge of monitoring and certifying the scrappage process (vertical integration).	

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## MRV

# Key parameters

- Size and age of cargo vehicle fleet in Colombia;
- Emission parameters by age and vehicle type;
- Road freight statistics in Colombia (vehicle-km travelled and tonne-km transported);
- Fuel quality data (sulphur content, etc.).

# Available data & data needs

During 2005–2011, the Renovation Fund has facilitated the disintegration of approximately 10 500 vehicles. The working group on NAMAs under the Colombian Low Carbon Development Strategy is currently investigating available statistical data and remaining data needs for the implementation of the MRV approach.

#### Ex-ante estimations

Largely depends on the following parameters:

- Number of vehicles scrapped;
- Remaining life-expectancy (in vehicle-km) of scrapped vehicles;
- Specific fuel consumption of scrapped versus replacing vehicles.

#### MRV process

The MRV process was developed by a consultant hired directly by GIZ to support the Ministry of Transport. It implied the compilation of existent data, estimation of missing data from other sources and proxies, and development of an adequate methodology based on existent methodologies worldwide and locally developed for other sectors or transport projects.

#### Lessons learned

- Data needs must not be underestimated;
- Existing data may need further data processing before it may be applied for the chosen MRV approach.

## **Funding and support needs**

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TRANSfer provided policy advice to the GoC (e.g. on policy identification and institutional arrangements for NAMAs in the transport sector) and technical support in the development of the MRV approach.

# Finance

The FRVC is fully funded by Ministry of Transport.

Investment in fuel refinery infrastructure were made by Ecopetrol.

### Domestic finance

By 2011, the Colombian government has invested about USD 400 million in the development of the large vehicle fleet renovation process.



Fleet renovation in progress
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Contribution to sustainable development		
Expected co-benefits	<ul><li>Increased economic competitiveness;</li><li>Increased air quality in urban areas;</li><li>Increased traffic safety.</li></ul>	
Monitoring of co-benefits	Air quality parameters, number of traffic accidents with cargo vehicles involved.	

Implementation		
Status and next steps	The NAMA concept has been developed and is ready to be registered under the UNFCCC NAMA registry.  Next steps are the improvement of monitoring, reporting and verification during the implementation phase of this transport NAMA.	
Lessons learned	Changes in government staff may pose a challenge to project activities.	
Applied tools	Regulatory instruments: Government decree to define diesel fuel quality sold in Colombia (max. sulphur content: 50 ppm).	
	Economic instrument: 'Renovation Fund for Cargo Vehicles' (FRVC) aiming at business formalisation, reducing the oversupply of cargo vehicles, and on the administration of financial incentives for the replacement or scrappage of obsolete road freight vehicles.	
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