

# Mexican Freight NAMA

## MRV - Blueprint

Programa Mexicano-Alemán para NAMA  
Componente Transporte  
México

On behalf of:

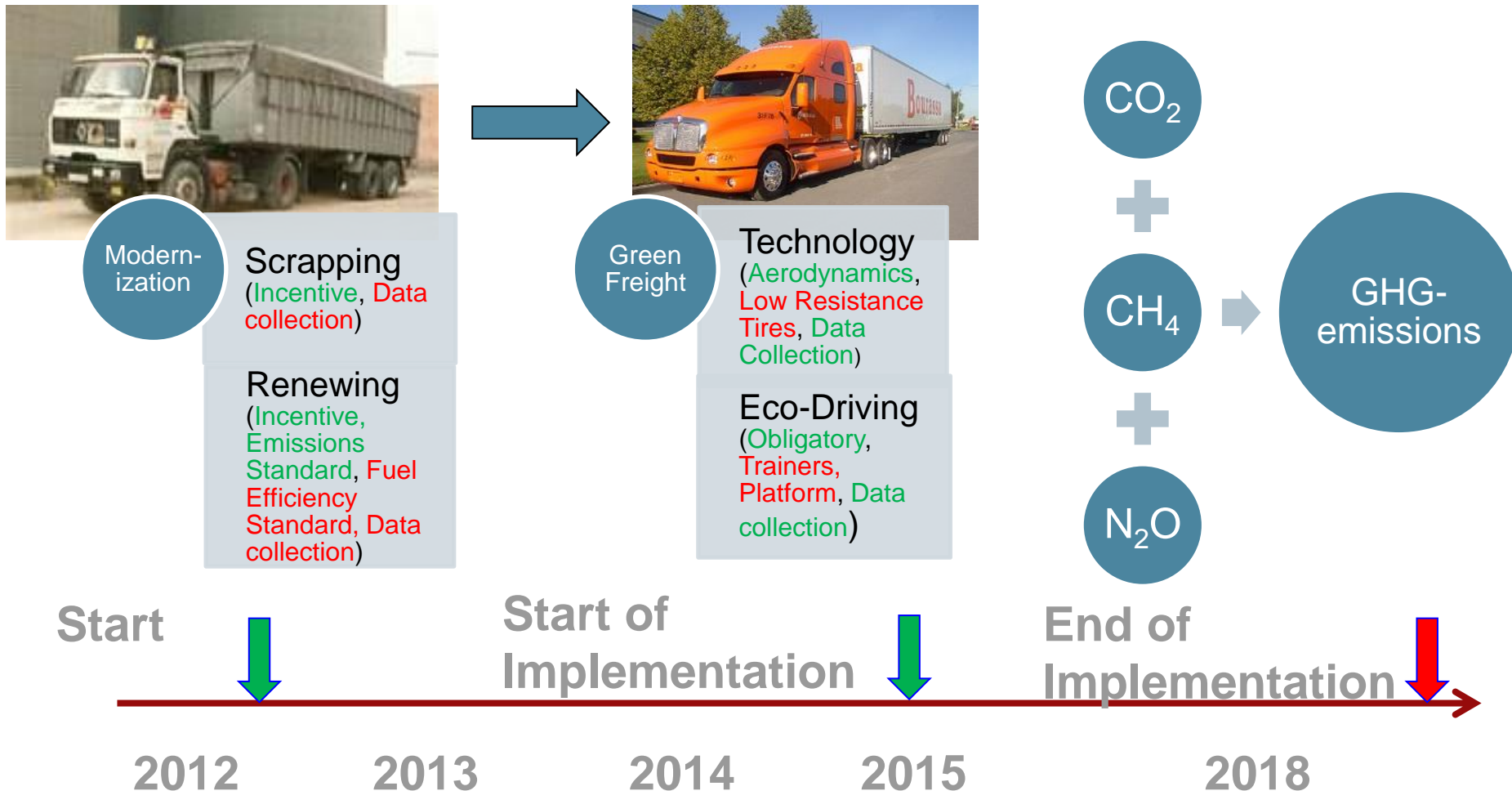


Federal Ministry  
for the Environment, Nature Conservation,  
Building and Nuclear Safety


of the Federal Republic of Germany

# Scope of the NAMA

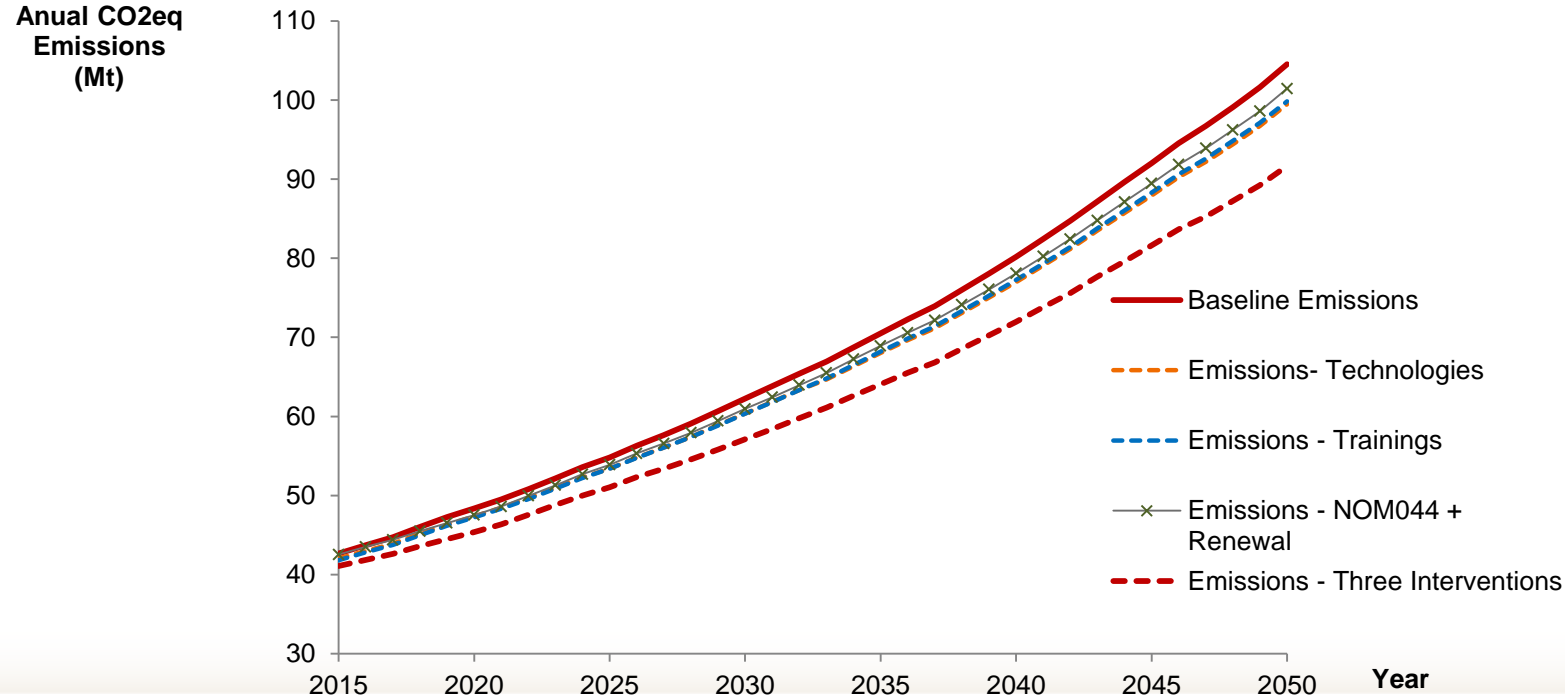
## Federal road freight in Mexico (license to use highways)



# Information and sources used for the design of the baseline

<b>Number of units of each type of truck</b>	The total number of trucks registered in SCT in 2013 is categorized into four types: C2, C3, T2 and T3. 
<b>Total yearly distance</b>	Total distance per year, taken from the study “Radiografía NAMA Transporte” developed in the framework of the NAMA.
<b>Performance</b>	Liters of diesel per kilometer, taken from the study “Radiografía NAMA Transporte” developed in the framework of the NAMA.
<b>Total emissions</b>	Own calculation (four mitigation-scenarios), considering that each truck produces 2.69 kg of CO <sub>2</sub> eq per liter (developed by INECC and CMM).

## Mitigation Scenarios - Three Interventions



## **Methodology implemented in the calculator**

### **Direct Effect**

Direct Effect: the new unit transports the objects that the old one did but with less CO<sub>2</sub> emissions.

$$\text{Direct Effect} = \text{tkm}_{\text{old\_per\_year}} \times (\text{EF}_{\text{old}} - \text{EF}_{\text{new}})$$

Where:

tkm: tons per kilometer.

EF: average emissions/tkm (old or new units) per vehicle class and year.

### **Indirect Effect**

Indirect Effect: the new unit runs more tkm – because it is more efficient and costumers demand to use a new unit - than the old one. It takes tkm away from the average of the fleet. The new unit is also more efficient than the average unit and hence, there is an indirect effect.

$$\text{Indirect Effect} = (\text{tkm}_{\text{new\_per\_year}} - \text{tkm}_{\text{old\_per\_year}}) \times (\text{EF}_{\text{fleet}} - \text{EF}_{\text{new}})$$

Where:

EF<sub>new</sub>: average emissions/tkm of a new unit per vehicle class.

EF<sub>fleet</sub>: average emissions/tkm of a 15 year old unit per vehicle class.

### **Impact chain:**

- No rebound effects are included
- Emissions for producing and scrapping trucks are not included.



Thank you for  
your attention!

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