

“How Government Can Support Business”

Transporte Limpio Program

International Green Freight
Workshop

Oct 3, 2018, San Diego CA

ING. JUDITH TRUJILLO MACHADO
SUBDIRECTORA DEL SECTOR TRANSPORTE
DGGCARETC/SEMARNAT

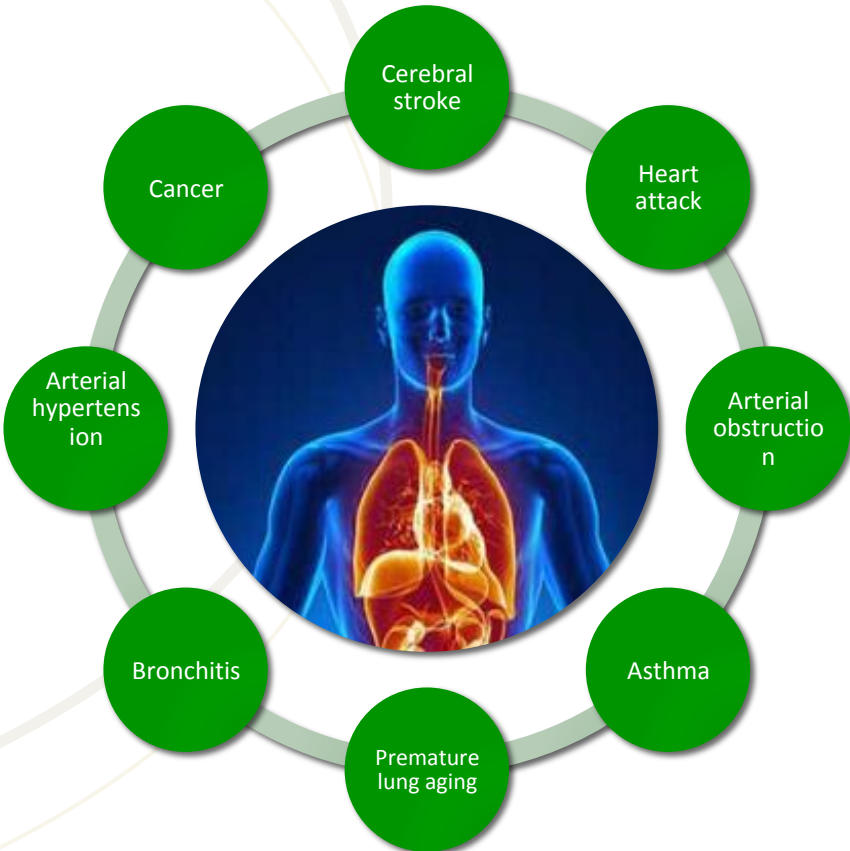
Effects of air pollution on health

In Latin America, more than 150 million people live in urban areas where the air quality guidelines of the World Health Organization are exceeded.

Source: Clean Air Institute con base en datos del Observatorio Mundial de la Salud la Organización Mundial de la Salud.

800 deaths every hour

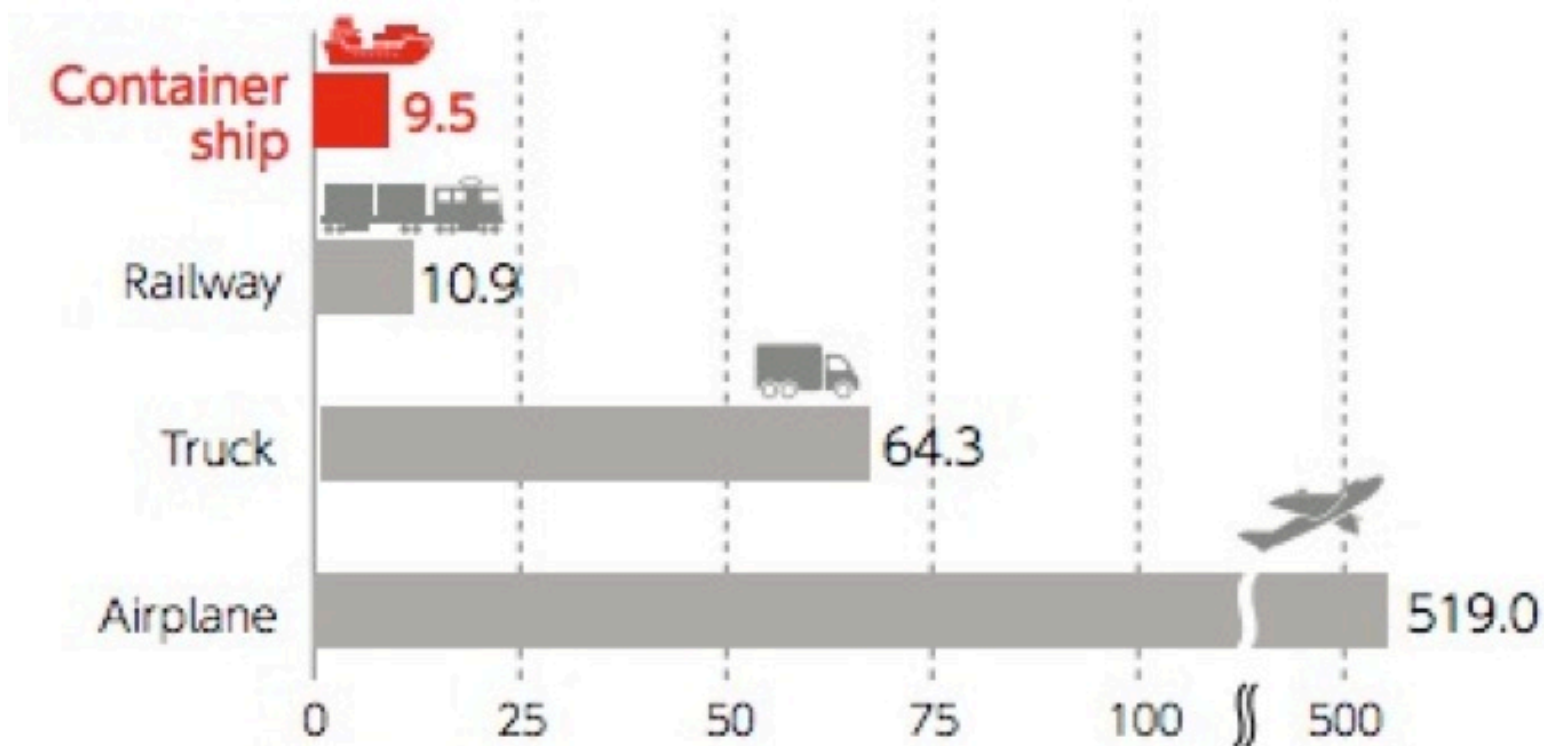
in the world attributable to air pollution (WHO 2012)



In **Mexico**, in 2010, an estimated 20,500 deaths related to exposure to air pollutants (INECC, 2014).

Emissions generated by different modes of transport

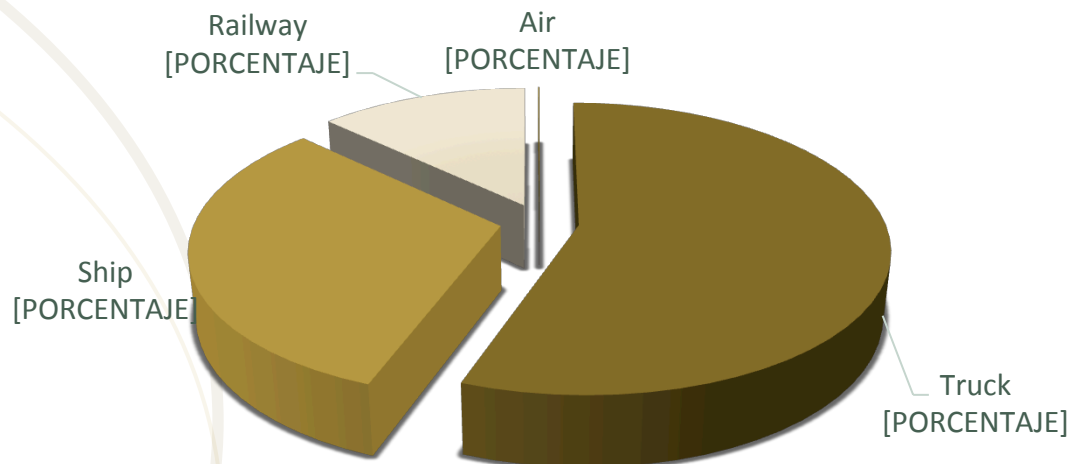
Emisiones de CO2 por tn-km



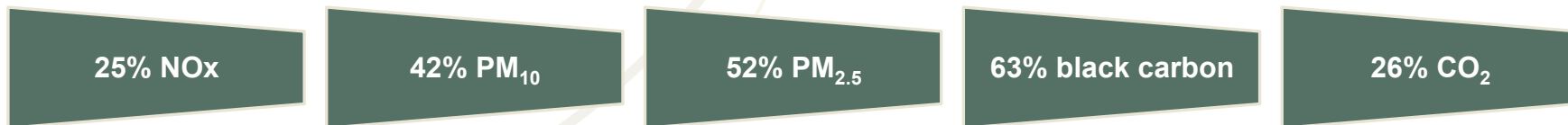
Impact of diesel transportation in Mexico

Freight transportation in Mexico:

Tons transported by different modes



Of all motor vehicles, diesel vehicles emit:



In 2012, the World Health Organization (WHO) classified diesel emissions as carcinogenic.

Public policies aimed at reducing emissions in freight transport

State or local

Inspection and Maintenance Programs

- Emissions Inspection

Self regulation

- Preventive Maintenance & Emissions reduction devices

Ecozones or Low Emission Zones

Promotion of efficient and low emission vehicles

- Natural Gas, hybrids, electric
- **Night Deliveries**

National

Update of Federal Rules for Emissions

- The NOM-044 was updated

Scheme for Substitution of Federal Registered Freight Vehicles (Chatarrización)

- This year resources were not released to operate the Chatarrización scheme

Financed by NAFIN

- Offers credit to buy new and new units for the micro and small transport company.

Transporte Limpio Program

Voluntary program, designed by SEMARNAT with the support of the SCT. The objective of the program is that the freight transportation be:

- **More efficient**
- **Competitive**
- **Friendly with the environment**



Transporte Limpio Program is based on:



Program participants

Truck Carrier

- **Objective:** Reduce fuel consumption and emissions through the adoption of strategies and technologies.

Shippers

- **Objective:** Reduce the carbon footprint by hiring efficient transport companies.

Transporte Limpio seeks to develop a virtuous circle between the transport companies and the shipper companies that contract the carrier service.

Truck Carrier

- Adopt measures to save fuel and emissions
- Reduce the emission of CO2 for each kilometer traveled and transported ton.

Shippers

- Hire efficient companies partners of PTL
- Reduce carbon footprint by moving your products.

Other important actors are: chambers and associations of carriers, technology providers and promoters of the program.

Measures promoted by PTL

For the Carriers companies:

Strategies	Fuel saving potential
Eco-driving.	10 – 30%
Regulation of the maximum speed.	5 – 15%
Reduce Idling.	Minimum 5%
Selection and specification of the vehicles.	Variable even up 30%
Maintenance.	7 – 15%
Logistic.	Variable, at least 10%

Technologies	Fuel saving potential
Aerodynamics improve.	5 – 10%
Low rolling resistance tires.	3%
Automatic tire inflation systems.	1%
Lubricants more advanced.	1.5%
Control emissions devices.	

For the Shippers companies:



The Shippers are those that have the power to define the characteristics of the transport that hire.

Program status



418 companies



+ 69,000 trucks
evaluated in 2018



8.7 millions of ton
CO₂ avoided*



Auto Tanques

- Arrendadora de maquinaria CAMHER S.A. de C.V.

Carga General

- Transportistas Unidos de Morelos S.A. de C.V. (TUMSA)
- Transportes MexAmerik S.A. de C.V.
- Transportes Peñón Blanco S.A. de C.V.
- Transporte Intermodal Mexicano S.A. de C.V. (TIMSA)
- Aldafa Transportes S.A. de C.V.
- Cervezas Cuauhtémoc Moctezuma Heineken S.A. de C.V.
- DLR Autotransportes, S.A. de C.V.
- Auto Express Guadiana S.A. de C.V.
- Fletes Sotelo S.A. de C.V.
- Transportes Lárraga S.A. de C.V.
- Auto transportes ROMEDU S.A. de C.V.
- Auto Transportes Parada Hermanos S.A. de C.V.
- GCC Transportes S.A. de C.V. (Cd. Juárez)
- Auto Express Perla S.A. de C.V.
- Biopappel S.A.B. de C.V.
- Transportes Unidos Castañeda S.A. de C.V. (TRUCKA)
- Transportes Rafa de Baja California S.A. de C.V.
- Transportes San Miguel de Oaxaca S.A. de C.V. (TSMO)
- Coca-Cola FEMSA (distribución primaria)
- Transporte Moderno Integral S.A. de C.V.

Material Peligroso

- Transportes y Equipos ASAMAZ S.A. de C.V.
- Auto Transporte Nacional de Carga TNC, S.A. de C.V.

Paquetería

- Auto Transportes de Carga Tresguerras S. A. de C. V.
- Impulsora de Transportes Mexicanos S.A. de C.V.

Reparto Urbano

- Coca Cola FEMSA (distribución secundaria)

Sólidos/Líquidos Refrigerados

- Transcooler S.A. de C.V.

Transporte de Autos

- Transportes MARVA, S.A. de C.V.

Transporte de Pasajeros

- Autos Pullman S.A. de C.V. (Grupo ADO)

Empresa Usuaria del Servicio de Carga

- Geodis Global Solutions México S.A. de C.V.

Main barriers to achieve efficient, competitive and environmentally friendly freight transport

- Atomization of the sector

Company Type	Vehicle Fleet (Trucks)	%
Self owner (HC)	1 to 5	82.0%
Small Carrier (PT)	6 to 30	15.6%
Medium Carrier (ME)	31 to 100	1.9%
Big Carrier (GE)	More of 100	0.6%

- Regulatory framework
 - In Mexico, two Euro and EPA regulations coexist
- Fuels quality
- Highway infrastructure
- Adulterated fuel
- Insecurity on the roads

Following steps to go to achieve sustainable transport

ASI approach (Avoid, Shift and Improve)

Avoid

- Motorized trips through more intelligent land use and planned logistics → **improve Efficiency system.**
 - Ej. Avoid empty trips.

Shift

- The transport of goods using the most efficient modes of transport → **Increase trip efficiency**
 - Ej. Change to greener modes: rail, ship.

Improve

- The efficiency of transport systems through the improvement of vehicles, fuel and network operations and management technologies → **Improve vehicle efficiency**
 - Ej. Implementing fuel saving strategies and technologies in the trucks (Transporte Limpio).

CONCLUSIONS

- Freight transport is a strategic factor for the cities economy; however, it produce pollutants that can harm the health of the population.
- Both, the federal government and local governments have implemented actions aimed to reducing emissions from cargo transport, among which are: Improving regulations, Vehicle verification programs (inspection and maintenance program), **Transporte Limpio Program**, Self-regulation, Time restriction, Ecozones, among others.
- **Have the polices worked?**
- A recommendation is to estimate the effects (cost-benefit) that the application of any policy entails. Bearing in mind that for a policy or action to be sustainable, three elements must converge: environmental, social and economic.



Transporte Limpio web site

gob mx

Trámites Gobierno Participa

Blog Multimedia Prensa Agenda Acciones y Programas Documentos Transparencia Contacto

Secretaría de Medio Ambiente y Recursos Naturales > Acciones y Programas

Programa de Transporte Limpio

Programa voluntario que busca que el transporte de carga y pasaje que circula por el país sea más eficiente, seguro, competitivo y amigable con el medio ambiente.

Objetivos del Programa Transporte Limpio

- Reducir el consumo de combustible.
- Reducir las emisiones de gases de efecto invernadero y contaminantes criterio (NOx y PM10 y PM2.5).
- Reducir los costos de operación del transporte.

Transporte Limpio

Transporte Limpio

Contacts:

Judith Trujillo

judith.trujillo@semarnat.gob.mx

Rodrigo Perrusquía

rodrigo.perrusquia@semarnat.gob.mx

Beatriz Mendez

beatriz.sanchez@semarnat.gob.mx

Phones:

(55) 5624 3300, Ext. 23556, 23717, 23694

<http://www.gob.mx/semarnat/acciones-y-programas/programa-de-transporte-limpio-26305?idiom=es>

Thank you

ING. JUDITH TRUJILLO MACHADO
SUBDIRECTORA DEL SECTOR TRANSPORTE
DGGCARETC/SEMARNAT

JUDITH.TRUJILLO@SEMARNAT.GOB.MX
TEL. (55) 5624 3300 EXT. 23717