

Herramienta ToolKit

Coordinación Transantiago





Introducción

- Coordinación Transantiago
 - Coordina y controla la operación del sistema de locomoción colectiva de Santiago de Chile.
 - Estructura organizacional
 - Coordinación de Contratos
 - Coordinación Técnica
 - Vías
 - Infraestructura
 - Información al Usuario
 - Calidad del Servicio
 - Ambiente y Territorio
 - Soporte Tecnológico
 - Coordinación de Recursos
- 14 unidades de negocios.
 - Servicios
 - Controlada por 11 operadores
 - Plan de operación

Datos de la flota - 2009

Fill in your fleet name:

Notes are at the bottom of this sheet

| Vehicle category ⁽¹⁾ | | Number of vehicles ⁽²⁾ | Total annual mileage ⁽³⁾ (km/yr) | Total annual fuel consumption ⁽³⁾ (L/yr) |
|--|----------------------------------|-----------------------------------|--|--|
| Heavy duty trucks & buses (15 - 22 tonnes): | Heavy duty - Euro I | 17 | 1.261.824 | 315.456 |
| | Heavy duty - Euro II | 1845 | 136.945.063 | 34.236.266 |
| | Heavy duty - Euro III | 4455 | 330.672.226 | 82.668.057 |
| | Heavy duty - Euro III con filtro | 110 | 8.164.746 | 2.041.187 |
| Total: | | 6.427 | 477.043.859 | 119.260.965 |

| Average annual mileage per vehicle ⁽⁴⁾ (km/yr) | Average fuel efficiency ⁽⁴⁾ (km/L) |
|--|--|
| 74.225 | 4,0 |
| 74.225 | 4,0 |
| 74.225 | 4,0 |
| 74.225 | 4,0 |

Your diesel sulphur level ⁽⁵⁾: ppm

Your petrol fuel price per liter ⁽⁶⁾: pesos (fill in your local currency)

Your diesel fuel price per liter ⁽⁶⁾: pesos

Emisiones y efectos en la salud

| The yearly emissions of TRANSANTIAGO | | | Air Pollution (in tonnes/yr) | | | | | Climate Change (in tonnes/yr) |
|--------------------------------------|--------------|--------------------|---------------------------------|--------------|----------------|------------|--------------|----------------------------------|
| | Numbers | km/year | CO | VOC | NOx | SOx | PM10 | CO2 |
| Heavy duty - pre-Euro | 17 | 1.261.824 | 5,6 | 4,0 | 9,3 | 0,0 | 1,4 | 820 |
| Heavy duty - Euro I+II | 1.845 | 136.945.063 | 493,0 | 354,7 | 728,5 | 1,3 | 76,7 | 89.014 |
| Heavy duty - Euro III+IV | 4.455 | 330.672.226 | 833,3 | 601,8 | 1.240,0 | 3,2 | 132,3 | 214.937 |
| Heavy duty - Euro V | 110 | 8.164.746 | 3,1 | 2,3 | 30,6 | 0,1 | 0,3 | 5.307 |
| Total | 6.427 | 477.043.859 | 1.335,0 | 962,8 | 2.008,5 | 4,6 | 210,7 | 280.263 |

Your current fleetwide PM emissions are: **210,67** tonnes of PM per year.



As a guiding estimate, if this amount would be emitted in the Netherlands it is estimated to cause: **84,3** premature deaths/year.

In addition, many more people are affected with other diseases such as non-fatal cancers, bronchitis, and cardio-vascular diseases (heart and lung).

Acciones

- Nueva norma de emisión buses (Euro III + DPF)
- Troncal 3
 - Euro III + DPF (800)
- Alimentadores
 - Euro I y II a Euro III + DPF (1862)

| Vehicle category ⁽¹⁾ | | Number of vehicles ⁽²⁾ | Total annual mileage ⁽³⁾ (km/yr) | Total annual fuel consumption ⁽³⁾ (L/yr) |
|--|----------------------------------|-----------------------------------|--|--|
| Heavy duty trucks & buses (15 - 22 tonnes): | Heavy duty - Euro I | | | |
| | Heavy duty - Euro II | | | |
| | Heavy duty - Euro III | 4455 | 330.672.226 | 82.668.057 |
| | Heavy duty - Euro III con filtro | 1972 | 146.371.632 | 36.592.908 |



Estrategias

- Bases de Licitación (BL) Troncal 3 exigía que la flota fuese Euro III + DPF antes de la aplicación de la normativa.
- Se espera el recambio de la flota alimentadora al termino de la concesión.

Emisiones y efectos en la salud

| The yearly emissions of Example Fleet | | | Air Pollution (in tonnes/yr) | | | | | Climate Change (in tonnes/yr) |
|---------------------------------------|--------------|--------------------|---------------------------------|--------------|----------------|------------|--------------|----------------------------------|
| | Numbers | km/year | CO | VOC | NOx | SOx | PM10 | CO2 |
| Heavy duty - pre-Euro | 0 | 0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0 |
| Heavy duty - Euro I+II | 0 | 0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0 |
| Heavy duty - Euro III+IV | 4.455 | 330.672.226 | 833,3 | 601,8 | 1.240,0 | 3,2 | 132,3 | 214.937 |
| Heavy duty - Euro V | 1.972 | 146.371.632 | 55,6 | 41,0 | 548,9 | 1,4 | 5,9 | 95.142 |
| Total | 6.427 | 477.043.858 | 888,9 | 642,8 | 1.788,9 | 4,6 | 138,1 | 280.263 |

Impacts: Air Pollution and Health Impacts

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→ [Health effects of Particulate Matter \(PM\) pollution are explained in this sheet.](#)

Your current fleetwide PM emissions are: **138,12** tonnes of PM per year.



As a guiding estimate, if this amount would be emitted in the Netherlands it is estimated to cause: **55,2** premature deaths/year.

In addition, many more people are affected with other diseases such as non-fatal cancers, bronchitis, and cardio-vascular diseases (heart and lung).



Sobre el Toolkit

- Posibles Mejoras
 - Factores de emisión vehículos híbridos, a gas y Euro V
 - Hacer un análisis comparativo de los FFEE.
- Impresiones
 - Flexible
 - Fácil uso y comprensión
 - Aplicable a flotas de empresas que actualmente no poseen ninguna información sobre sus impactos.
 - Para Transantiago se requiere mayor grado de sofisticación dadas las exigencias en la RM. (PPDA)