



13-14 May 2019  
Joint ERMES/TFEIP workshop  
Thessaloniki, Greece

# EEA activities and priorities on transport emissions

Martin Adams

# EEA transport team and work areas



What we work on currently	Who?
CO <sub>2</sub> monitoring and reporting on new passenger cars	Cinzia Pastorello
CO <sub>2</sub> monitoring and reporting from new vans, TERM indicators	Diana Vedlugaitė
CO <sub>2</sub> monitoring and reporting from heavy duty vehicles (new reporting obligations)	Rasa Narkevičiūtė
Reporting under the Fuel Quality Directive, aspects of GHG emissions from aviation & shipping	Stephanie Schilling
TERM Report, SOER parts on transport sector & mobility system, transport taxonomy under the sustainable finance initiative	Andreas Unterstaller



# EEA's transport activities – context



## European

### *Energy and Climate Change Mitigation:*

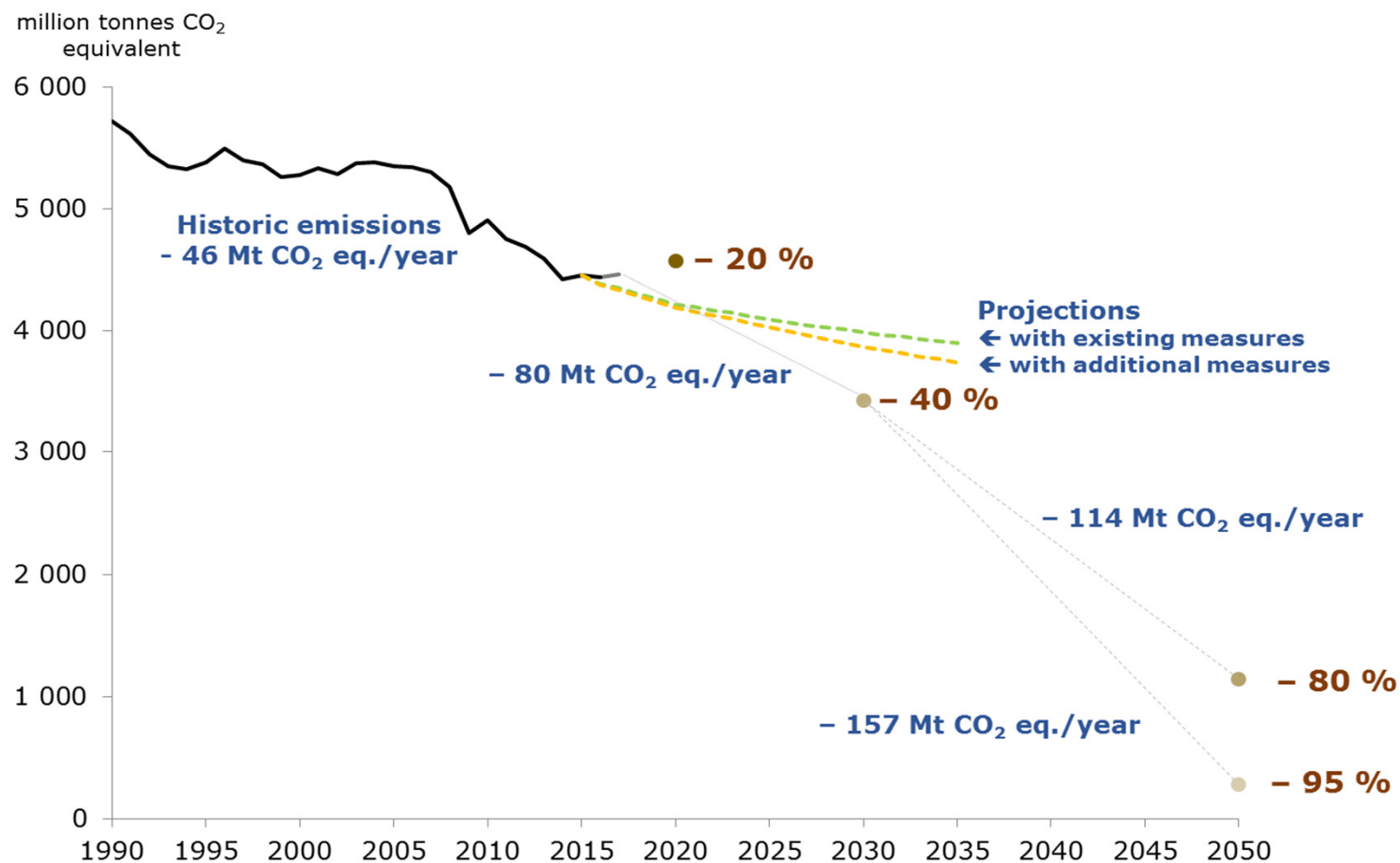
- 2030 C&E framework, 2050 low-carbon strategy
- Effort Sharing Regulation
- EU Energy Union (renewables, energy efficiency)
- CO<sub>2</sub> from cars, vans, heavy duty vehicles
- Fuel Quality Directive

### *Transport and environment:*

- Air pollution from cars (Euro standards, RDE requirements)
- Air pollution from shipping (Emission Control Areas)
- Noise, road vehicle emission standards
- Urban agenda
- Biodiversity fragmentation

# EEA's transport activities – context

*A need for systemic approaches and transition thinking*



Source: Trends and Projections report, EEA 2018

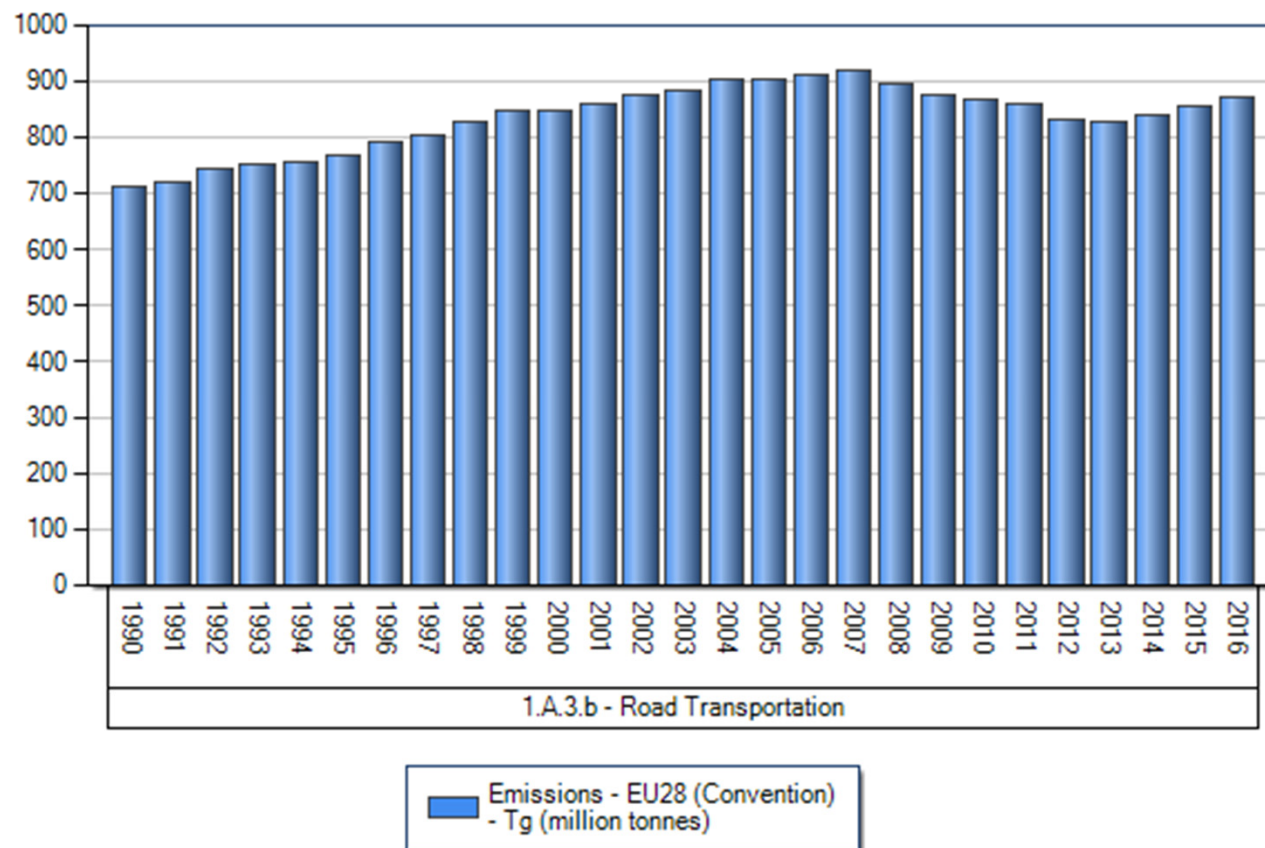
European Environment Agency



# EEA's transport activities – context

## Transport

- 21% of total EU GHG emissions
- GHG emissions from transport increasing – road, aviation
- Average CO<sub>2</sub> emissions from new cars increased in 2017
- Total CO<sub>2</sub> from road transport has increased in each of the past 3 years
- Ambitious measures on transport needed (national energy and climate plans reported in 2018)

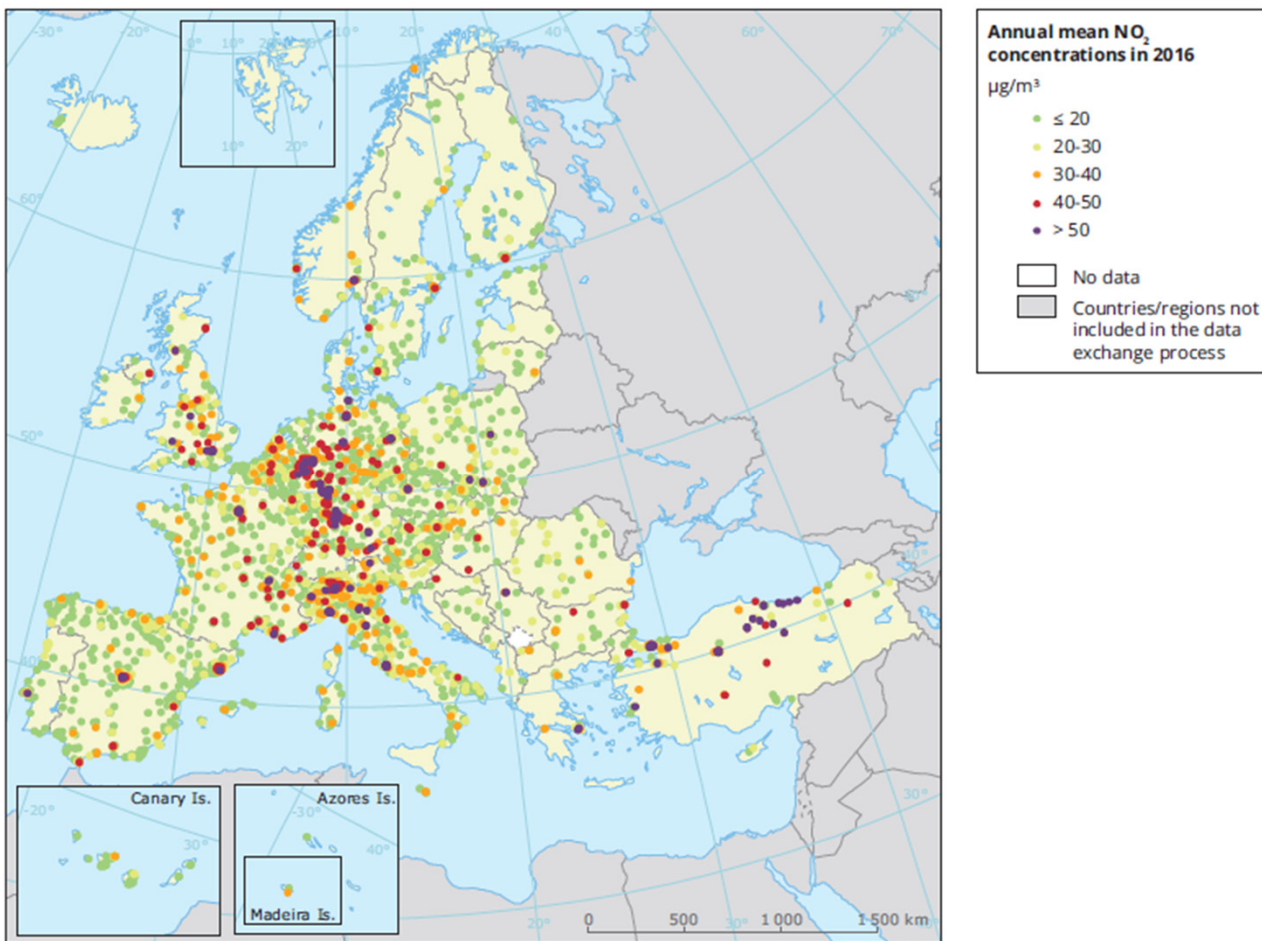


Source: EU GHG inventory 2018

# EEA's transport activities – context

## Transport – air pollution

- More than 400 000 Europeans die prematurely each year due to PM<sub>2.5</sub> and NO<sub>2</sub> exposure
- No<sub>x</sub> emissions from road transport are slowly falling, but wide-spread exceedences of the EU air quality limit value persist across Europe

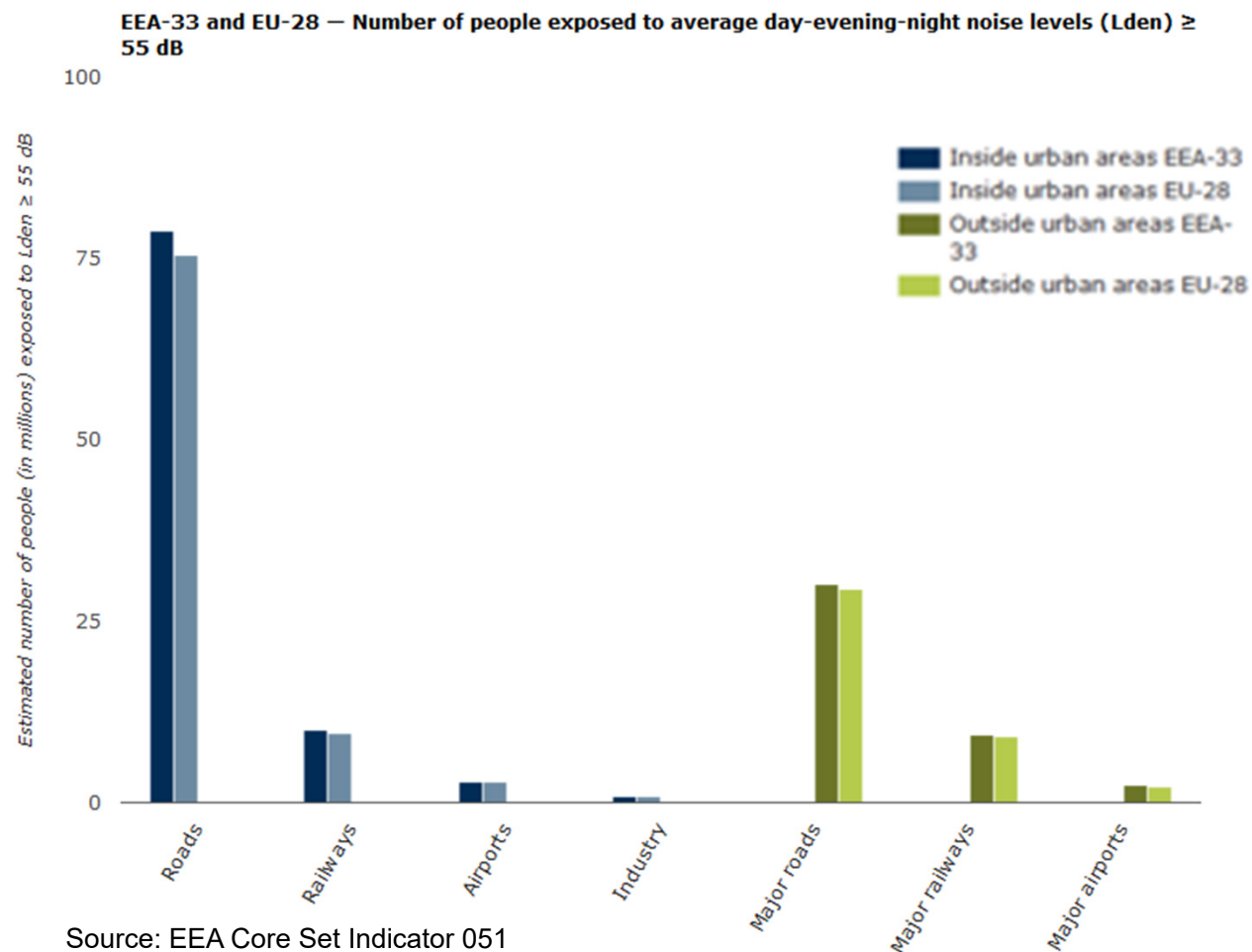


Source: Air Quality in Europe 2018 report

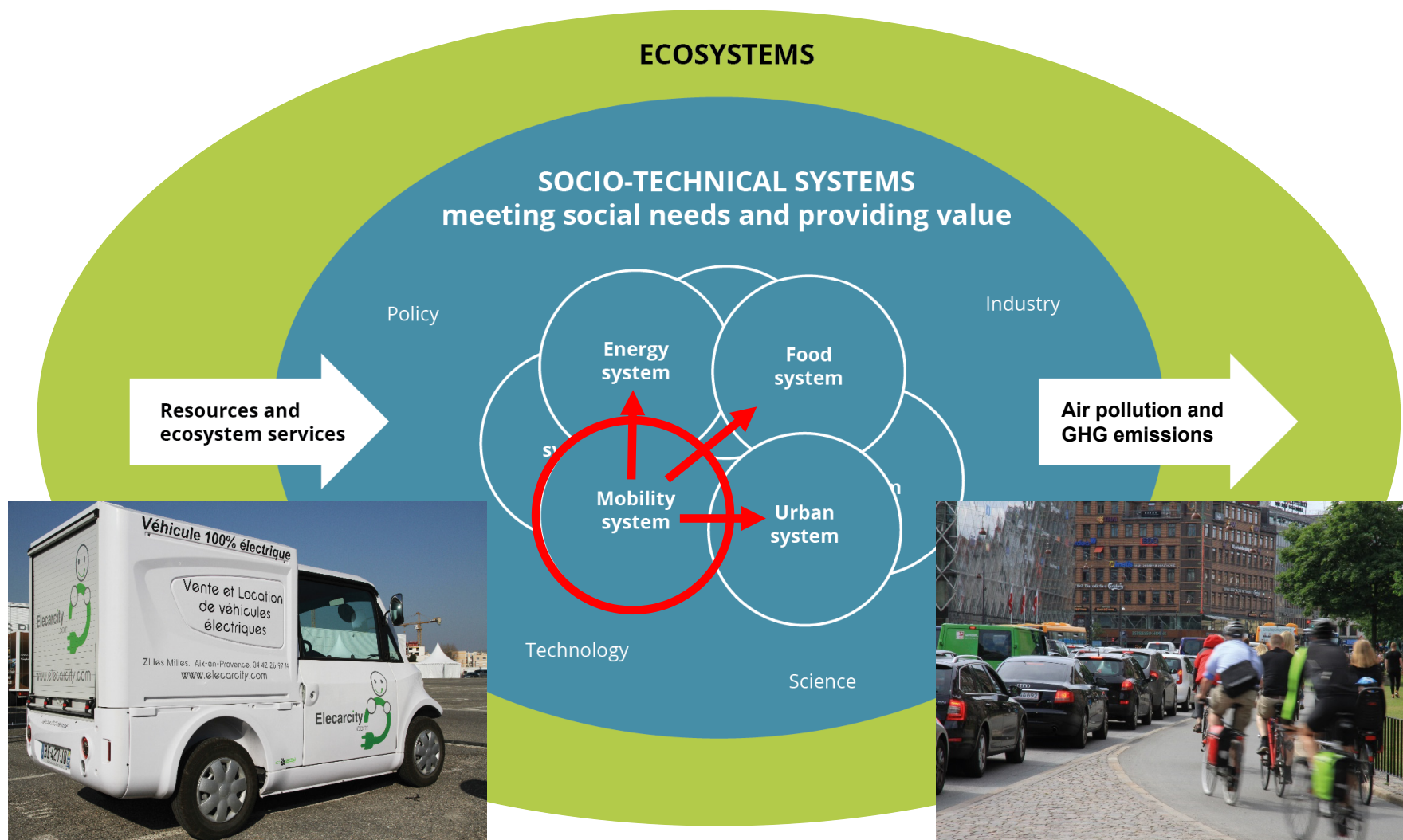
# EEA's transport activities – context

## Transport – noise

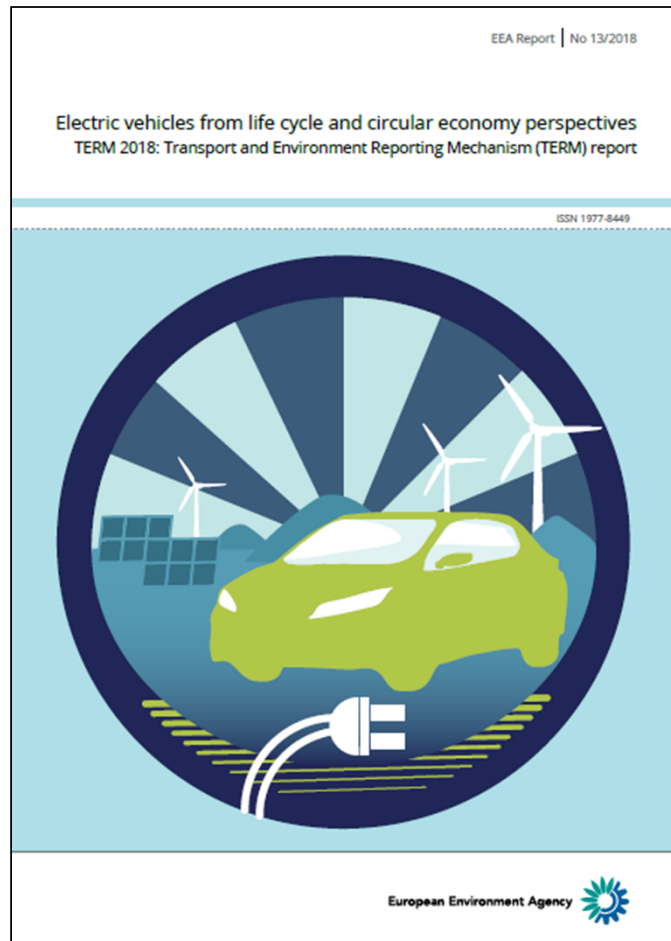
- Road traffic is the most widespread source of environmental noise, with more than 100 million people affected by harmful levels in the EEA-33 member countries.
- Around 14 000 people European's die prematurely each year due to environmental noise exposure



# A systemic approach to transport assessment



# EEA transport and environment reporting mechanism (TERM)



European Environment Agency

Topics Countries Data and maps Indicators Publications

Environmental topics Transport Transport and Environment Reporting ... Monitoring

## Monitoring progress of Europe's transport sector towards its environment, health and climate objectives

Briefing — Published 05 Dec 2017 — Last modified 30 Jul 2018 — 12 min read

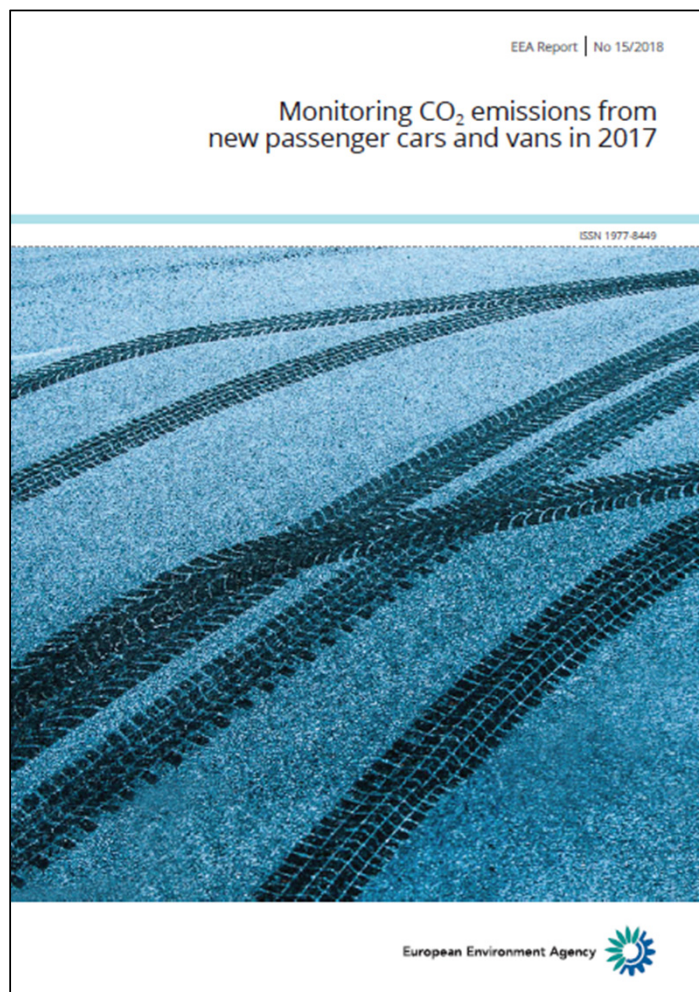
PDF

Topics: Air pollution Biodiversity — Ecosystems

The 'Transport and Environment Reporting Mechanism' (TERM) includes a number of indicators used for tracking the short and long-term environmental performance of the transport sector in the 28 Member States of the European Union (EU-28). This briefing presents the latest indicator-based assessment of progress being made towards key transport-related policy targets and objectives.



# Monitoring CO<sub>2</sub> emissions from new vehicles



## CO<sub>2</sub> emissions from new cars and vans, preparing for HDVs

European Environment Agency

Topics Countries Data and maps Indicators Publications


News New vans sold in Europe in ...

### New vans sold in Europe in 2017: large decrease in annual average CO<sub>2</sub> emissions

News — Published 17 May 2018 — Last modified 17 May 2018 — 3 min read

Topics: Transport Climate change mitigation

Average carbon dioxide (CO<sub>2</sub>) emissions of new vans registered in the European Union (EU) in 2017 were 4.7% lower than in 2016, according to preliminary data published today by the European Environment Agency (EEA). This is the highest annual reduction reported since the regulation to reduce CO<sub>2</sub> emissions from light-duty vehicles came into force in 2011.



European Environment Agency

Topics Countries Data and maps Indicators Publications


News No improvements on average ...

### No improvements on average CO<sub>2</sub> emissions from new cars in 2017

News — Published 23 Apr 2018 — Last modified 23 Apr 2018

Topics: Transport Climate change mitigation Policy instruments

Efforts to improve the fuel efficiency of new cars sold in the European Union (EU) stalled in 2017 compared to 2016, according to provisional data published today by the European Environment Agency (EEA). While past years have seen steady declines, new passenger cars registered in 2017 emitted on average 0.4 grammes (g) of carbon dioxide (CO<sub>2</sub>) per kilometre more than in 2016.



European Environment Agency


Topics Countries Data and maps Indicators Publications

News Tax breaks and incentives make Europeans buy cleaner cars

News — Published 12 Apr 2018 — Last modified 12 Apr 2018

Topics: Transport Policy instruments Climate change mitigation

Emissions of carbon dioxide from new passenger cars have dropped in a number of European countries where a range of taxes, subsidies and other incentives are used to encourage consumers to purchase lower-carbon-dioxide (CO<sub>2</sub>) emitting vehicles. The number of countries offering incentives for electric vehicles in particular, continues to grow, according to European Environment Agency (EEA) data published today. At the same time, emissions from trucks and buses are expected to increase further if new measures are not taken.



1994-2019

European Environment Agency

# Indicators

European Environment Agency

Search

A-Z Glossary

Topics

Countries

Data and maps

Indicators

Publications

Media

About us

The EEA is an agency of the European Union

Data and maps

Indicators

Exceedances of air quality limit values ...

Exceedances of air quality ...

## Exceedances of air quality limit values due to traffic

Indicator Assessment — Prod-ID: IND-106-en Also known as: TERM 004 — Created 29 Nov 2017 — Published 07 Dec 2017 — Last modified 18 Sep 2018 — 5 min read

Topics: [Transport](#) [Air pollution](#)

**Key messages**

- The annual EU limit value for nitrogen dioxide (NO<sub>2</sub>) — one of the main air quality pollutants of concern, which is typically associated with vehicle emissions — was widely exceeded across Europe in 2015. Some 89 % of these exceedances occurred at roadside monitoring locations.
- The EU limit values for the two categories of particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) were exceeded at fewer locations and at around the same amount of traffic and background stations, in comparison with last year. This indicates the importance of other emission sources for these pollutants, such as commercial and institutional buildings, household heating, etc.

European Environment Agency

Search

A-Z Glossary

Topics

Countries

Data and maps

Indicators

Publications

Media

About us

The EEA is an agency of the European Union

Data and maps

Indicators

Exceedances of air quality limit values ...

Exceedances of air quality ...

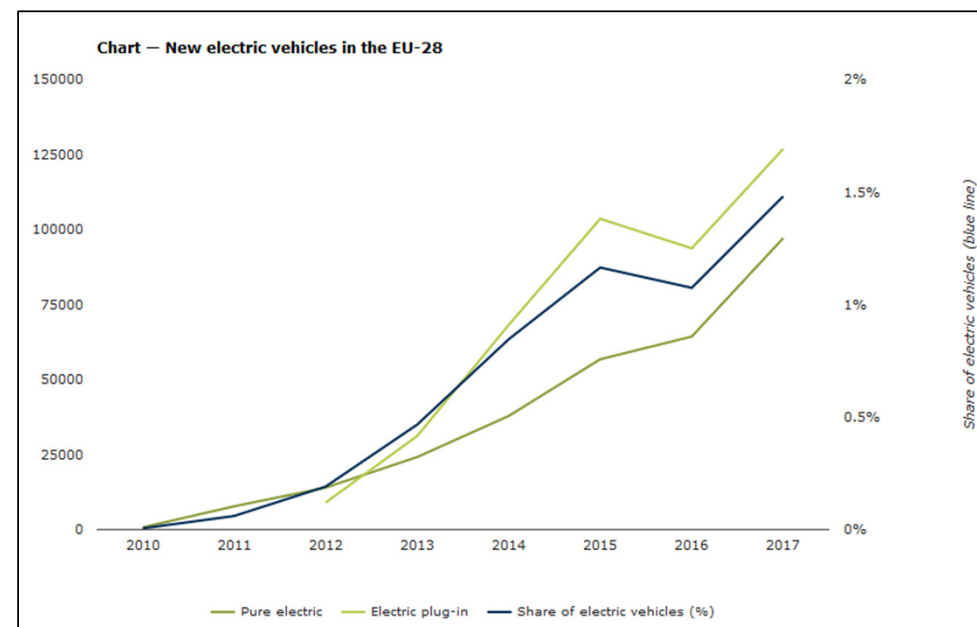
## Electric vehicles as a proportion of the total fleet

Indicator Assessment — Prod-ID: IND-108-en Also known as: TERM 034 — Created 03 May 2018 — Published 11 Jun 2018 — Last modified 11 Jun 2018 — 10 min read

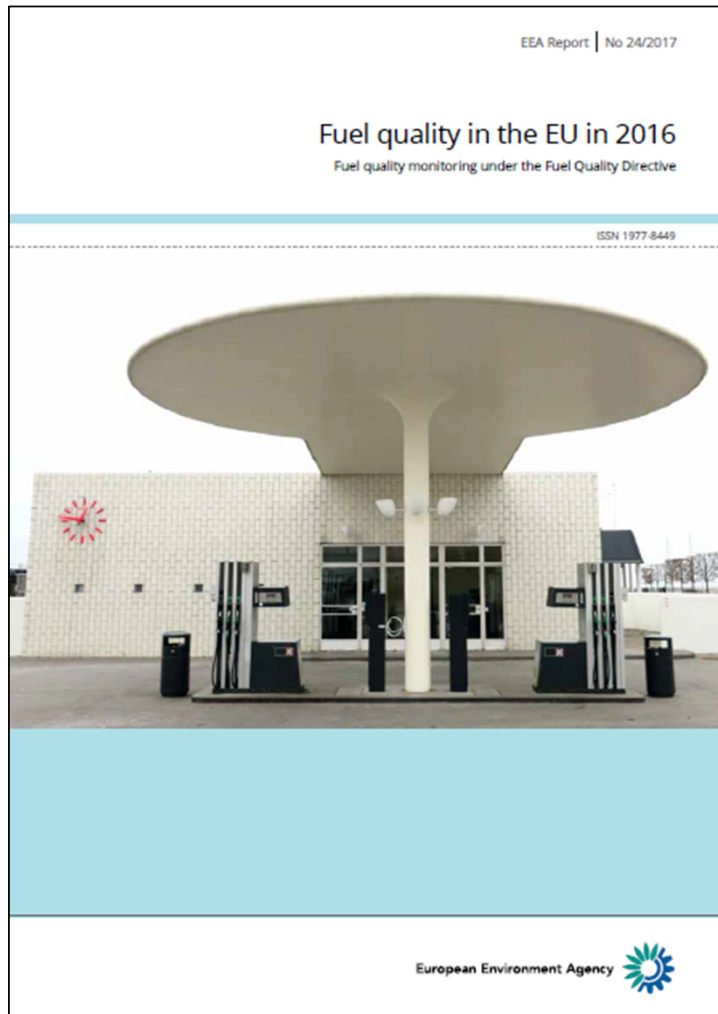
Topics: [Transport](#) [Energy](#)

**Key messages**

- Compared with 2016, sales of battery electric vehicles (BEVs) in the EU-28 increased by 51 % in 2017, the highest increase since 2008. Nevertheless, BEVs continue to constitute only a very small fraction of new vehicle registrations.
- Around 224 000 plug-in hybrid electric vehicles (PHEV) were registered in 2017, a 35 % increase compared with 2016.
- The largest number of registrations was recorded in France (more than 26 110 vehicles), Germany (more than 24 350 vehicles) and the UK (more than 13 580 vehicles). Combined, the relative share of PHEV and BEV sales was highest in Sweden, Belgium and Finland, with shares of 5.5 %, 2.7 % and 2.6 % respectively of national car sales in 2017.



# Fuel quality monitoring



## Fuel Quality Directive

Data — Prod-ID: DAT-176-en — Created 19 May 2017 — Published 03 Jul 2018 — Last modified 03 Jul 2018 — 1 min read

Topics: [Air pollution](#) [Transport](#) [Energy](#)

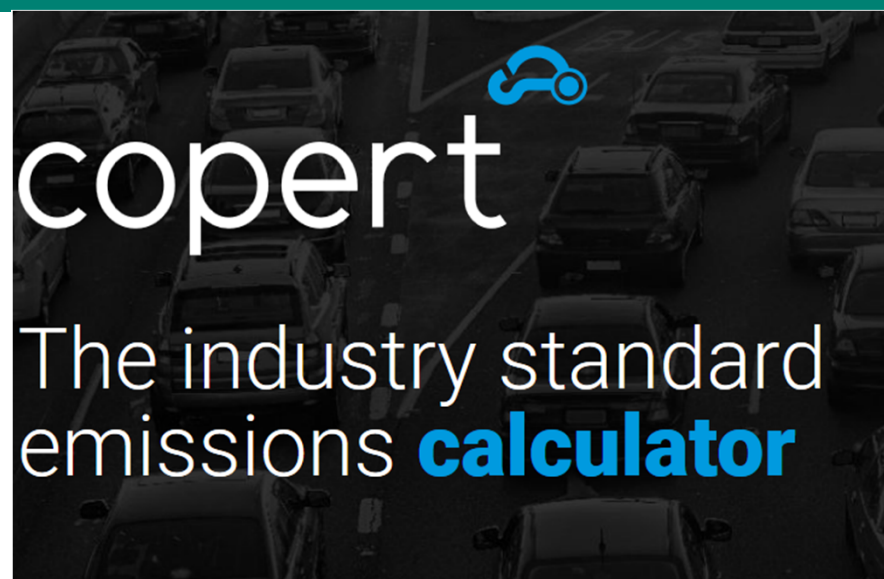
By 31st of August each year the Member States must submit a summary of fuel quality monitoring data collected during the period January to December of the previous calendar year, in accordance with Article 8(1) of Directive 98/70/EC as amended by Directive 2009/30/EC. The delivery process is managed by EEA.

[European data](#) [Metadata](#)

### Fuel Quality Directive Data v1

- [Fuel\\_Quality\\_Directive\\_v1\\_mdb](#) (ZIP archive)  
1.32 MB [Download file](#)
- [Fuel\\_Quality\\_Directive\\_v1\\_xlsx](#) (Microsoft Excel (Office 2010))  
3.08 MB [Download file](#)
- [Fuel\\_Quality\\_Directive\\_v1\\_csv](#) (ZIP archive)  
803.54 KB [Download file](#)

# Support to countries – emission inventory reporting tools



## Background

The development of COPERT is coordinated by the European Environment Agency (EEA), in the framework of the activities of the European Topic Centre for Air Pollution and Climate Change Mitigation. The European Commission's Joint Research Centre manages the scientific development of the model. COPERT has been developed for official road transport emission inventory preparation in EEA member countries. However, it is applicable to all relevant research, scientific and academic applications.



## Four reflection points – looking forward

- Continued alignment between COPERT and HBEFA as far as practicable
- Improving knowledge on real-world driving emissions from hybrids and non-combustion PM emissions for EVs
- Timeliness of information
- Innovation: Adapting to, and using, new sources of information, including ‘non-official’ sources



# Thank you

[martin.adams@eea.europa.eu](mailto:martin.adams@eea.europa.eu)

[eea.europa.eu/transport](https://eea.europa.eu/transport)

