TERM

Transport and Environment reporting mechanism

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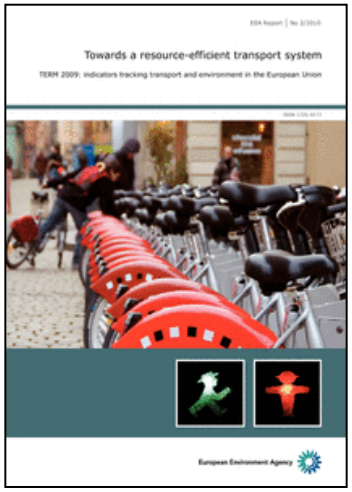
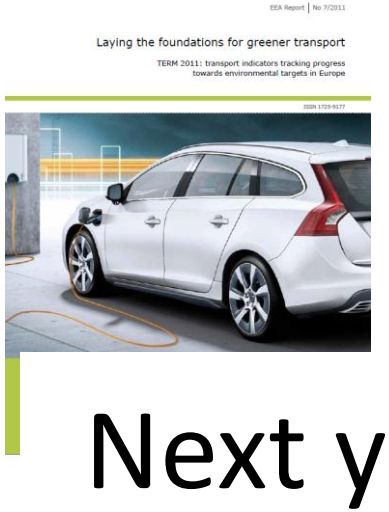
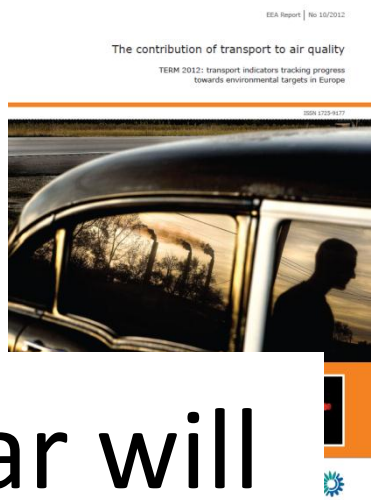
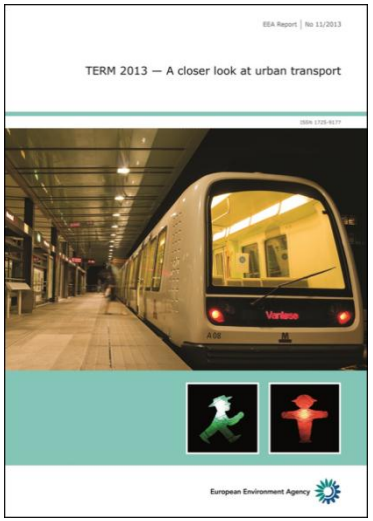
European Environment Agency

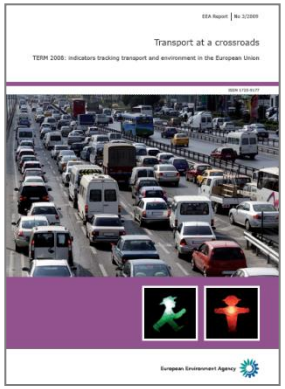




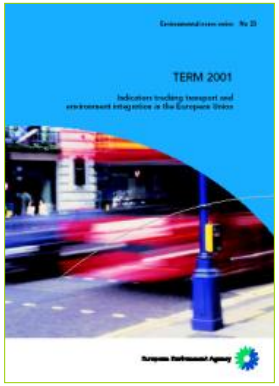


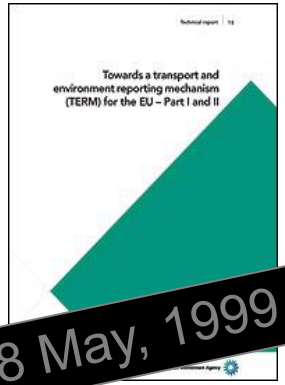


Next year will be special: 15 years of TERM reports



2003
No report
ESTAT
reorg.

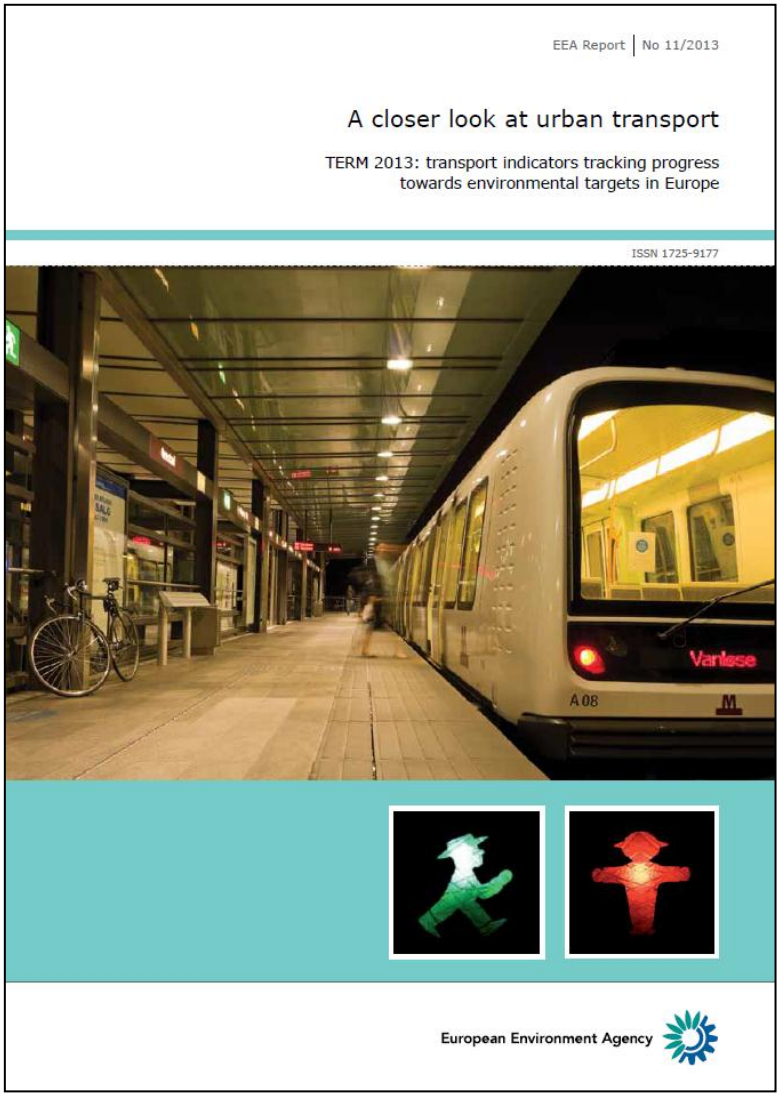




18 May, 1999

The TERM report 2013

http://www.eea.europa.eu/publications/term-2013



European Environment Agency

Organisational set-up and outputs

eurostat

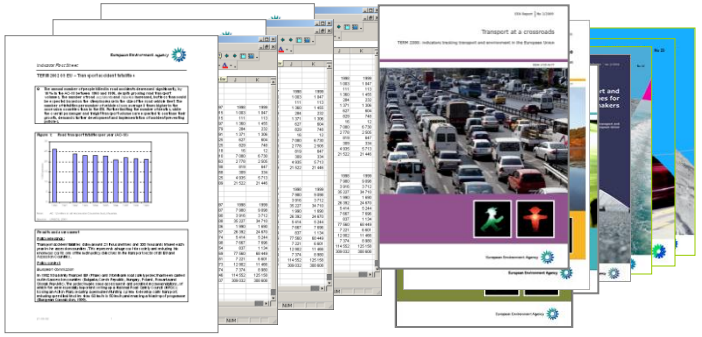
ENV
MOVE
CLIMA

Country information

Statistics

Policy context

EEA



Indicators

Reports

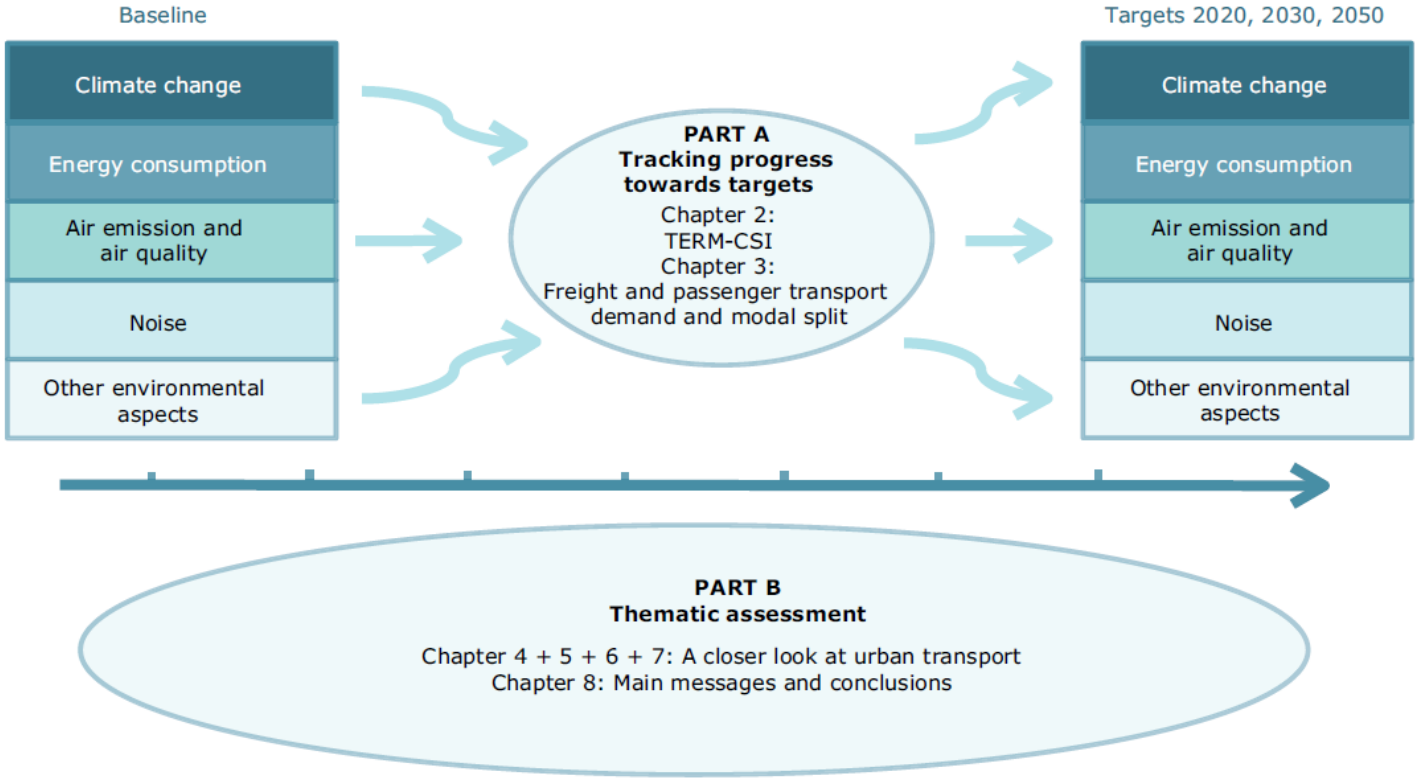
Review

Analysis

- Country fact sheets
- **Indicator based reports**
- Technical/focus studies

TERM CONCEPTUAL APPROACH

Part A: Monitoring progress towards transport and environmental goals



Part B: A closer look at urban transport

European Environment Agency

Transport and environment targets

- 60 % GHG emissions from transport (inc. aviation) by 2050 compared to 1990

-40%

Reduce international bunker GHG emissions by 40% by 2050, compared to 2005

10%

For each EU Member State, the share of renewable energy consumed in transport must be at least 10% by 2020.

95g CO^2/km

Reduce average CO_2 emissions of new cars to 95 g/km by 2020

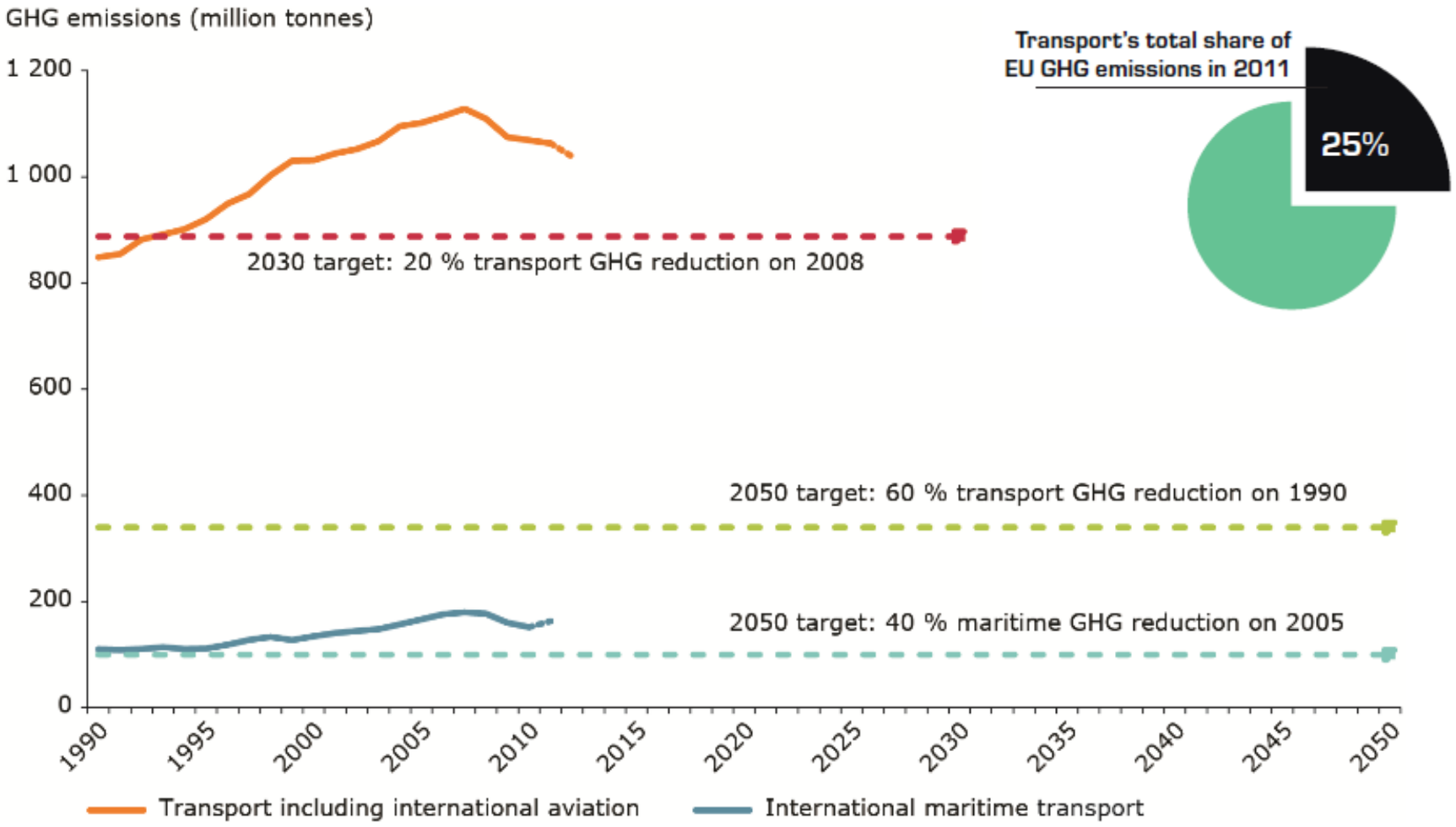
147g CO^2/km

Reduce average CO_2 emissions of new vans to 147 g/km by 2020

Source: EEA, 2013.

European Environment Agency

EU-28 transport emissions of GHGs



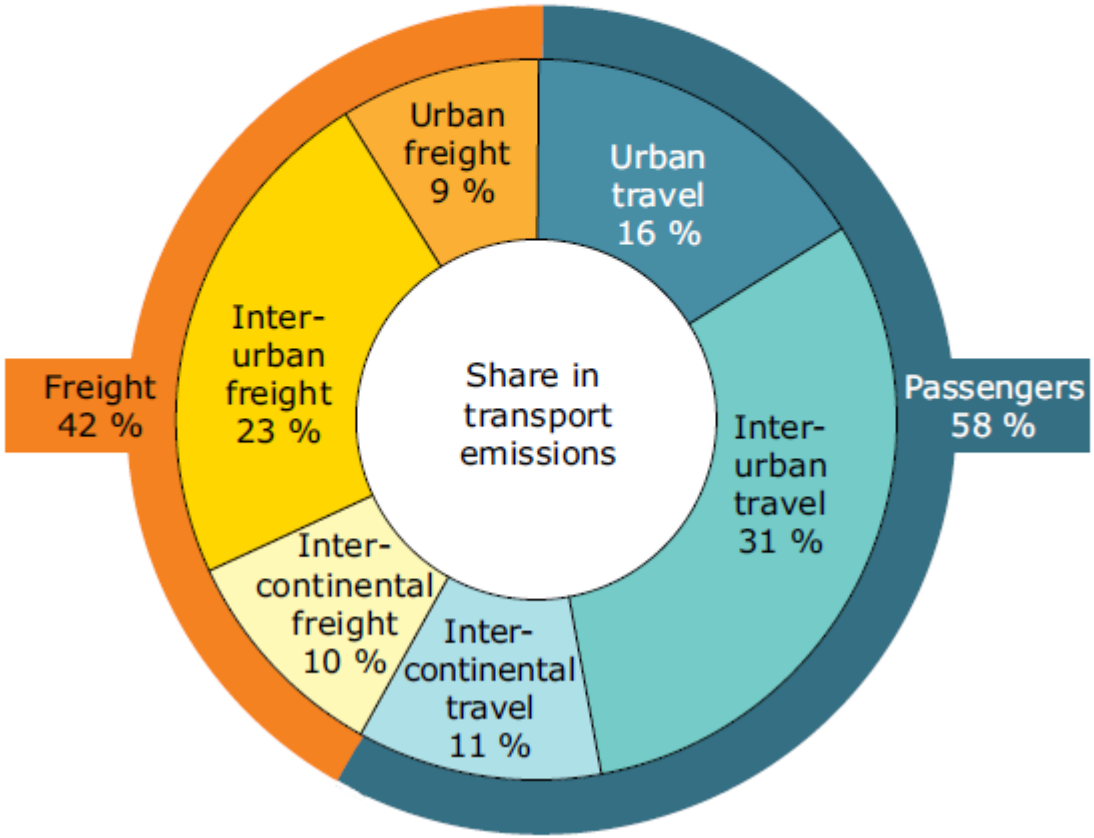
Source: EEA, 2013.

Transport and environment targets

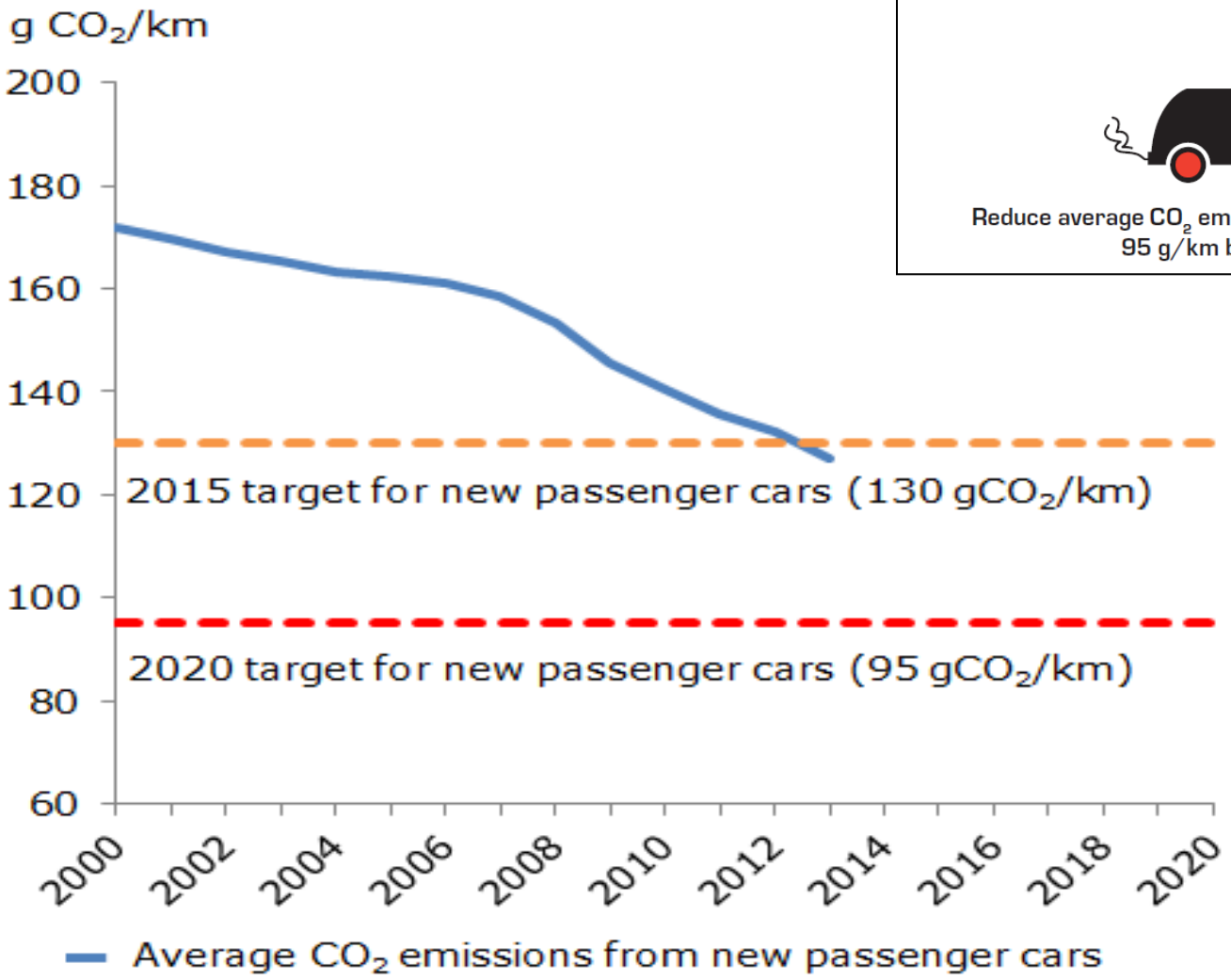
- 60 % GHG

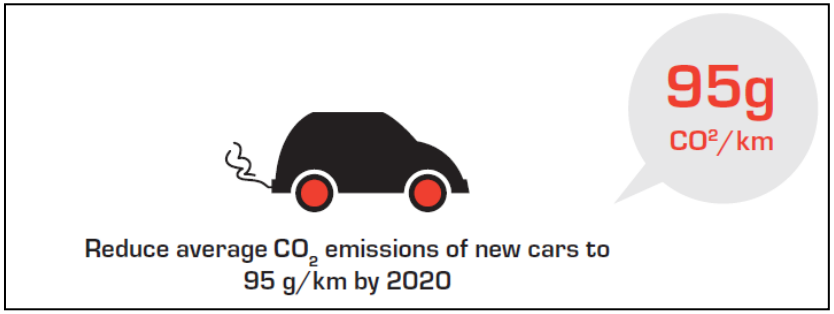
emissions from transport (inc. aviation) by 2050 compared to 1990

Shares in EU transport greenhouse gas emissions in 2010 (estimates)



Average emissions (g CO2/km, EU-27) for new cars



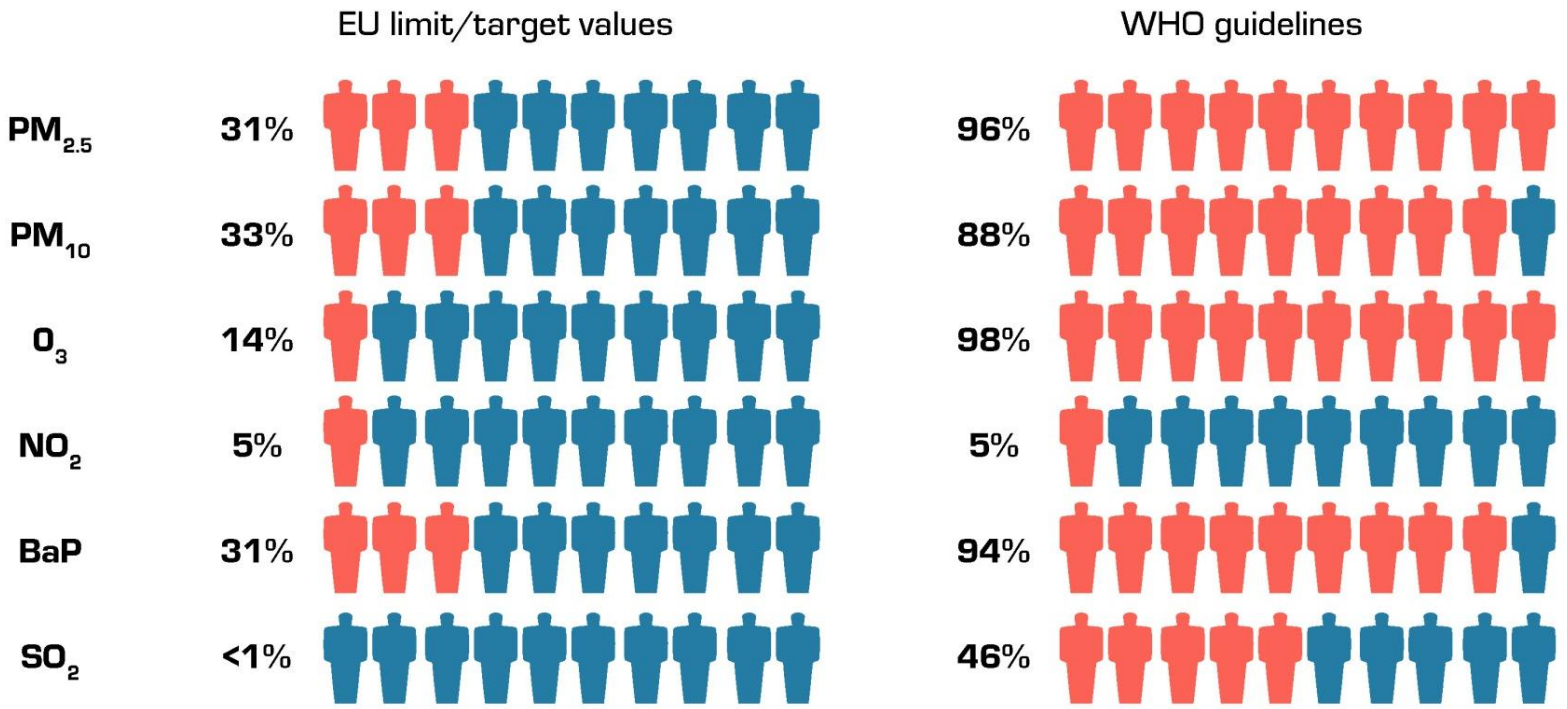


Source: EEA, 2013.


More than 74 % of the EU-27 population live in urban areas and this figure will likely rise to over 80 % by 2030

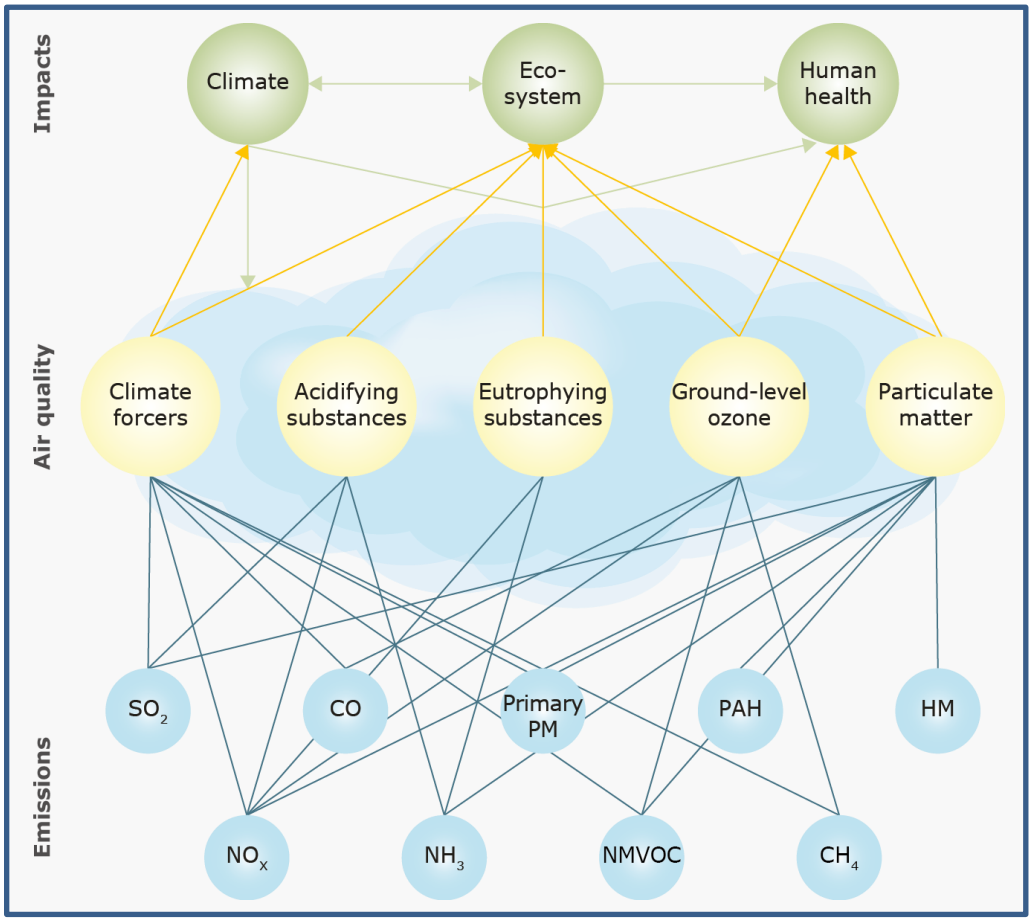
Exposure to harmful levels of air pollution in the EU

EU urban population exposed to harmful levels of air pollution in 2011, according to:



EEA Report No 9/2013: Air quality in Europe - 2013

Important air pollutants and their impacts on health and the environment – a complex system



- Sulphur oxides (SO_x)
- Nitrogen oxides (NO_x)
- Ammonia(NH_3)
- Particulate matter (PM)
- Non-methane volatile organic compounds (NMVOC)
- Persistent organic pollutants (POPs)
- Heavy metals (HM)
- Carbon dioxide (CO_2)
- Polycyclic Aromatic Hydrocarbons (PAH)

Complex interactions!

Source: EEA, 2013.

European Environment Agency

Transport and air quality in cities

- $PM_{2.5}$ and NO_2 concentration in cities is a major concern, highly linked to transport related emissions
- Contribution of urban and local traffic to PM_{10} concentration is 34 %. This is most likely higher in the case of $PM_{2.5}$
- The averaged contribution of urban and local traffic to NO_2 concentration is estimated at 64 %
- Congestion and shorter journeys, street canyon effect.

More info http://eea.europa.eu

European Environment Agency

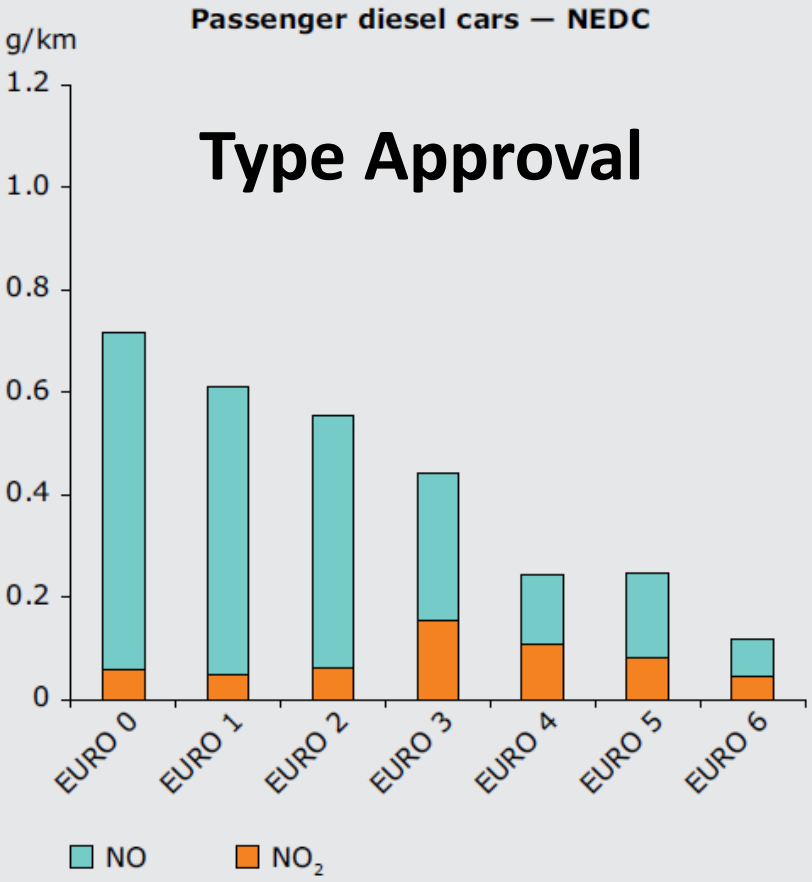
Transport and air quality in cities

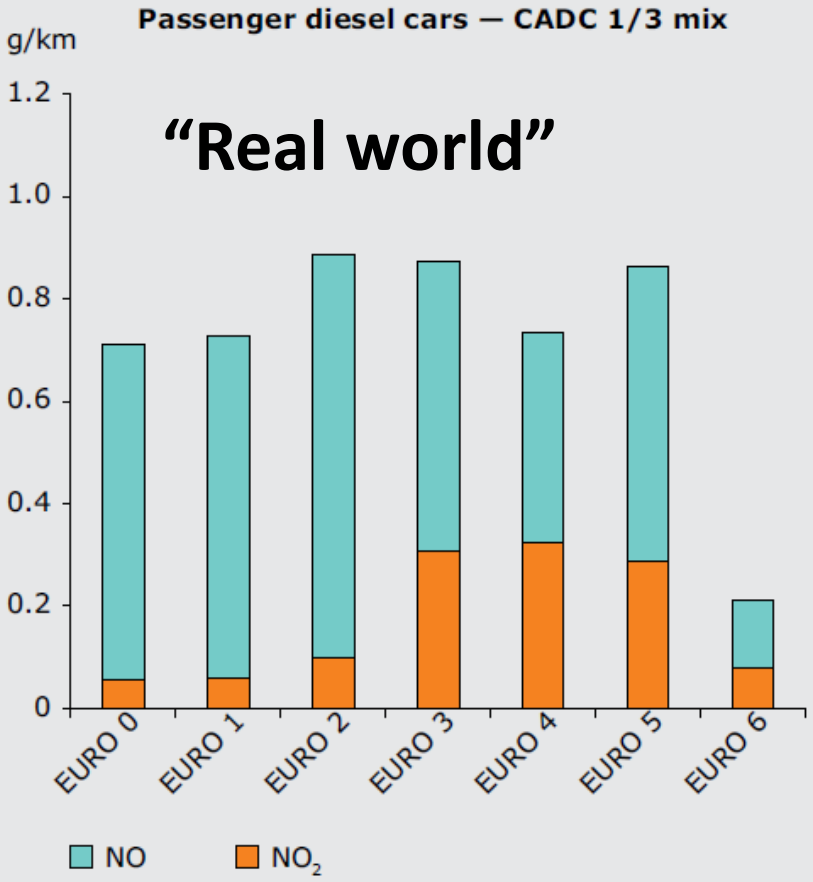
- Vehicle composition (Buses, M/C). Diesel vehicles have higher NOx emissions than petrol cars
- EURO standards have obtained general reductions, but not as much as anticipated (especially diesel NO_x)
- Higher proportion emitted directly as NO_2
- The discrepancy between type approval and real world emissions is crucial (NOx and CO_2).

Source: EEA, 2013.

NOx and NO_2 fraction in diesel vehicles

Figure 4.2 Test results for a set of diesel cars



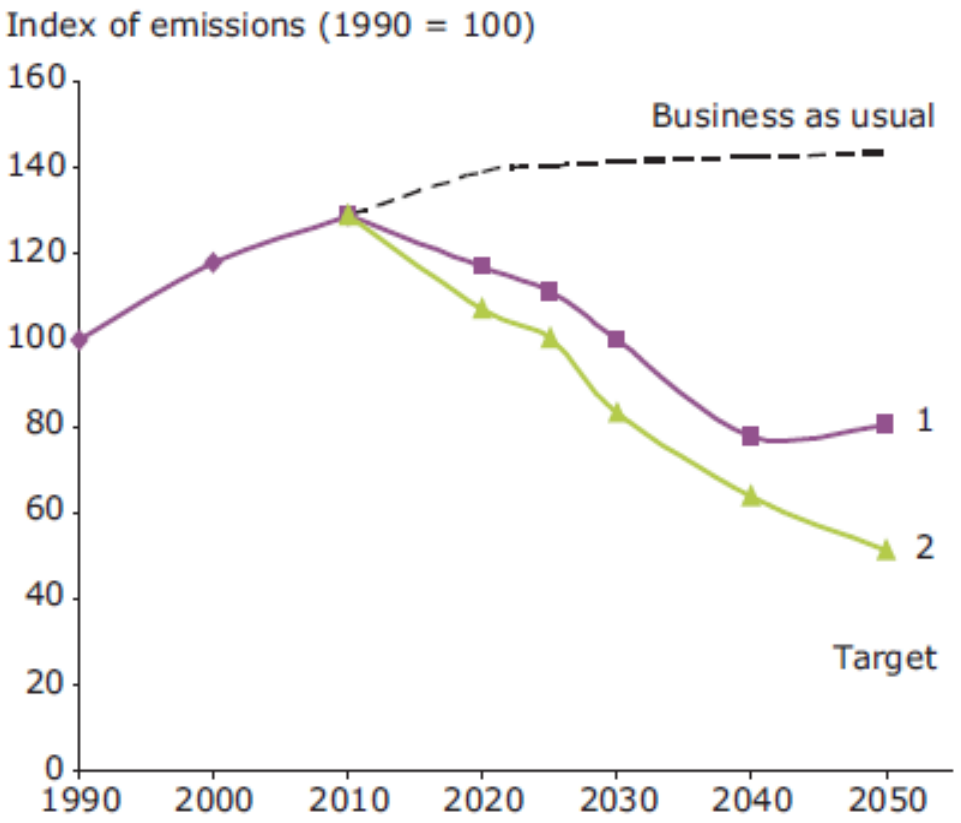


Note: These figures include the average New European Driving Cycle (NEDC) and the average Common ARTEMIS Driving Cycle (CADC) (1/3-mix urban, rural, motorway) test results for a set of diesel cars.

Source: Kühlwein et al., 2013 and Hausberger, S., 2010.

Approaches to impact minimisation

- ‘Avoid’, measures that reduce overall demand for travel: urban shape, IT, etc;
- ‘Shift’, measures that shift journeys onto more sustainable modes; and
- ‘Improve’, measures, that reduce the carbon intensity of travel through improved vehicle efficiency or finding alternative, low-carbon, sources of energy.



1: Improve
2: Avoid and shift

Alternative fuel & “clean” vehicles

Photo: www.hyer.eu

…we still look for cleaner air, less noise, less CO_2

It is not only about technology

Avoid and shift in urban passenger transport

Share of all kilometres travelled by:

WALKING + CYCLING + PUBLIC TRANSPORT

Paris	87 %	Vienna	71 %
Barcelona	83 %	Valencia	67 %
Amsterdam	79 %	Berlin	60 %
Helsinki	75 %	Seville	60 %
Stockholm	75 %	Turin	59 %
Madrid	74 %	Stuttgart	49 %
Copenhagen	72 %		

Share of all kilometres travelled by:

WALKING + CYCLING

Amsterdam	68 %	Helsinki	41 %
Paris	55 %	Seville	41 %
Barcelona	55 %	Berlin	39 %
Valencia	47 %	Vienna	34 %
Stockholm	45 %	Madrid	34 %
Copenhagen	42 %	Turin	33 %
		Stuttgart	23 %

Source: EEA, 2013.

TERM 2014 outline: Long Distance transport

Proposed table of contents:

- Chapter 1 - Foreword - Intro.
- Chapter 2 - Baseline, targets and TERM-CSI
- Chapter 3 - Transport demand
- Chapter 4 – Why is long distance transport relevant for the environment?
- Chapter 5 – Long distance passanger transport
- Chapter 6 – Long distance freight transport
- Chapter 7 – Options to minimise impacts
- Chapter 8 - Conclusions

Thank you

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http://www.eea.europa.eu/publications/term-2013