

TERM

Transport and Environment reporting mechanism

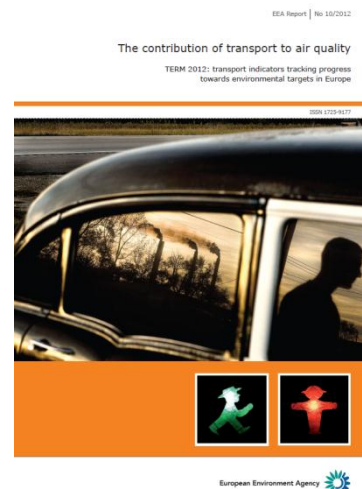
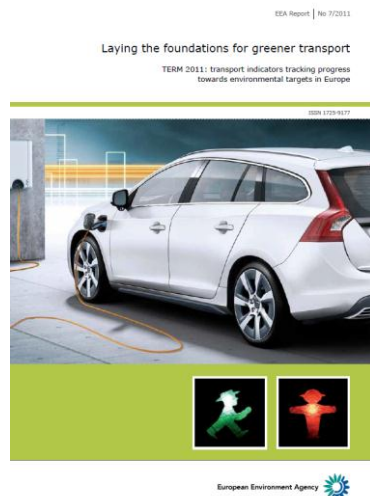
Alfredo Sánchez Vicente

Project Manager – Transport

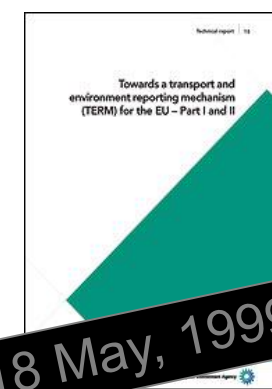
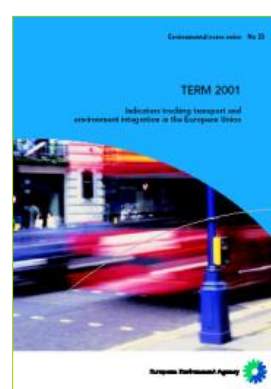
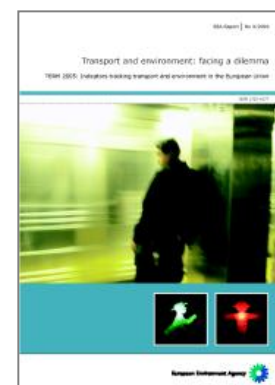
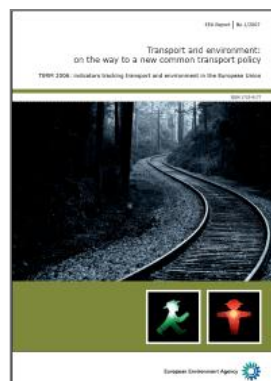
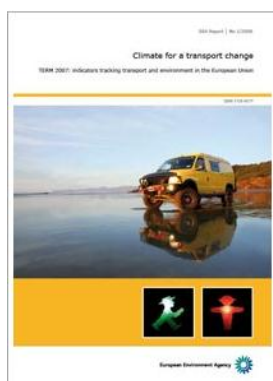
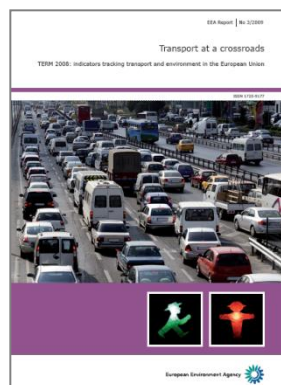
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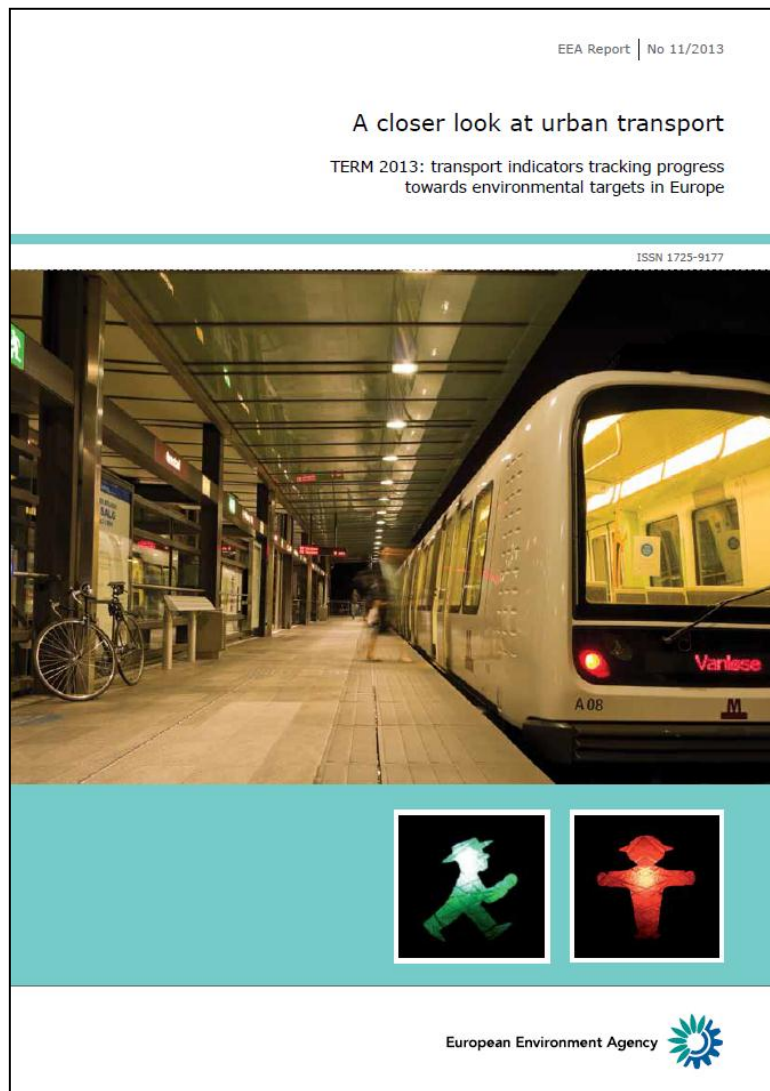
14 years of TERM reports



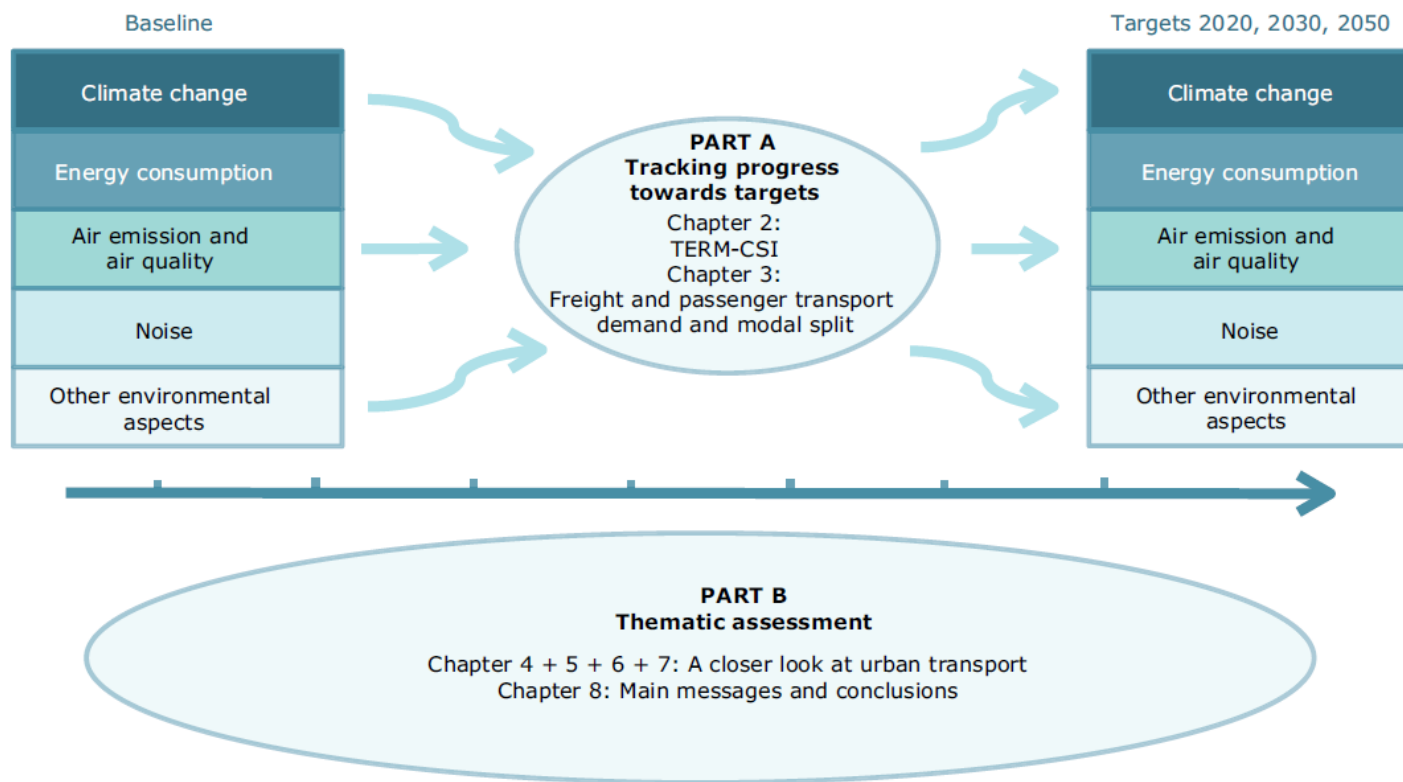
18 May, 1999

The TERM report 2013

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



Part A: Monitoring progress towards transport and environmental goals



Part B: A closer look at urban transport

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



Reduce average CO₂ emissions of new cars to 95 g/km by 2020

95g
CO₂/km



10%

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

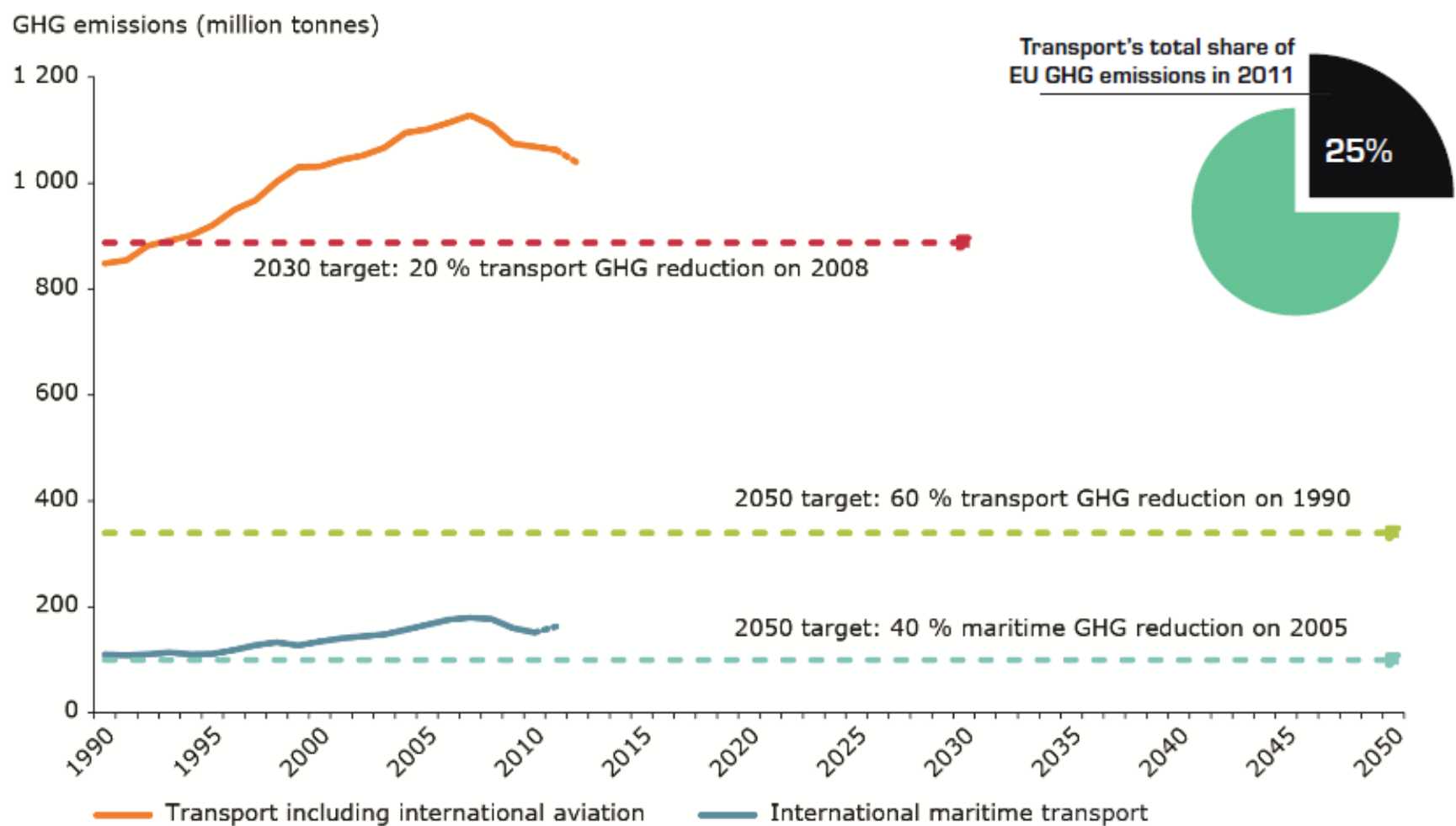


147g
CO₂/km

Reduce average CO₂ emissions of new vans to 147 g/km by 2020

Source: EEA, 2013.

EU-28 transport emissions of GHGs



Source: EEA, 2013.

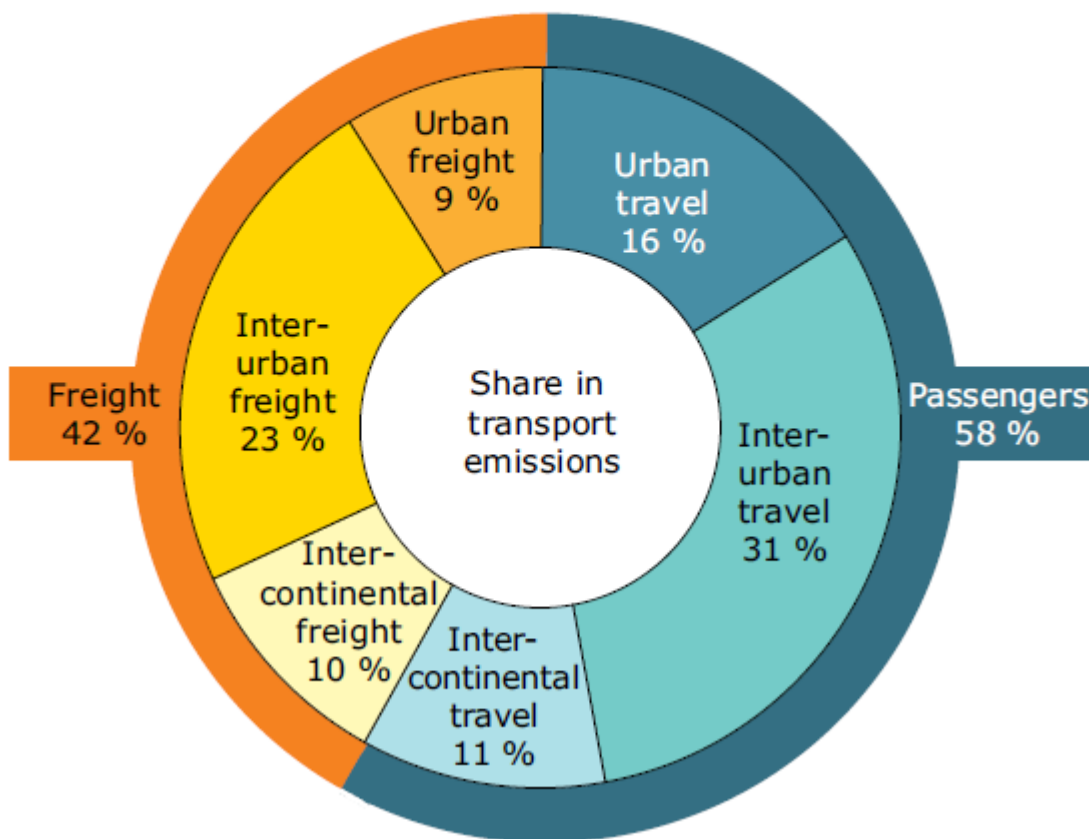
KEY QUESTIONS:

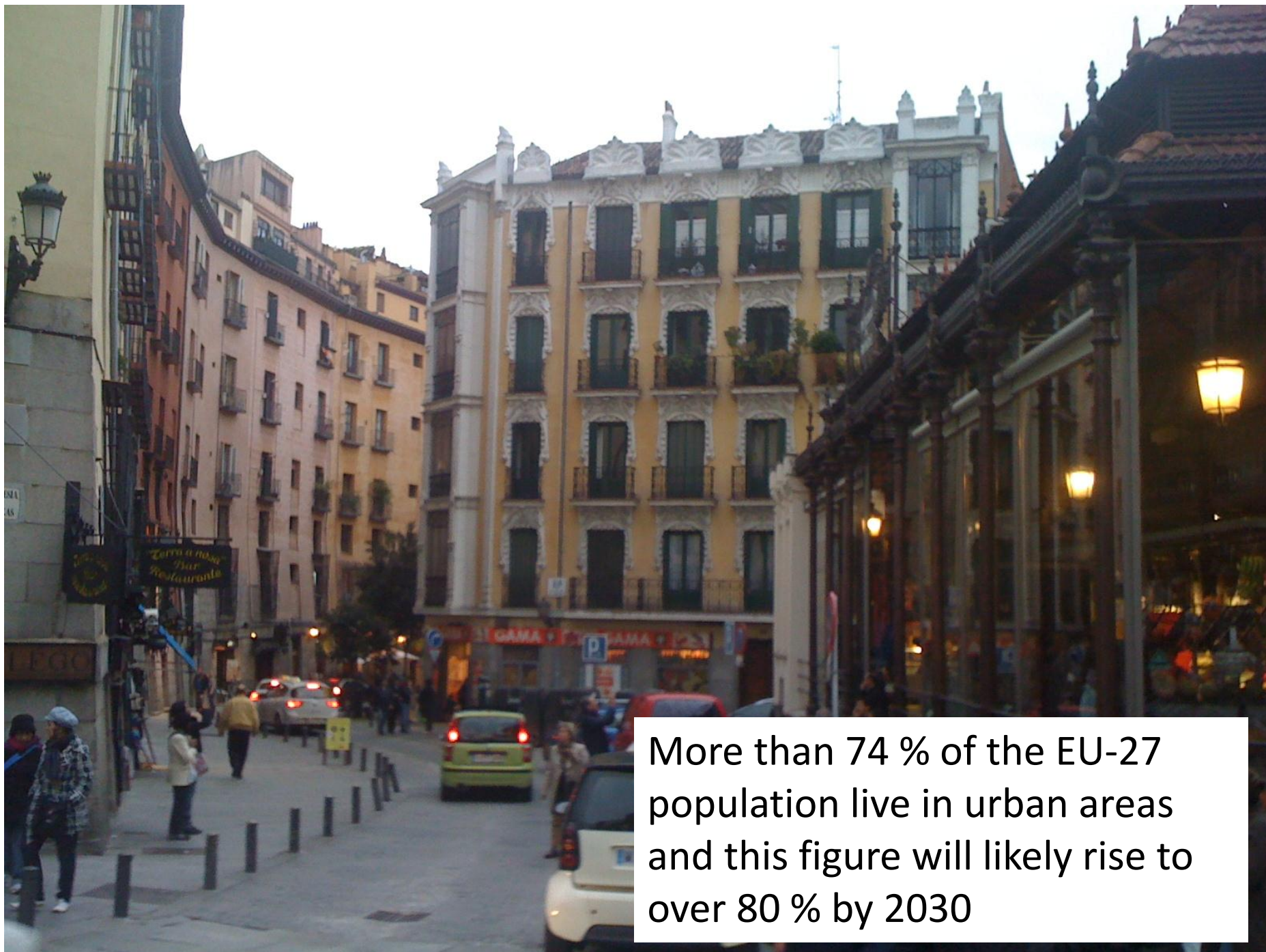
- Will we get there?
- How? And what are the knock on effects?
- Would it guarantee sustainability?

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)**

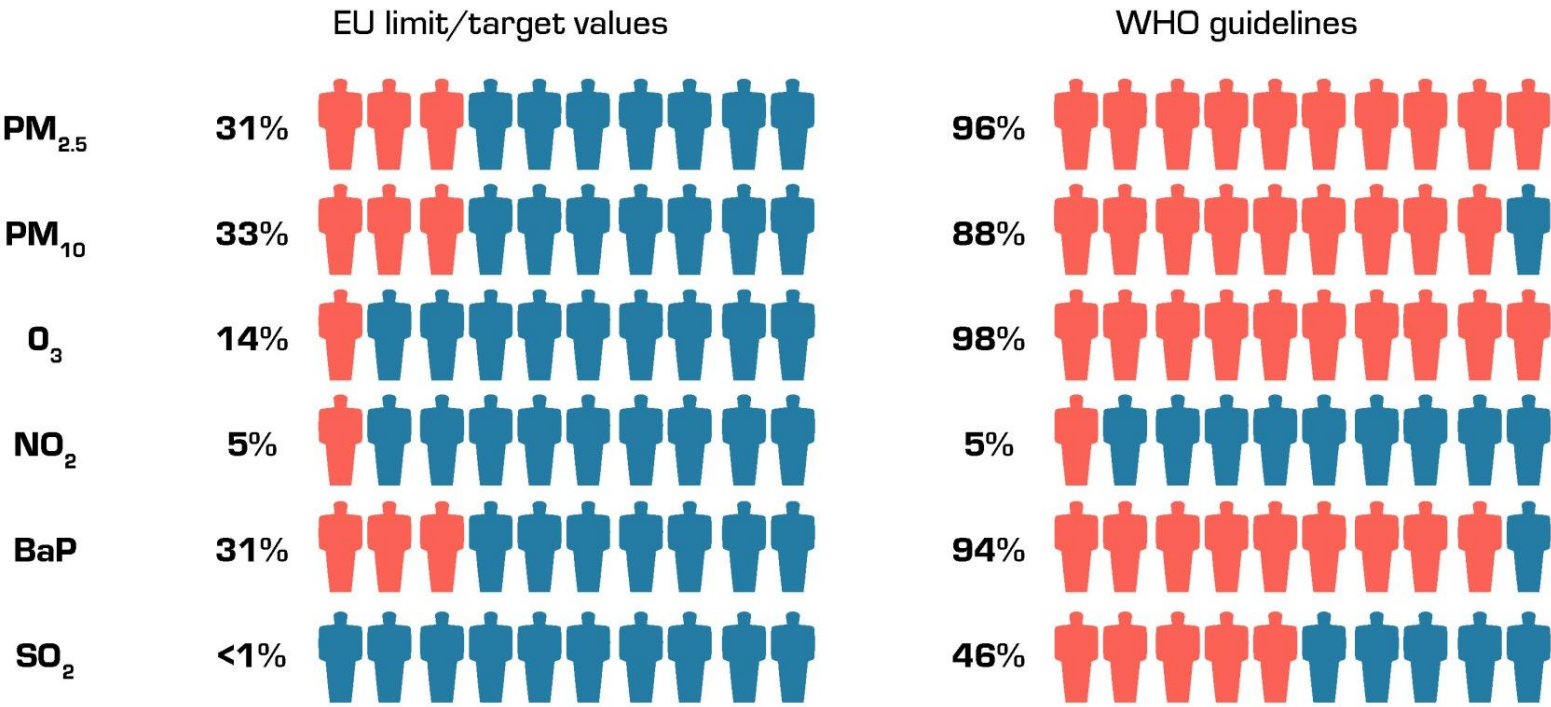




More than 74 % of the EU-27 population live in urban areas and this figure will likely rise to over 80 % by 2030

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

Transport and air quality in cities

- $\text{PM}_{2.5}$ 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 $\text{PM}_{2.5}$
- 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>

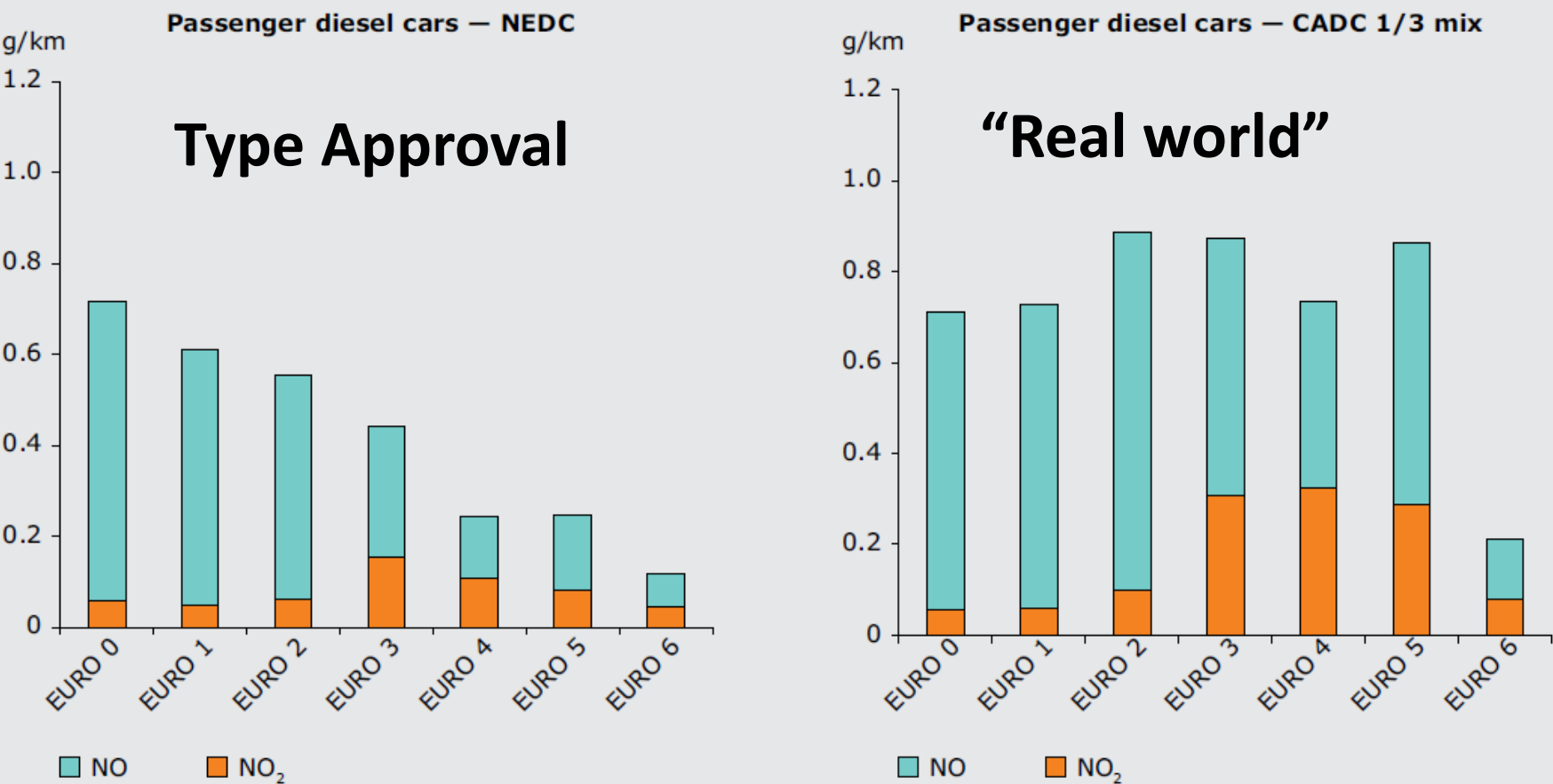
Transport and air quality in cities

- Vehicle composition (Buses, M/C). Diesel vehicles have higher NO_x 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 NO₂
- The discrepancy between type approval and real world emissions is crucial (NO_x and CO₂).

Source: EEA, 2013.

NOx and NO₂ 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.

Episodes of very high pollution levels

- Concentrations of PM10 unusually high!
- Stable and calm weather, inversion layer, preventing pollution from dispersing
- Same level of pollutants, but much more media attention
- Opportunities for effective communication
- Linking AQ with daily habits
- Prepare the field for introducing measures

Alternative fuel & “clean” vehicles



Photo: www.hyer.eu

...we still look for cleaner air, less noise, less CO₂

Avoid and shift in urban passenger transport



**Parking management, access restrictions,
Land use, ICT, facilities to bike and walk...**

A closer look at urban freight transport

- Urban logistics needs more attention
- Level of urbanisation are increasing
- Trends affecting urban logistics: home delivery, aging population, e-commerce.
- Generally competitive & cost-focused industry
- Major issue of failed deliveries at residential addresses – highly inefficient for all concerned
- Development of pick-up and drop-off points

A closer look at urban freight transport

- Freight: 10–18 % of urban road traffic
- Share of emissions 20 % - 40 % depending on the local situation.
- Congestion levels causes huge inefficiencies
- Average new van emitting 180.2 gCO₂/km while new cars 132.2 gCO₂/km in 2012
- WP goal: Achieving essentially CO₂ free city logistics in major urban centres by 2030

Options for urban freight

- Tailored, integrated packages for local situations vs harmonisation of regulations at a national or regional level to adaptation
- Pedestrianisations, vehicle size and weight controls, parking and loading controls, and delivery time windows. Relation between residents and traffic
- **Avoid and shift in urban freight more limited:** even though analysis suggest that 25% of all urban goods could be delivered by bike.

Thank you

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