# THE ROLE OF LIGHT DUTY VEHICLES IN ACHIEVING EMISSIONS REDUCTIONS

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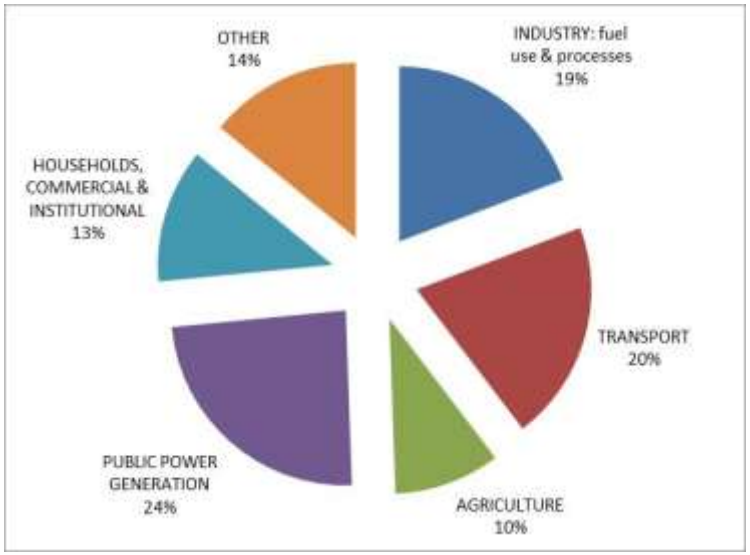
TRANSPORT & MOBILITY LEUVEN

# Relevance - Share of LDV emissions in EU




*Source: EEA*

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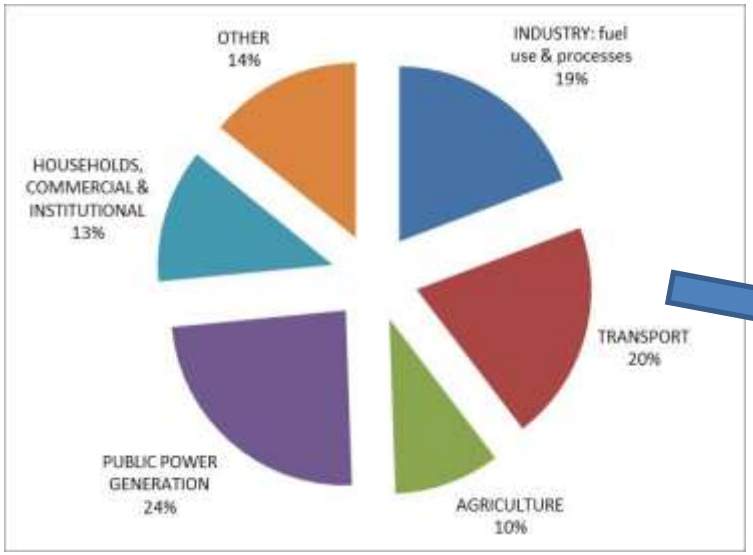


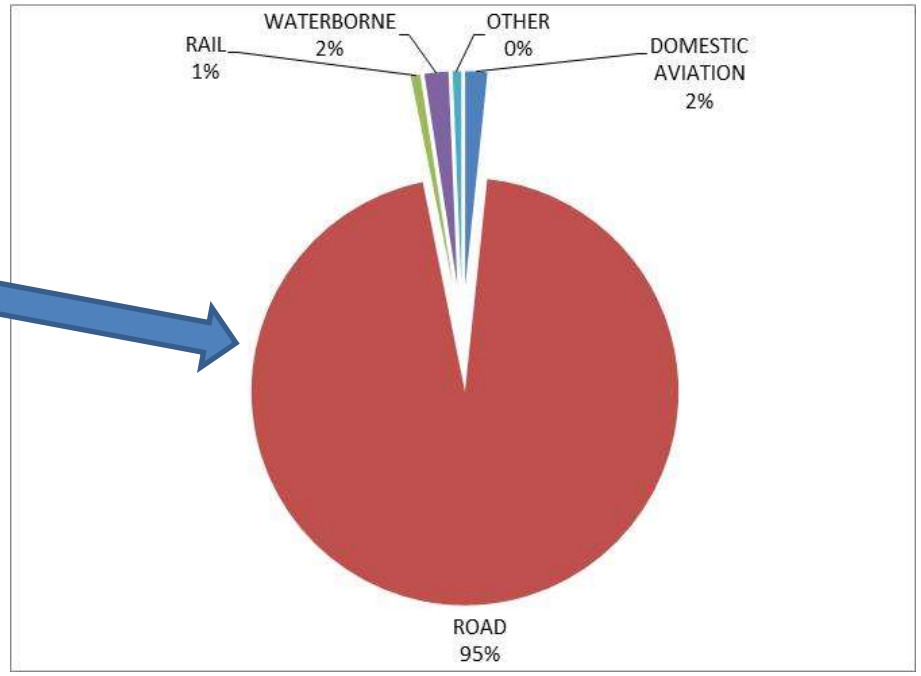


*Excl. international aviation & bunkers*

*Source: EEA*

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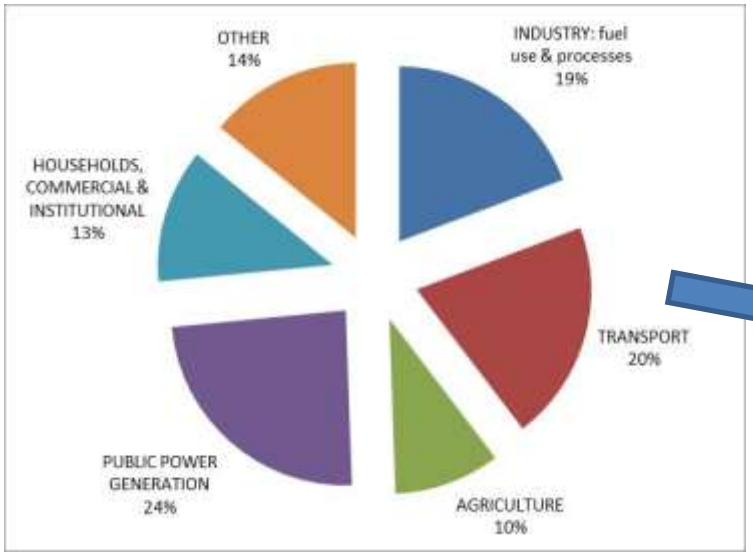


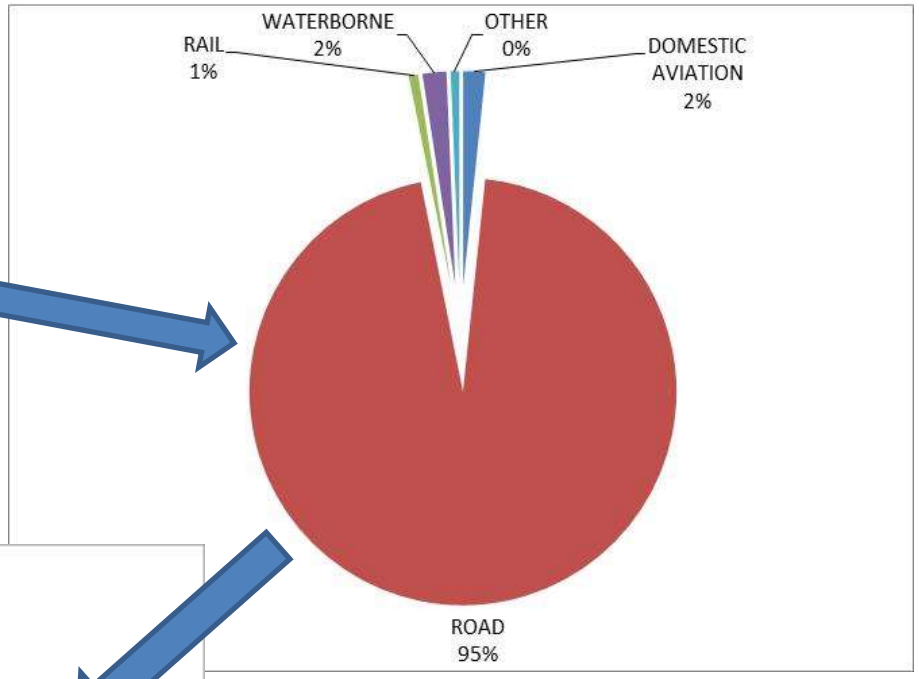


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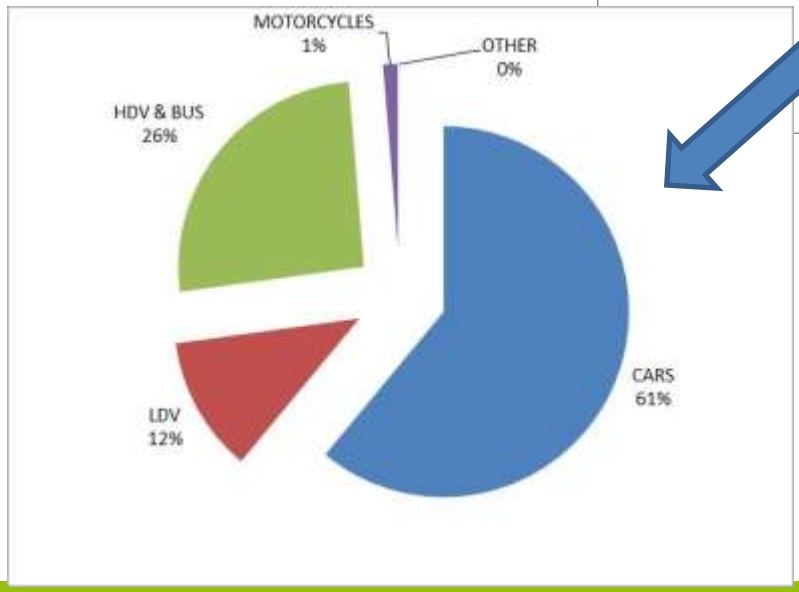
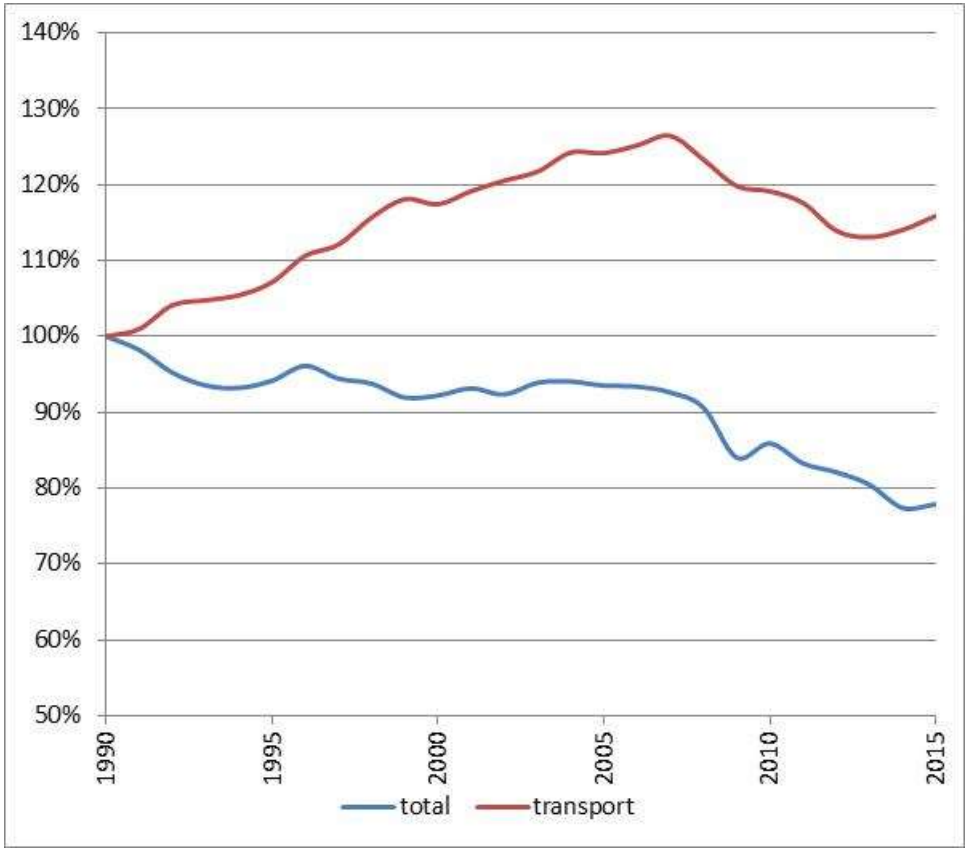



Cars & vans account for 14% of EU total

*Source: EEA*

# Trends



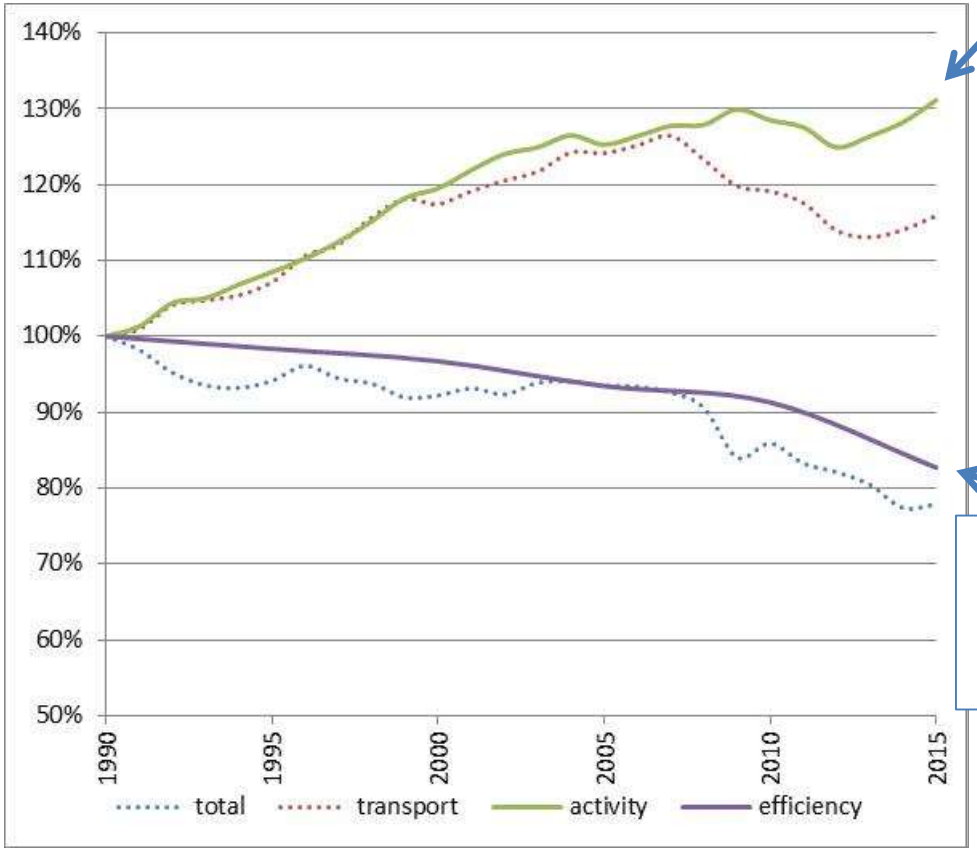

*Source: MOVEET model (TML)*

Transport emissions increase

Total emissions decrease

# Trends

Transport activity increases




Efficiency improves but insufficient to offset increase in activity

*Source: MOVEET model (TML)*

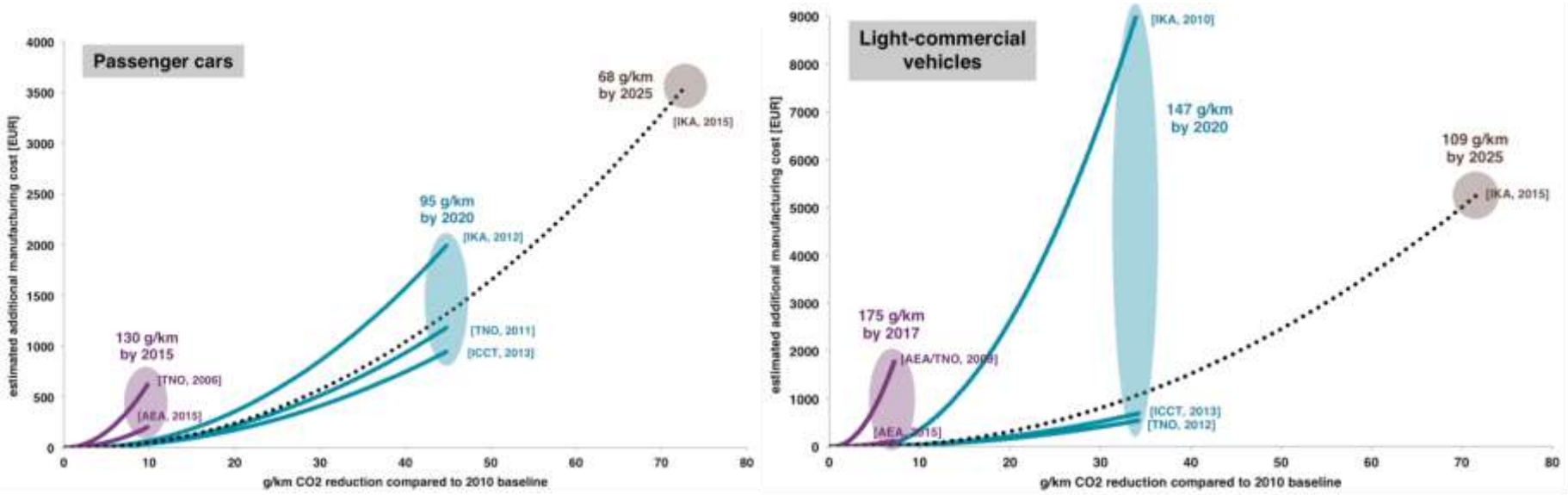
# Legislative efforts - history

Vehicle fuel efficiency standards

- 1998: Voluntary ACEA agreement: 140gr/km in 2008 – **not achieved** (153.7g/km in 2008)
- 2009: First binding targets for cars: 130gr/km phased in between 2012 to 2015 – **achieved**
- 2011: binding targets for vans: 175gr/km by 2017 – **achieved**
- 2014: updated targets:
  - Cars: 95g/km by 2021
  - Vans: 147g/km by 2020

# At what cost?

- Purchase cost ↗
- Fuel cost ↘
- Net…

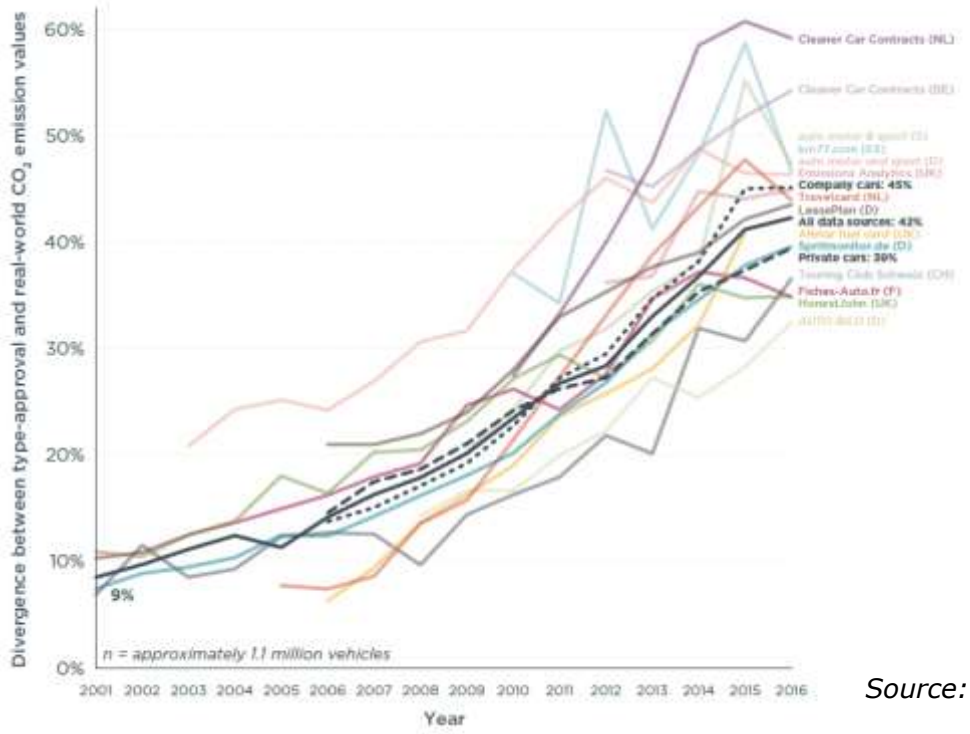



*Source: ICCT*

# Future – EC proposal November 2017

Objective: -30% in 2030 compared to 2021

- Maintain 95g/km standard
- "True compliance": NEDC ➔ WLTP




*Source: ICCT*

# Future – EC proposal November 2017

Objective: -30% in 2030 compared to 2021

- Maintain 95g/km standard
- "True compliance": NEDC ➔ WLTP
- Gradual percentage reductions compared to 2021 target
- Zero (0gr)- and low(<50g)-emission vehicles target 15% in 2025 and 30% in 2030

# Step change vs. breaktrough

- 2000-now: incremental improvement of the conventional diesel/gasoline cars
- Past few years: gradual penetration of electric vehicles, plug-in hybrids
- Future: to achieve further CO2 emission reductions in road transport, uptake of zero- and low-emissions is key