CO$_2$ emissions from Heavy-Duty Vehicles in the EU
Inception impact assessment on HDV CO$_2$ standards

Stakeholder meeting

Brussels, 16 January 2018

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Political Context

• **Paris Agreement**
  - EU commits to at least **40%** GHG emission reduction domestically 1990-2030

• **2030 climate and energy framework**
  - At least 40% GHG emission reduction domestically 1990-2030
  - **30%** GHG emission reduction in **non-ETS** sectors 2005-2030
    (Road transport = 1/3 of these emissions)
European Strategy for low-emission mobility

- Transport GHG emissions at least **60%** lower than in 1990 by mid-century and firmly on the path towards zero

- Emissions of air pollutants to be drastically reduced

- **HDV fuel consumption and CO\textsubscript{2} emissions to be measured and monitored** increasing market transparency and vehicle comparability

- The EU will also need to introduce **measures to actively curb HDV CO\textsubscript{2} emissions**

- 3\textsuperscript{rd} Mobility package: first half of 2018 to include proposals for **CO\textsubscript{2} emission standards for lorries**
EU28 GHG Road transport emissions 1990 - 2015

Source: GHG Emission Inventory data 2017
HDV CO₂ emissions projections (without additional policies)

Source: EU Reference scenario 2016, PRIMES-TREMOVE Transport Model (ICCS-E3MLab)
HDV CO₂ emissions: step-wise approach

- **VECTO simulation tool** to calculate fuel consumption and CO₂ emissions from new HDVs placed on the EU market.

- **Commission Regulation (EU) 2017/2400**
  - **Certification regulation**: Procedure to calculate CO₂ emissions and fuel consumption with VECTO for new HDVs placed on the EU market.

- **Proposal COM(2017) 279 final**
  - **Monitoring & reporting legislation**: VECTO CO₂ emissions & fuel consumption from every new HDV registered in the EU to be monitored & reported to EC.

- **Work in progress**
  - **CO₂ emission standards** on the basis of certification values.
Key problems

Without further action HDV CO₂ emissions are set to increase

EU HDV manufacturers face increasing global competitive pressures - US, Canada, Japan, China and India set/implemented already fuel efficiency measures

Transport operators and their clients miss out on possible fuel savings
Main drivers

**Limited uptake of fuel-efficient tech due to market barriers**
- Market uncertainties
- Information asymmetries
- Split incentives
- Financial constraints

**Payback gap**
- Expected amortisation of a tech lower than average lifetime of vehicle

**Increase in freight transport activity**
- Strong correlation with the economy
- Limited use of alternative fuels
General policy objectives

1) Reduce the climate impact of HDVs in line with the **EU's climate and energy targets**

2) Contribute to maintain the **technological leadership** of HDV manufacturers and component suppliers

3) Facilitate a reduction in the **total cost of ownership** for transport operators, most of which are SMEs
What's it in terms of vehicles concerned*?

*for the first step

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<tr>
<th>Axle configuration</th>
<th>Chassis configuration</th>
<th>Technically maximum load mass (ton)</th>
<th>Vehicle group</th>
<th>Allocation of mission profile and vehicle configuration</th>
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* EMS - European Modular System

** in these vehicle classes, tractors are treated as rigid but with specific curb weight of tractor

T = Tractor
R = Rigid & standard body
T1 = Standard trailers
T2 = Standard semitrailer
D = Standard dolly
Options (1)

Non-regulatory/soft measures

Regulatory measures

Types of CO₂ standards

Scope of the standards

Target levels
Options (2)

Type of targets

Metrics

Timing

Consideration of utility parameters

Flexibilities
Next steps

• **29 January**: closing of online public consultation

• **First half of May**: Adoption
Thank you for your attention!

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HDV CO2 Emissions Team

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