The future role of trucks for energy and environment

Dr Dimitrios Savvidis
European Commission
DG Climate Action
Unit C4: Transport

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Low-emission mobility

An essential component of the shift to the low-carbon, circular economy

Transport sector challenges

- About one fifth of greenhouse gas emissions
- Dependence on oil for more than 90% of its need
- Major cause of air pollution in cities
- Global competition and third countries' market access
- Changes in mobility models, consumer preferences, disruptive technologies
Road transport emissions 1990-2014

EU28 Road transport emissions 1990 - 2014

Data source: GHG Emission inventory date 2016
Trend in transport GHG 1990-2014 EU28

GHG emissions by source sector (source: EEA)
Road transport emissions

Estimated CO₂ emission by type of road vehicle

-- Cars and light duty vehicles (vans) ≈ 70%
-- Heavy duty trucks, buses and coaches ≈ 30%

Data source: Ricardo-EEA
Certification legislation

In the EU, certification of motor vehicles takes place under type approval legislation as defined in the 2007/46/EC Framework Directive that is currently being transformed into a new regulation.

DG GROW is currently preparing a new legislative Act on HDVs' certification under the existing Reg 595/2009 that deals with HDVs' emission pollutants.
Simulation tool to calculate both, fuel consumption and CO₂ emissions from the whole vehicle
# Vehicles' Segmentation

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<tbody>
<tr>
<td>4x2</td>
<td>Rigid</td>
<td>&gt;3.5 – 7.5</td>
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<td>Long haul</td>
<td>Long haul (EMS)</td>
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<td>Rigid (or tractor)*</td>
<td>7.5 - 10</td>
<td>1</td>
<td>R</td>
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<td></td>
<td>Rigid</td>
<td>&gt;16</td>
<td>4</td>
<td>R + T2</td>
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<tr>
<td></td>
<td>Tractor</td>
<td>7.5 - 16</td>
<td>5</td>
<td>T + ST</td>
<td>T + ST + T2</td>
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<tr>
<td>4x4</td>
<td>Rigid</td>
<td>&gt;16</td>
<td>(6)</td>
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<td>Rigid</td>
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<td></td>
<td>Tractor</td>
<td>all weights</td>
<td>(8)</td>
<td>R</td>
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<td>6x2</td>
<td>Rigid</td>
<td>all weights</td>
<td>9</td>
<td>R + T2</td>
<td>R + D + ST</td>
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<td></td>
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<td></td>
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<td>all weights</td>
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<td>T + ST</td>
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<tr>
<td>6x6</td>
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<td>(13)</td>
<td>R</td>
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<tr>
<td></td>
<td>Tractor</td>
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<td>(14)</td>
<td>R</td>
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* in these vehicle classes tractors are treated as rigid but with specific curb weight of tractor

- \( R \) = Rigid & standard body
- \( T1, T2 \) = Standard trailers
- \( ST \) = Standard semitrailer
- \( D \) = Standard dolly

A European Strategy for Low-Emission Mobility

(SWD(2016) 244 final)
Post-2020 strategy for lorries and buses

- Certification, monitoring and reporting of CO\textsubscript{2} emissions and fuel consumption
- Additional measures to actively curb CO\textsubscript{2} emissions
- Other parts of the world, such as the US, China, Japan and Canada, have already introduced standards
- Lower running costs for transport of goods, more fuel efficient vehicles will benefit the entire economy and ultimately, the consumers and passengers.
Post-2020 strategy for lorries and buses

"This Commission will, therefore, speed up analytical work on design options for CO₂ emission standards for such vehicles and will launch a public consultation to prepare the ground for a proposal during this mandate.

Given the average lifetime of a lorry of about 10 years, vehicles sold in 2020 will still be on European roads in 2030.

In order to be able to make swift progress different options for standards will be considered, including for engines only or for the whole vehicles, with the objective of curbing emissions well before 2030.

In its analysis, the Commission will make full use of all available data, including the simulation tool developed in close collaboration with stakeholders"
Timeline (trucks)

- VECTO development: on-going

- Dissemination and trials: from 2013 to 2016

- Preparation of possible legislative proposals: 2015-2016

- Possible first reporting year: 2018/2019
Thank you for your attention

- I will be happy to address your questions
- More info can be found at: http://ec.europa.eu/clima/policies/transport/vehicles/heavy
- Dimitrios SAVVIDIS: dimitrios.savvidis@ec.europa.eu

Thank you for your attention