



# MODULE 2: THE CLEAN VEHICLES DIRECTIVE (CVD)




Co-funded by the Intelligent Energy Europe Programme of the European Union

The sole responsibility for the content of this presentation lies with the Clean Fleets project. It does not necessarily reflect the opinion of the European Union. Neither the EACI nor the European Commission are responsible for any use that may be made of the information contained therein.





## **2.3: SETTING THE CVD WITHIN ITS CONTEXT: OTHER EUROPEAN VEHICLE DIRECTIVES AND LOCAL LEGISLATION**

-  Clean Fleets fact sheet on EU clean road vehicles legislation and policy



## EURO STANDARDS: LOCAL POLLUTANT EMISSIONS

Acceptable levels of pollutant emissions for road vehicles set by the EC:

- Carbon monoxide (CO)
- Hydrocarbons (HC)
- Non-methane hydrocarbons (NMHC)
- Nitrogen oxides (NO<sub>x</sub>)
- Particulate matter (PM)
- **NOT carbon dioxide (CO<sub>2</sub>) or energy use, so just specifying Euro Standards is not enough to comply!**



## CO<sub>2</sub> EMISSIONS LIMITS

Currently limits are restricted to cars and light duty vehicles (vans)

Date	Cars	Vans (Category N1*)
2012	An average of <b>65%</b> of each manufacturers newly registered cars must meet a limit of <b>130g CO<sub>2</sub>/km**</b>	
2013	<b>75%</b> must meet <b>130g CO<sub>2</sub>/km</b>	
2014	<b>85%</b> must meet <b>130g CO<sub>2</sub>/km</b>	
2015	<b>100%</b> must meet <b>130g CO<sub>2</sub>/km</b>	
2017		<b>175g CO<sub>2</sub>/km</b>
2024	<b>95g CO<sub>2</sub>/km</b>	<b>147g CO<sub>2</sub>/km</b>



## **EMISSIONS & ENERGY EFFICIENCY DATA REQUIRED FROM MANUFACTURERS**

CO<sub>2</sub> emissions and fuel consumption:

- **Light duty vehicles**
  - CO<sub>2</sub> and fuel consumption is measured during type approval
  - + recorded in the Certificate of Conformity (CoC)
  
- **Passenger cars**
  - As above
  - + a label indicating the car's fuel economy and CO<sub>2</sub> emissions\*



## EMISSIONS & ENERGY EFFICIENCY DATA REQUIRED FROM MANUFACTURERS

CO<sub>2</sub> emissions and fuel consumption:

### ➤ **Heavy duty vehicles**

- CO<sub>2</sub> emission values must now\* be measured
- Not recorded in the CoC BUT can be demanded by procurers at the tender stage
- Values defined by engine energy output (g/kWh)\*\*
- Therefore NOT a suitable basis for method 3 allowed under the CVD



## **EMISSIONS & ENERGY EFFICIENCY DATA REQUIRED FROM MANUFACTURERS**

Toxic pollutants (NO<sub>x</sub>, NMHC & particulates)

- The specific values of each pollutant measured during the type approval tests are recorded in the CoC.
- In the absence of a real-driving emissions test, these do not provide a reliable basis for assessing the actual lifetime environmental impacts of different vehicles.
- All vehicles must also meet a specific Euro standard for such emissions - compliance with a particular Euro standard is therefore the most important basis for procurement decision making



## CLEAN POWER FOR TRANSPORT

### To promote a market breakthrough of alternative fuels

- Short term aim: to promote a market breakthrough of alternative fuels
  - Long term aim: drive substitution of oil as an energy source in all modes of transport
  - Main pillar of the strategy – to encourage the deployment of alternative fuels infrastructure across member states
- 🔍 Presentations and video recordings from the Clean Fleets event in Stockholm, which focused on infrastructure for EVs





## SUMMARY OF RELATED LEGISLATION

- There is a mixture of European level legislation supporting cleaner vehicles
- Most are imposed on manufacturers – whereas the CVD is imposed on public authorities and public transport operators
- It is not enough to rely on legislation CO<sub>2</sub> emissions limits or even Euro Standards to be compliant with the CVD, as the following must ALL be considered:
  - Energy efficiency
  - CO<sub>2</sub> emissions
  - Pollutants affecting air quality