





## **MODULE 2:** THE CLEAN VEHICLES DIRECTIVE (CVD)









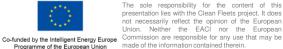












































### 2.3: SETTING THE CVD WITHIN ITS CONTEXT:

# 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 (NOx)
- Particulate matter (PM)
- ➤ NOT carbon dioxide (CO₂) 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</b> CO <sub>2</sub> /km**	
2013	75% must meet 130g CO <sub>2</sub> /km	
2014	85% must meet 130g CO <sub>2</sub> /km	
2015	<b>100%</b> must meet <b>130g</b> CO <sub>2</sub> /km	
2017		<b>175g</b> CO <sub>2</sub> /km
2024	<b>95g</b> CO <sub>2</sub> /km	<b>147g</b> CO <sub>2</sub> /km





# 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 absense 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 wheras the CVD is imposed on public authorities and public transport operators
- ▶ It is not enough to rely on legislation CO₂ 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