



EURO 7:

MORE OR LESS STRINGENT THAN OTHER GLOBAL STANDARDS?

The EU already has one of the most comprehensive and stringent approaches on pollutant emissions globally. State-of-the-art technology means that exhaust emissions are barely measurable.

Euro 7 is a new regulatory proposal put forward by the European Commission in November 2022 to further reduce pollutant emissions, such as nitrogen oxides (NOx) and particles, from all new vehicles.

EU POLLUTANT STANDARDS

Since 1992, the EU has introduced increasingly stricter exhaust **pollutant emission limits** for new vehicles sold in the EU, known as the '**Euro standards**' (Euro 1-6 for passenger cars and Euro I – VI for trucks).

Standardised laboratory tests measure pollutant emissions and ensure that a vehicle does not emit pollutants above the threshold permitted by these standards, which are established through EU Regulations. Since 2017, **real driving emissions (RDE)** tests have become the main focus for cars and vans, confirming they deliver low emissions in on-road conditions. Heavy-duty vehicles (HDVs) have lab tests for heavy-duty engines, but HDVs have had a similar approach to RDE using **portable emission measuring systems (PEMS)** for much longer than cars and vans.

WHAT IS THE LATEST EURO STANDARD?

The latest standards – Euro 6/VI – were introduced from 2014. Since then, extra steps have been taken as part of Euro 6 for cars and vans to **further reduce nitrogen oxides (NOx)** and **particle pollutant emissions** under real driving conditions. Emissions measured on the road using PEMS are now at a barely measurable level. Euro VI strengthened particle number (PN) limits and expanded the test conformity procedures, also delivering low emissions.

EURO 7 INTRODUCES:

- Strict **NOx** and **ultra-fine PN emissions limits** for all internal combustion engine (ICE) vehicles, regardless of the technology. It also proposes particle emissions standards from brake wear and tyre abrasion for all vehicles (ICE and electric).
- A strengthened on-road testing regime will test emissions for statistically irrelevant conditions such as extremely high or low temperatures and high altitudes.

The **Euro 7 proposal** for heavy-duty vehicles in particular, has no global comparison. It therefore threatens the EU's role in setting standards that other world regions will follow.

HOW DO CURRENT EU EMISSIONS STANDARDS COMPARE TO OTHERS GLOBALLY?

China, Japan, and the United States also have regulations to reduce vehicle emissions, but they are not as strict as those in the EU.

The severity of pollutant emissions standards is about much more than numbers on paper or tests in a lab. Its effectiveness should ultimately be measured by how a vehicle performs on the road. The EU regulations are more effective than those in other regions as they emphasise on-road performance.

For example, the US approach is less stringent than the EU's in a number of instances:



VS



- Emission limit values achieved by vehicles in the US are measured under **controlled lab tests**, not under the variability of on-road driving.
- Limits are based on the **average number of new cars sold by manufacturers**, rather than applying to every single vehicle sold, as is the case in the EU.
- The US has no limits for emissions of **ultra-fine particles**.

ACEA RECOMMENDS:

- Focusing on policies and proportionate regulation which accelerates **zero-emissions transport in Europe**.

