

Euro Standards



Cars and commercial vehicles sold in Europe are subject to strict limits on the emission of tailpipe pollutants and from other sources on the vehicle, e.g. evaporative emissions from the fuelling system.

Nominally referred to as 'Euro' standards, these were introduced in 1991 with 'Euro 0' (symbolised with Arabic numerals) for passenger cars and in 1992 with 'Euro I' (symbolised with Roman numerals) for commercial vehicles (emission standards did exist before Euro 0, but this was taken as the starting point for Euro standard references).

Innovation has helped meet progressively tighter emission standards as the legislation has developed. Technologies such as variable valve timing, direct fuel injection and improved and highly sophisticated engine management systems have all played a major role.

So too have exhaust after-treatment systems where the engine and the exhaust after-treatment are designed as a system (not forgetting the need for consistent and high quality fuels in all EU markets – even beyond the EU borders for commercial traffic). All new diesel cars and all new trucks are now fitted with particulate filters to meet tough new Euro 5/V and 6/VI standards. Many commercial vehicles also use Selective Catalytic Reduction (SCR) in combination with a urea-based additive (trademark AdBlue®)

to help reduce NOx emissions. SCR technology is appearing on larger diesel cars for Euro 6, but other NOx-reducing technologies such as lean NOx catalysts will also be adopted by vehicle manufacturers.

Industry will continue to innovate and invest. It was fully involved in discussions on Euro 5 and V and the latest changes to the Euro 6 and VI rules for cars and commercial vehicles respectively. There still remain several open issues to complete the Euro 6 stage and industry is actively participating in these talks with sensible and effective legislative proposals.

Europe should make the most of the solutions brought to market by EURO 5/V and 6/VI by encouraging fleet renewal. This would not only greatly and more quickly improve air quality, but would also help stimulate the economy

History and levels of Euro standards for passenger cars:

Euro standards	Entry into force		Emission limits		
	New approvals	All new registrations	Petrol NOx	Diesel NOx	Diesel PM
Euro 0	1 Oct 1991	1 Oct 1993	1,000mg/km	1600mg/km	(no limit)
Euro 1	1 Jul 1992	31 Dec 1992	490mg/km	780mg/km	140mg/km
Euro 2	1 Jan 1996	1 Jan 1997	250mg/km	730mg/km	100mg/km
Euro 3	1 Jan 2000	1 Jan 2001	150mg/km	500mg/km	50mg/km
Euro 4	1 Jan 2005	1 Jan 2006	80mg/km	250mg/km	25mg/km
Euro 5	1 Sep 2009	1 Jan 2011	60mg/km	180mg/km	5mg/km
Euro 6	1 Sep 2014	1 Sep 2015	60mg/km	80mg/km	5mg/km

More from this section

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New UN-ECE test procedure to better reflect real-world driving

ACEA welcomes the development of the new World Light [Vehicle] Test Procedure (WLTP), that includes a new test cycle and test procedures, under UN-ECE as a global technical regulation.

Environment and Sustainability | Air Quality | Euro Standards

CO2 Emissions | CO2 from Cars and Vans