Euro 7 motor vehicle emission standards

In November, the European Parliament is due to vote its first-reading position on a new regulation (Euro 7) for the type-approval of motor vehicles with respect to their emissions and battery durability. This regulation would replace the Euro 6 regulation for cars and light-duty vehicles and the Euro VI regulation for heavy-duty vehicles, adopted in 2007 and 2009 respectively. The report would set Parliament’s position for trilogue negotiations.

Background

Emissions standards for light-duty and heavy-duty vehicles have been in force in the EU since 1992, through a series of Euro emissions rules. Over the years, successive Euro standards have tightened limits for specific pollutants and modernised testing procedures. The Euro 7 proposal focuses on improving control procedures for all vehicles, and aims to update and complete current emissions standards, covering dangerous pollutants such as nitrogen oxides (NOx), particulate matter (PM), carbon monoxide and ammonia. The new standards would apply to vehicles using any fuel technology (petrol, diesel, electric drivetrain and alternative fuel). In the context of the ‘fit for 55’ package, a recent regulation requires a 55 % reduction in CO2 emissions for new cars (50 % for new vans) by 2030, and 100 % emissions reductions by 2035. A regulation on CO2 emissions from heavy-duty vehicles is currently under discussion.

European Commission proposal

On 10 November 2022, the Commission proposed the Euro 7 regulation with its impact assessment and annexes. The proposal brings requirements for both light-duty vehicles and heavy-duty vehicles together in a single act. It aims to control emissions more effectively, not only of tailpipe emissions but also of non-exhaust particle emissions from brakes and tyres, including those from electric vehicles. On tailpipes, the NOx limit departs from the Euro 6 standard for cars to reach 60 milligrams per kilometre (mg/km) for diesel, which has a higher (i.e. less ambitious) limit of 80 mg/km, as well as petrol engines. The proposal introduces new rules on the durability of electric batteries. Euro 7 also aims to raise the quality of emissions measurement in on-road emission tests, and by including digital sensors to measure emissions throughout a vehicle’s lifetime. It extends the compliance period for cars and vans to 10 years or 200 000 km.

European Parliament position

The Committee on the Environment, Public Health and Food Safety (ENVI) adopted its report on 12 October 2023 (with 52 votes in favour, 32 votes against and 1 abstention). On emission limits, the report aligns with the Commission proposal but sets stricter limits for exhaust emissions from heavy-duty vehicles, including levels set for real driving emissions. However, the report delays the date of application, by linking it to secondary legislation (to be adopted within 1 year of the regulation’s entry into force), granting 2 additional years for light-duty vehicles and 4 years for heavy-duty vehicles to adapt. On testing conditions for cars and trucks, it keeps most Euro 6 standards on acceleration, temperature and altitude. It supports the creation of an environmental vehicle passport and of on-board systems for monitoring emissions, consumption and battery health. The report is due to be voted during the November plenary session. It would then form Parliament’s position for negotiations with the Council, which adopted its position on 25 September.

Outcome of the Conference on the Future of Europe: This proposal is relevant for measures 4(3), (6); 18(2); 31(3).