

**Question for written answer E-005387/2018
to the Commission**
Rule 130
Mireille D'Ornano (EFDD)

Subject: Water injection and lower fuel consumption

According to the German car manufacturer BMW, referring to a 2015 prototype, when water was injected in fine droplets into the intake manifold of the vehicle's turbocharged petrol engine, torque and power increased by 10%, fuel consumption was 8% lower, and nitrogen oxide emissions were greatly reduced. As it evaporates, injected water absorbs energy and cools the intake gases, increasing the density of the intake air. In this way the combustion chambers receive more oxygen. Thermal efficiency is enhanced, consumption is lowered, and the knock threshold (knocking occurs when fuel detonates before it has been ignited by the spark-plug) is raised. This system can bring down fuel consumption in conventional vehicles.

1. Does the Commission have additional information about the technique of injecting water into engines to save fuel and reduce nitrogen oxide emissions?
2. Bearing in mind that the EU is committed to reducing its greenhouse gas emissions by at least 40% by 2030, compared with the 1990 levels, does the Commission think that it might support the widespread use of this technique in vehicles? If so, how?