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**COMMISSION STAFF WORKING DOCUMENT**

**Executive summary of the evaluation of Directive 98/70/EC**

**Evaluation of Directive 98/70/EC of the European Parliament and of the Council  
relating to the quality of petrol and diesel fuels ('Fuel Quality Directive')**

{SWD(2017) 178 final}

## 1. INTRODUCTION

The Fuel Quality Directive<sup>1</sup> ("FQD") aims to ensure a high level of environmental and health protection in relation to fuel used in road transport as well as non-road mobile machinery by reducing pollution from the transport sector, and enhancing air quality. It also aims to enhance the functioning of the single market for transport fuels and vehicles by setting minimum standards for the quality of transport fuels and ensuring the technical compatibility of such fuel with internal combustion engines and after-treatments. The FQD also sets a target for the reduction of life cycle greenhouse gas emissions from transport fuels.

As part of the Commission's Regulatory Fitness and Performance (REFIT) programme, the FQD was subject to an ex-post evaluation in order to examine its actual implementation compared to what was expected, as well as its relevance, effectiveness, efficiency, coherence, and EU value added. Article 7a related to greenhouse gas emission reduction was excluded from the evaluation because it is not yet fully transposed into national legislation. Articles 7b to 7e relating to the sustainability of biofuels were also excluded because they were the subject of an earlier evaluation<sup>2</sup>.

## 2. MAIN FINDINGS

The evaluation concluded that the FQD is effective in ensuring high levels of environmental and health protection in relation to fuels used in road transport and non-road mobile machinery as evidenced by substantial reductions of the main pollutants from transport, which are sulphur oxide (SO<sub>x</sub>), lead, nitrogen oxides (NO<sub>x</sub>), particulate matter (PM) and polycyclic aromatic hydrocarbons (PAH). These reductions have been achieved to some extent by defining obligatory fuel specifications that became progressively stricter over the time of application of the FQD. To some extent, they have also been the result of improved vehicle emission standards, which were dependent on improvements in fuel quality in order to be achievable. The emission reductions of major pollutants were smaller as initially expected. The increase in fuel consumption (and in particular of diesel fuel) over the past decade partly offset some achievements in emission reductions.

The FQD was also found effective in ensuring the compatibility of fuels with engines and after treatments of road vehicles and non-road mobile machinery. No reports of engine damage resulting from inappropriate fuels not meeting the fuel specifications were obtained during the stakeholder consultation exercise.

A full cost-benefit evaluation of the FQD was not undertaken. However, from the available data on the main costs of complying with the fuels specifications and the administrative costs for Member States' authorities related to monitoring and reporting as well as the estimated economic benefits obtained from avoided damage to the environment and human health it appears that the FQD is likely to be efficient in achieving its goals as the benefits significantly outweigh the costs.

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<sup>1</sup> Directive 98/70/EC relating to the quality of petrol and diesel fuels, OJ L 350, 28.12.1998

<sup>2</sup> SWD(2016) 416 final

Coherence of the FQD with other EU legislation was assessed, and in particular with the Renewable Energy Directive<sup>3</sup>, which amongst others provides for a target on renewable energy in transport. Work undertaken for this evaluation has found no evidence suggesting that the biofuels blending limits<sup>4</sup> established by the FQD would be incoherent with this target and with the target for a reduction of the greenhouse gas intensity of transport fuels set out by the FQD.

Several specific provisions in the FQD were assessed with respect to the internal coherence of the Directive. No major issues were identified that would require a change of the Directive at the present time.

The vast majority of transport fuels placed on the EU market is in line with the FQD fuel specifications. This indicates that the current monitoring and reporting system under the FQD is appropriate.

By defining fuel specifications, the FQD ensures an appropriate level of protection of the environment and human health against threats resulting from pollution by transport fuels. In the absence of EU legislation on fuel quality it is possible that Member States would adopt national provisions filling the empty space. This would entail the risk that the level of protection for the environment and human health would become unequal across the EU, putting some citizens at a disadvantage. Addressing fuel specifications at a national level could also lead to a fragmentation of the internal fuel market if these national provisions are not fully aligned. Even though voluntary industry standards (CEN) are currently applied to virtually all road transport fuels compliance with these voluntary standards cannot be ensured in the same way as with legally binding standards.

### **3. CONCLUSIONS**

It can be concluded that the FQD is generally fit for purpose and should remain in place. Nevertheless, some points have been identified in the evaluation process, which deserve further consideration. These primarily relate to the functioning of the internal market. In line with its scope the FQD has not been constructed as an instrument to fully harmonise the internal transport fuel market. It therefore allows certain margin for national measures related to transport fuels, including while not limited to the blending of biofuels.

In consequence, there is a diversity of fuel blends supplied across different Member States, which may lead to higher costs for fuel suppliers. There are also some fuels for which the environmental specification of the FQD do not apply.

However, these above-mentioned findings do not entail that the overall objectives of the FQD would be compromised. Also, the work undertaken for this evaluation has not produced any

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<sup>3</sup> Directive 2009/28/EC on the promotion of the use of energy from renewable sources, OJ L 140, 5.6.2009.

<sup>4</sup> There are limits of ethanol and other oxygenates in petrol and of fatty acid methyl ester (FAME) in diesel.

compelling evidence that national flexibilities provided by the FQD have led to severe market disruptions.

As this situation may change in the future it is considered appropriate to continue monitoring of the development of the internal market for transport fuels.