Brussels, 8th June 2017

Introduction

FuelsEurope is of the opinion that the EU’s transport greenhouse gas (GHG) reduction policy should be holistic, and include in addition to lower carbon fuels and vehicles, traffic demand, infrastructure improvements, and driver education/training/behavior. We believe that the current tank-to-wheel (TTW) approach for the vehicle efficiency standards has been effective in promoting improvements in the internal combustion engines (ICE)-based vehicles. A sensible continuation in the short term of the CO₂-efficiency targets is supported, provided the following points are considered.

We call for a technology neutral approach towards ambitious but achievable targets such that they can be cost-effective and delivered by different technologies

Credible academic¹ work shows the considerable potential in further efficiency improvements of the ICE-based vehicles. Therefore CO₂-efficiency targets should be set that are mostly achievable with foreseeable ICE vehicle technologies to encourage their further development.

Counting electricity used in vehicles as zero CO₂ emissions does not reflect the reality of their actual contribution to CO₂ emissions across the economy. There should be a clear plan on how to address real life cycle CO₂ emissions of vehicle drive-train technologies for the longer term

The use of electricity is not zero CO₂ emissions across the economy. Regulations and marketing approaches claiming vehicles have zero tail-pipe CO₂ emissions, do not represent the full picture and may misinform consumers. The production of electricity (with reference to the current EU generation mix), extraction of raw materials and feedstocks for and the manufacturing of batteries for electrical vehicles are CO₂ emission intensive. Academic analyses that take into account the different life cycle aspects² demonstrate that using LCA, there is a significantly lower CO₂ saving for electrical vehicles versus ICE vehicles than when compared using tail-pipe CO₂ emissions.

Therefore life cycle considerations should at least be considered immediately and preferably included to ensure the GHG emissions for each drive-train are fully accounted. This should also be the case in the definition of a clean vehicle.

FuelsEurope is of the opinion that the inclusion of life cycle analysis in vehicle CO₂-efficiency regulation should be evaluated in-line with the regulation review process. While a TTW approach is recognised for the time being to enable comparison of indicated performance with real driving results, FuelsEurope supports to start looking into ways to include LCA-based real GHG emissions of drive-train technologies in future vehicle efficiency legislation. FuelsEurope also believes that the current work on LCA is already at a stage where it can be used to inform consumers of the real CO₂ savings of different drive-train technologies, as well as help to find an appropriate definition of a clean vehicle.

¹ NTNU Trondheim data
² Life cycle analysis (LCA) components are the CO₂ emissions associated with the production and recycle of the vehicle and its components together with the production and use of fuel and/or energies
Recognise fuel CO₂ reduction contribution to CO₂ vehicle efficiency standards

Fuel providers will be expected to deliver fuel improvements, for example CO₂ savings associated with renewable components in the fuel. Those improvements should be recognised in the CO₂-efficiency standards of vehicles. In the TTW approach the CO₂ emissions are measured without making a distinction between CO₂ originating from fossil, biogenic or other technology-based sources. In the case of CO₂ of biogenic origin (for example from sustainable biofuels³), this biogenic CO₂ should be recognised in-line with the GHG emission treatment of biofuels in the legislation in force⁴ in the total CO₂ emitted by the vehicle as long as the vehicle efficiency regulation remains based on a TTW approach.

The recognition of fuel CO₂ reductions will create clear and aligned interest for the auto and fuel sectors and encourage investment in new fuel technologies.

The non-compliance penalty should be revised downward

Although a target with a penalty can be considered as an effective approach, the penalty value should be re-evaluated. The penalty⁵ is currently set at a level corresponding to a very high carbon price (about 500⁶ €/tonne CO₂). The combination of the “zero CO₂” from electricity and the high penalty creates an environment that does not produce an acceptable societal cost for reduction of GHG emissions of transport by forcing OEMs to preferentially sell electrical vehicles instead of the efficient ICE vehicles. FuelsEurope believes the penalty value should be revised downward.

The FuelsEurope proposal for the post-2020 CO₂-vehicle efficiency regulation aims to support and recognise all technologies equally so as to promote consumer choice and to encourage the most cost-effective solutions over the long term.

In the short term, CO₂-vehicle efficiency standards should:

- Be based on ambitious but realistic TTW targets which enable the contribution of all vehicle drive-train technologies in a technology neutral way.
- Recognise the contribution of fuel improvements in the vehicle emission standards. Biofuels GHG emission saving should be treated in-line with the legislation on biofuels in force if the current TTW approach is continued unchanged after 2020.
- Evaluate how an LCA approach could be introduced in vehicle CO₂-efficiency regulation in-line with the review process of the regulation. Inform consumers immediately and transparently about the life cycle CO₂ performance of different drive train technologies.
- Revise the non-compliance penalty downwards.

³ As per the renewable energy EU legislation in place
⁴ Amongst which are the Renewables Energy Directive (RED) and the European Trading System (ETS)
⁵ 95 € penalty per 1 g/km above the fleet average CO₂-efficiency
⁶ Assuming 200,000 km driven over the vehicle life time: 95 € / (1g/km over 200,000km)
In the medium term:

- Assess CO₂-vehicle efficiency standards in-line with the review process of the regulation to take into account the real GHG savings based on LCA CO₂ emissions.

In the long term:

- The regulatory approach currently in place is sectorial, and the implicit cost for reducing emissions in transport can be much higher than in other sectors due to the technological immaturity of alternatives. FuelsEurope is of the opinion that over the long term an economy-wide approach to reduce emissions is more cost-effective than a sectorial one. It is important that a regulatory transition be considered, leading to the eventual convergence of the cost of emission reduction in transport and other sectors.