

Letter to European Policymakers

Brussels, 30th October 2017

Equal Support for all Key Technologies for Sustainable Transport

In support of Consumer Choice and Industrial Strategy in Europe

Dear President, Dear Vice-Presidents, Dear Commissioners,

The European Commission is expected to announce in early November the Mobility package. A central part of the package will be the proposal for Emission Performance Standards for New Passenger Cars and Vans. The Commission is being encouraged by some, to turn this regulation into a support scheme primarily to drive rapid, wholesale electrification of light duty vehicles (LDVs), effectively shutting the door on other critical technologies for transport for the long term. We would like to explain why this would be an unwise strategy to meet Europe's long term technological, environmental and industrial goals, and how policy can be developed to give us more options for the long term.

A Portfolio of Key Technologies

Experts broadly agree that there are three key technologies for vehicles that will be necessary for the long term targets of 60% GHG reduction across all transport by 2050, and eventually, net-zero emissions across the economy:

Efficiency: Further development of efficiency of the Internal Combustion Engine (ICE) and the vehicle, for both light and heavy duty vehicles;

Clean Electrons: Electrification of vehicles including battery development to make use of the new resource of renewable power;

Clean Molecules: New lower carbon sources of liquids – including sustainable and advanced biofuels, green hydrogen based technologies, power-to-liquids, and CCUS technologies – “clean molecules”. These will be essential for heavy duty trucks, aviation, and marine, and also for chemicals manufacture, and other non-fuel products.

However In order to give a clear view to citizens, businesses, investors, and regulators, for wise choices to be made, we will need to evolve policy beyond the current limited views of GHG emissions in transport and its associated energy use.

The need for Policy to take a Life Cycle view

The current focus is on the CO₂ in Cars regulation which is built on a laboratory test protocol that does not fully reflect real life. The test measures only emissions from the tailpipe, yet there are many GHG emissions that result from a choice of car (due to manufacturing the car, battery or energy, and recycling) that the test completely disregards today. This is simply wrong, and also unwise for the large scale long term decisions that are being taken.

Today, the best gasoline hybrid ICE based cars have an environmental footprint¹ that in a life cycle approach is lower, for GHG and other impacts, than the larger electric cars, and yet the current regulatory framework for evaluating CO₂ emissions misleads customers into thinking that choosing any EV, even a larger one results in no emissions whatsoever. This is not fair on consumers who choose the latest generation ICE-based efficient and clean cars. The regulation effectively will decide the technology that manufacturers choose to develop and sell, and supposedly then that consumers buy. It is not only a CO₂ regulation, but becomes the de facto automotive industrial, and transport energy strategy for Europe. Such an outdated approach, limited to tailpipe emissions, is simply not fit for this very important challenge, and we call on the Commission to recognise the deficiencies of the current approach by at least informing consumers on the real GHG emissions and to consider how to transition in the medium term to a life-cycle based vehicle GHG policy.

Fair Support to commercialise Electrification

Like all new technologies necessary to meet EU's targets, Plug-in Electric Vehicle technologies certainly deserve incentives to help them achieve commercialisation. However they already have several very strong sales incentives, including the zero-rating in the efficiency standards in cars regulation which creates a cross-subsidy allowing manufacturers of EVs to sell "carbon credits" to makers of other, efficient ICE vehicles. Ultimately, citizens pay this cross-subsidy.

In addition, several Member States offer purchase grants, forego fuel taxes, and give additional perks for EV users. Such a package typically, worth €10,000 or more, is surely enough to support this important technology, and these incentives should also be rolled back as battery costs fall. A call for a mandate is effectively a call for even more cross-subsidy, which is unjustified. Furthermore a manufacturer's mandate also drives customers to buy EVs, using the misleading assessments of the "tailpipe-only" approach to justify this. There could be political risk in this approach, and therefore it seems unwise.

Accordingly we call on the Commission to resist requests to mandate a quota of EVs and to keep true to its principles of being technology neutral.

¹ See NextGreenCar.co.uk 2017 Toyota Prius compared with Tesla Model S 75kWh.

The opportunity to support other Key Technologies

It is very important that the current strong vision of electrification does not exclude other critical technologies for the future. We will need sustainable sources of molecules as well as electrons as energy carriers for the long term. Not only will these be essential for heavy duty, aviation and marine transport in the long term, they can also give citizens and businesses a wider choice of cost-effective and sustainable transport technologies in light road transport.

Clean Molecules – Advanced Fuel technologies

Energy companies, including members of FuelsEurope, have been conducting research and development, and also investment, in these technologies for many years, and there is a wide portfolio of innovative solutions, some well proven whilst others are developing fast. It is important to note that for future fuels, 2020-2030 RED II proposals from the Commission could result in sustainable and advanced biofuels blended into our current standard liquid fuels, delivering substantial GHG savings in 2030, and a wider range of technologies for lower carbon liquids could deliver much more in the longer term. Yet the current vehicle regulations take no account whatsoever of any improvement in the fuel. This is not good policy, and it also discourages investors in advanced fuel technologies.

To correct this we call on the Commission to include in the forthcoming revisions of Vehicle CO₂ regulations a facility to recognise the improving GHG intensity of liquid fuels as a contribution to the CO₂ performance of vehicles.

The potential for further Efficiency gains with the ICE engine

Finally, we also need to continue to pursue energy efficiency. There is much expert academic work² that shows that the efficiency of the ICE-based car can be improved much further. This includes technologies such as advanced combustion processes, hybridisation, and light-weighting. The current vehicle regulation has since its inception in 2012 done a very good job in driving efficiency gains and technology improvements. Consequently Europe's automotive industry now has global industrial leadership in this area. One of the single biggest contributions that the EU can make to meeting global energy and climate goals is to supply efficient ICE based cars and technology to the world. And it is worth remembering that an advanced efficient ICE based vehicle combined with a liquid fuel containing advanced lower-carbon components can be competitive in every way with fully electrified battery vehicles, because the combination of the individual improvements in fuels and vehicles have a multiplied effect in real life.

In proposing the next revision the Commission should stay true to the original purpose of this regulation in seeking to drive technology-neutral improvements in the efficiency of the vehicle as a key part of its overall life cycle impacts.

² J B Heywood On The Road towards 2050 Massachusetts Institute of Technology November 2015

The need for a clear long term policy framework

To further develop and deploy all of these technologies at scale over the coming decades, we need a clear policy framework. One that makes it attractive for businesses to invest in the fuel and vehicle technologies that Europe and the world will need for the long term, in addition to the expected developments in electrification.

To achieve this we call on the Commission to set out a plan for a comprehensive vehicle and transport energy policy framework for the coming decades to support all of the technologies that we need in a neutral, even-handed way, to give transparency to citizens and long term certainty to investors. We propose that this starts today with the revisions of the core regulations such as the Emission Performance Standards for New Passenger Cars and Vans regulation, and the expected CO2 regulation for Heavy Duty trucks.



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Director General of FuelsEurope

To read the Position Paper of FuelsEurope on Vehicle Efficiency Standards post-2020, please click on the following link:

<https://www.fuelseurope.eu/wp-content/uploads/2017/07/FuelsEurope-position-on-the-vehicle-efficiency-standards-post-2020.pdf>