

EAA answer to public consultation on the Communication on a Sustainable Future for Transport

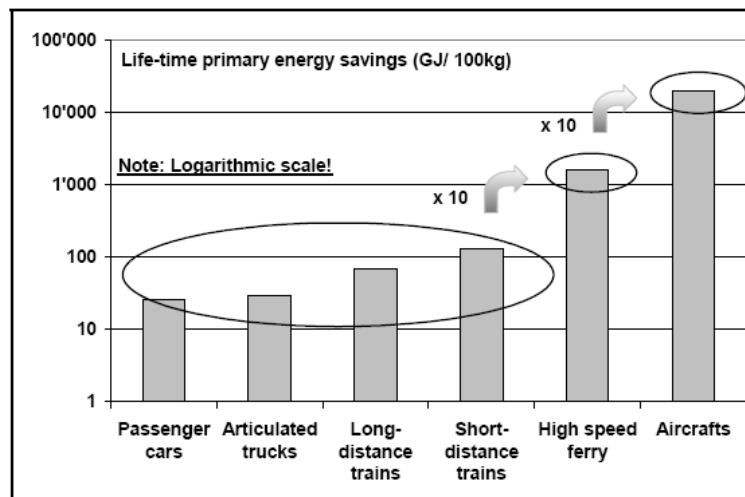
Out of the seven policy fields that the Commission has identified for possible intervention, please find below our views on two of them that are the main concern of our industry: technology and legislative framework.

TECHNOLOGY

Environmental performance

As the mechanical energy required for moving a vehicle is, except for aerodynamic and fluid resistance, directly proportional to its mass, the use of lightweight materials should be encouraged for all road & rail vehicles where their penetration is still limited today.

Between 2003 and 2005, the Institute for Energy and Environmental Research (IFEU, Heidelberg, Germany) studied the impact of a 100kg mass reduction on energy savings for various vehicle types. The conclusions reached at global scale are summarized below.



The benefits of lightweighting should therefore be underlined in the future White Paper.

Safety

Regarding metal deformation that energy-absorbing elements undergo upon impact, aluminium systems make it possible to absorb significantly more crash energy per unit of weight than traditional systems. As a rule of thumb, the light-weighting potential exceeds



40%. For this reason, aluminium is very well suited for front, rear and side crash management systems.

It is often believed that a heavier car is safer, but this is not exactly the case. A heavy car might well be safer for its few passengers, but it is also much more dangerous for all the other road users around it, e.g. passengers of other, lighter cars, pedestrians & two-wheelers. Light-weighting all vehicles while keeping their size constant would improve the survival rate for all road users. Several cars equipped with aluminium crash management systems and/or aluminium bonnet are rated among the best in class in Euroncap crash tests.

In the context of its Road Safety Action Programme, the European Commission was looking into the introduction of crash energy absorption criteria for trucks. The aluminium industry has already developed several solutions for the automotive and railway sectors and would be ready to take up this challenge for trucks as well.

LEGISLATIVE FRAMEWORK

Cars and light commercial vehicles

Regulation 443/2009 of the Council and Parliament on reducing the CO₂ emissions from cars discriminates lightweighting as a CO₂ reduction measure and, should a similar mass-based methodology be used for light commercial vehicles, lightweighting would be discriminated even further.

It is therefore essential that, when revising Regulation 443/2009, the utility parameter is changed from vehicle mass to vehicle footprint. Cars CO₂ labelling should be based on absolute CO₂ emissions and NOT on the difference between those and the CO₂ target given by the limit value curve from Regulation (EC) No 443/2009.

To be efficient and deliver credible results, the future regulation on “CO₂ from light commercial vehicles” should not allow the vehicles with the lowest payload (i.e. the highest empty weight) to have the highest CO₂ emissions. Consequently it is the payload itself that should be adopted as the utility parameter of the legislation, and not vehicle mass.

Heavy commercial vehicles

As indicated in TERM 2007 (EEA Report No 1/2008), freight transport growth outpaces economic growth meaning that CO₂ emissions from freight transport are growing quickly. With a 78% market share, road transport dominates the inland freight transport market and has grown steadily over the last decade. Over the same period, the energy efficiency progress in the road freight transport sector has been more limited than for passenger cars, with 4% improvement for light duty vehicles and 10% for large trucks, compared to about 14% for passenger cars.

Road freight transport, i.e. trucks & trailers, should be addressed by appropriate CO₂ legislations as other road vehicles are.



In the debates around the revision of the heavy commercial vehicles weights and dimensions Directive 96/53/EC, we would like to stress that today most goods transported on European roads cube out before they gross out. We could therefore understand the dimensions to be increased, but we cannot support increasing weight limits.