

## Introduction

The primary objective of the **European Tyre and Rubber Manufacturers' Association** is to represent the regulatory and related interests of the European tyre and rubber manufacturers at both European and international levels. Tyre Corporate Members include the following tyre manufacturers: Apollo Vredestein, Bridgestone, Continental, Cooper Tires, Goodyear Dunlop, Hankook, Marangoni, Michelin, Mitas, Nokian Tyres, Pirelli, Trelleborg.

Furthermore, ETRMA represents about 4200 companies that operate in the rubber sector. These are mainly SMEs and together with the tyre industry they employ a total of 374 000 people across Europe.

With regard to the European Action Plan on Urban Mobility, the main priorities of our industry lie in the following areas:

- **Action 8:** Campaigns on sustainable mobility behaviour;
- **Action 9:** Energy-efficient driving as part of driving education;
- **Action 11:** Internet guide on clean and energy-efficient vehicles;
- **Action 20:** Intelligent transport systems (ITS) for urban mobility.

The comments included in this paper will also be reported in the internet-form to facilitate your statistical evaluation of the consultation.

## Campaigns on sustainable mobility behaviour

### From the 2010 Consumer Summit to increasing awareness of the role of tyre in safety and sustainability of transport

**Tyre industry's investigations showed the importance that tyres have in the safety of drivers as well in the fuel efficiency of vehicles. At the same time, according to data regarding UK roads, 36% of the drivers never check their tyres' tread depth and 71% of them are not even aware of what the legal depth it. It is for this reason that ETRMA would like the Commission to invest more energy in raising the awareness of consumers and drivers of the role of tyres and the need to maintain them in good conditions.**

Currently, tyre industry surveys indicate that, across the EU, no less than 65% of European cars have permanently under-inflated tyres.

Driving with tyres at the right pressure is of paramount importance for vehicle safety, since only properly inflated tyres hold the load, adhere to the road, consume less fuel, produce less noise, assure the best breaking distance and contribute to extending the lifetime of the tyres. Under inflated tyres can increase fuel consumption by up to 4%, as they require extra energy to roll, while reducing tyre lifespan by 45%. Having tyres at the right pressure also provides environmental benefits as it enhances the efficiency of low rolling resistance tyres, and reduces CO<sub>2</sub> emissions by as much as 5g for each kilometre driven.

Furthermore, if the tyre tread depth is not at the legal minimum the speed at which hydroplaning starts is reduced

by up to 40% and the braking distance at 80km/h will increase by 13 metres, greatly hampering driving safety.

It is for this reason that also in the context of urban mobility, efforts need to be stepped up to make drivers responsible through an integrated approach that includes vehicle technology, driver behaviour and road infrastructure. To this end, the experience of the Department for Transport of the UK shows that tyre safety campaigns have helped reduce the number of deaths on UK roads from tyre related accidents from 44 in 2006 to 34 in 2008 and **it is in this context that we urge the European Commission to invest in such kind of campaigns in the context of the Urban Mobility Action Plan.**

**Furthermore, ETRMA believes that similar campaigns should also be run amongst law enforcement agencies, who should be encouraged to run stricter roadside inspections, which should verify the sidewall type approval marking, tread depth, tyre pressure and proper fitment (winter/summer tyres) according to the season.**

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## Energy-efficient driving as part of driving education

### Continue implementation of ECOWILL and ECODRIVEN

ECOWILL, one of the driving education programmes developed within the Action Plan on Urban Mobility, included the recommendation to check tyre pressure regularly:

“Check tyre pressures frequently at least once a month and before driving at high speed: keep tyres properly inflated as low tyre pressure is a safety risk and wastes fuel. For correct tyre pressure (acc. To loading, highest pressure and speed driven), check with car’s manual.<sup>1</sup>”

The inclusion of this recommendation amongst the golden rules for eco-driving is a step in the right direction, but it is now high time for these recommendations to reach the highest number possible of driving schools and drivers.

As highlighted above, the attention of drivers needs also to be turned to the need for the tyres to have a legal tread depth. Furthermore, drivers should be made aware of their obligations with regard to tyre fitment (winter/summer) and the effect that not having well-maintained tyres would have on fuel consumption.

Indeed inflation pressure has a strong influence to determine vehicle fuel consumption. Depending on the type of road and driving style, rolling resistance represents 20% of the total force on a vehicle. Since low inflation increases rolling resistance, it has a direct effect on both vehicle fuel efficiency and emissions. And with a 25% loss of pressure, the tyre rolling resistance is increased by 10%, which in turn results in 2% more fuel consumption !

**It is for this reason that ETRMA supports any action carried out by local authorities to further sensitise urban transport drivers and users on the energy efficiency benefits of performing a simple and regular checking of the pressure of their vehicles tyres. In the meantime, ETRMA members will continue organising such dedicated programmes in various European cities.**

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## Internet guide on clean and energy-efficient vehicles

### Information for consumers and public procurement through tyre labelling

Tyres make a vital contribution to road safety as well as to eco-driving. Raising the vehicle specification to include more safety and environmental features will only deliver its full impact in the long term due to the rate of renewal of the vehicle fleet.

The effect deriving from the use of tyres with improved safety and environmental performance will be more immediate since tyres are replaced on average 2.7 times in the life of a car (and more frequently in the case of HCV).

Not all tyres offer the same performance and independent tests show that the worst-performing brand in a sample of six had a wet braking distance 38% greater than the best. This corresponds to an additional 9 meters of stopping distance from 80km/h (Auto-cars.co.uk, 2009).

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<sup>1</sup> Golden Rules for Ecodriving: [http://www.ecodrive.org/en/what\\_is\\_ecodriving/the\\_golden\\_rules\\_of\\_ecodriving/#check](http://www.ecodrive.org/en/what_is_ecodriving/the_golden_rules_of_ecodriving/#check)

Tyre labelling will be compulsory from 1 November 2012 and introduces labelling requirements with regard to the display of information on the fuel efficiency, wet grip and external rolling noise of tyres. Its aim is to increase the safety and the environmental and economic efficiency of road transport by promoting fuel-efficiency and safe tyres with low noise levels. This regulation allows end-users to make more informed choices when purchasing tyres by considering this information along with other factors normally considered during the purchasing decision process.

Customers should be made aware that the actual fuel savings and road safety depend heavily on the behaviour of drivers, in particular the following: eco-driving can significantly reduce fuel consumption, the tyre pressure needs to be correct and regularly checked for optimum fuel efficiency and wet grip performance, stopping distances should always be strictly respected. Customers should be made aware that these three criteria although important, are not the only performance parameters.

**For this reason, tyre labelling should be at the centre of any internet campaign on clean and energy-efficient vehicles – such as *Clean Vehicle Europe*.**

**Furthermore, tyre labels could be used as the basis for public procurement tenders to ensure that public authorities acquire tyres with a good balance between fuel efficiency and safety performances.**

## **Intelligent transport systems (ITS) for urban mobility**

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### **The importance of TPMS for drivers' safety and fuel efficiency**

Within the next decade, it is expected that the use of sensors in tyres will become technologically and economically feasible and could become the principal tyre safety device in the future. They shall, for example, be able to communicate both with on board systems (ESP – VDC) and with external receivers/dataloggers.

The role of well-maintained tyres in ensuring the safety of drivers and the fuel efficiency of vehicles was explained above and was the main reason to make TPMS compulsory for passenger car. For the same reason, ETRMA urges the European Commission to take the same decision for trucks as it was stated in the Recitals of the General Safety Regulation.

The TPMS of the future shall overcome the constrain of limited battery life; to this end, like for the in tyre-sensors, the development of suitable “Energy harvesters”, to be integrated with the TPMS, is strategically important. To obtain the full safety potential of Tyre pressure maintenance and TPMS, there is the need a network of air stations capillary distributed, 24/7 available and properly maintained.

Other devices to be applied on tyres, like the Radio Frequency Identifier, could contribute improving coordination in freight and supply chain and could provide innovative solution to support ITS initiatives. To this end, R&D financial support and fiscal incentives may further stimulate the technological progress.

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