

CONSULTATION ON REDUCING CO2 EMISSIONS FROM ROAD TRANSPORT

ORGANISATIONS' COMMENTS IN RESPONSE TO QUESTIONS C.2, C.4, E.2, E.7, E.9 and F

The tables below display the comments provided by organisations in response to the questions referred to above in the online questionnaire. As answering these questions was optional, not all respondents provided an answer or comments for each of the questions. The organisation response number can be used to cross reference these comments from organisations with the response which they provided to the tick box questions in the questionnaire.

COMMENTS FROM ORGANISATIONS IN RESPONSE TO QUESTION C2

Organisation Response Number	C2 - Please specify why the current legislation is not working or delivering tangible benefits
11	Current legislation has created additional burdens for customers and road haulage companies, who are the ones who have to pay the additional costs to upgrade their LCV fleet in view of new CO2 standards. New CO2 limits come with increased procurement costs for operators and buyers, and especially SMEs. In order to compensate operators and buyers for these extra costs, incentives for the demand side should be foreseen to stimulate a quicker substitution of the older vehicles in operation. Unfortunately, the current Regulation has failed to encourage Member States to adopt such incentives, which could take the form of direct subsidies (to the purchasing price, one-time or recurring tax reductions, on the vehicle tax) or of benefits in kind (use of quick lanes for bus or taxi in urban areas). Moreover, the regulation contributes to putting a larger amount of smaller vehicles into use instead of curbing CO2 emissions.
12	1) technologische Vorleistungen für die Einführung alternativer Antriebsarten mit entsprechenden CO2-Minderungspotentialen werden nicht ausreichend berücksichtigt. Ein entsprechender Technologiebonus sollte eingeführt werden, um Alternativen wie BEV, CNG oder LNG in ihrer Marktentwicklung zu stützen. 2) Gerade kurzfristig kann CNG und mittelfristig können BEV ein Baustein zur Erfüllung der 147g-Zielsetzung bei LCVs sein und sollten gefördert werden.
14	Die gesetzten Ziele sind nicht ambitioniert genug. Die Erhöhung der Grenzwerte unter Gegenrechnung von Agrokraftstoffen ist nicht sinnvoll, da Agrokraftstoffe nicht CO2-neutral sind. Die Anrechnung von elektrisch betriebenen Pkw mit 0-Emission, berücksichtigt nicht deren tatsächlichen CO2-Emissionen und lässt die erhöhten CO2-Emissionen bei der Herstellung dieser Fahrzeuge (Bsp: BMW i3, CO2-Amortisation im Vergleich zu einem konventionellen BMW erst ab 50000 km Fahrstrecke) unberücksichtigt.
17	Bonus/malus schemes relating to the CO2 emissions and the fuel consumption of motor vehicles have had a positive impact on consumers behaviour (increasing acquisitions of light motor vehicles). However, we think that the approach of setting emission standards for vehicles is in principle effective but current standards are not strict enough to incentivize alternative technologies such as electric or natural gas vehicles. Furthermore standards should be complemented by policy measures which support the development of the necessary charging infrastructure for alternative fuels.
19	ePURE supports the setting of greenhouse gas emission standards for cars and vans. However, one major omission in the current legislation is that no support is given to constructors of Flex-Fuel-Vehicles (FFV). We believe that this needs to be amended in order to incentivize the production of more environmental friendly vehicles.
20	The tailpipe measurement that is used in current regulation gives an unrealistic picture of overall vehicle emissions. Vehicle emissions are not only produced during the driving of a vehicle but also during the production and recycling phases. When vehicle emissions assessment is focused solely on emissions during the driving phase, this encourages the use of greenhouse gas-intensive materials in an effort to reduce vehicle weight and fuel consumption. But this may have the unintended consequence of increasing GHG emissions during other vehicles' total life cycle phases. In most cases, these emissions override any benefits that may be gained through fuel efficiency improvements. This problem becomes even more crucial with the advent of more efficient powertrains that reduce emissions in the use phase. This is why shifting the basis of CO2 emissions regulations to a Life Cycle Assessment approach that considers emissions from all aspects of a vehicle's life is needed, and is feasible.
24	There's a need for tougher regulation - and regulation that includes the total well-to-wheel energy consumption This will make it easier to compare the actual energy usage of different technologies
26	It does not regulate how a vehicle is used and is not often representative of what we will see in operation/use but it does set a consistent benchmark for improvements to be based upon. If anything the drive cycle should be broader to not allow manufacturers to fine tune vehicles to simply achieve good results in the drive cycle tests but to perform better across all aspects of its operation.
27	Current legislation is not ambitious enough to ensure the future competitiveness of European automotive manufacturers. As 2020's objective of 95gCO2/km is feasible without investments in alternative technologies, car manufacturers will focus on improving Internal Combustion Engine technology for the next 10-15 years and will dedicate more resources on alternative power trains such as electric vehicles (EVs) only after that.

- 28** Die Fokussierung auf eine "tank-to-wheel" Betrachtung führt zu einer einseitigen Fokussierung auf fahrerseitige Maßnahmen mit möglicherweise gegenläufigen Effekten auf der Seite der Energiebereitstellung. Die Rolle der Kraftstoffe, hier insbesondere zukünftiger Alternativen wird nicht ausreichend gewichtet. Die Betrachtung der Vorkette von Kraftstoffen muss in einem balancierten Ansatz münden, der auf harmonisierten CO₂-Vermeidungskosten sowohl auf der Fahrzeug- als auf der Kraftstoffseite basiert.
- 29** TI supports the following IRU comments: Regulation 510/2011 is a positive step forward in the reduction of CO₂ emissions of Light Duty Vehicles, but unfortunately, it is too early after adoption and entry into force to measure the impact of the legislation. One aspect which is missing from the regulation is clear and transparent information to the operators about the gains in fuel consumption reduction which can be obtained by investing in these vehicles. This would have been a positive incentive to operators to invest in such vehicles.
- 35** shecco believes that setting a limit of 95gCO₂/km for new vehicles by 2020 would not trigger any massive innovations in the EU's automotive industry, thereby putting EU's competitiveness in danger. As mentioned in the Boston Consulting Group report of July 2011, "Powering Autos to 2020", improvements in internal combustion engine (ICE) technologies can contribute to up to 40% emissions reduction. This means that while in 2008 the average level of CO₂ emissions from passenger cars in the EU was 153gCO₂/km, a 40% reduction would result in 92gCO₂/km. Since this would still be below the 2020 target of 95gCO₂/km, instead of investing in new low carbon technologies that could bring long-term benefits, European automotive manufacturers would still devote a substantial part of their investments into improvement of the existing ICE technologies. However, the benefits that these improvements could bring are very shortsighted and they will eventually face limitations in 10-15 years.
- 36** The current legislation has created additional burdens for the customer and the road haulage company, who are the ones who have to pay the additional costs for the Light-Duty Vehicle to be conformed to rules CO₂ emissions. Moreover, the regulation contributes to put a larger amount of smaller vehicles into use instead of curbing CO₂ emissions.
- 37** Sie erfüllen ihren Zweck nicht, weil es keine genauen Präferenzen (Vorteile) für die Eko-Fahrzeuge gibt.
- 49** We think the legislation is delivering on the goals, but the way it is constructed creates disincentives for lightweighting effort on vehicles. Since the legislation is based on mass as a utility parameter any lightweighting effort will result in a tougher target. This means that lightweighting is not treated in the same way as other CO₂ reducing measures like for example engine efficiency or aerodynamics. A technology neutral utility parameter would be fairer since the car manufacturers would be allowed to use any CO₂ reducing method they want in order to achieve their target emission level. As was also pointed out in the consultant report and further stressed at the stakeholder meeting on Dec 6th, lightweighting will be even more important beyond 2020. Therefore we would encourage the EC to already now propose to move away from using mass as the utility parameter. That is the only way the industry actually receives all the benefit for the lightweighting efforts now and beyond 2020.
- 50** Current regulation uses tailpipe measurement giving so an unrealistic picture of overall vehicle emissions. Vehicle emissions are not only produced during the driving of a vehicle but also during the production and recycling phases. The influence of production and recycling phases will be more relevant when more efficient powertrains are used since these help vehicles have less emissions in the use phase. According to these observations, it is worth underline that tailpipe measurements give wrong incentives to car manufactures, giving the unintended consequence of increasing greenhouse gas emissions during other vehicles' total life cycle phases. GHG emissions could override any benefits that may be gained through fuel efficiency improvements. Greatest reductions in vehicle emissions can be reached only considering with the same importance level material selection and investment in both new powertrains and fuels. On this basis, a proper reduction of GHG emissions can be only achieved
- 52** Il est nécessaire de segmenter les objectifs par catégorie de véhicules et d'utilisateurs, d'afficher la performance énergétique de chaque véhicule, de développer des outils pour que les acheteurs puissent faire des choix éclairés, de développer des solutions hybrides et carburants alternatif.
- 60** The values do not reflect real usage on road

COMMENTS FROM ORGANISATIONS IN RESPONSE TO QUESTION C4

Organisation Response Number	C4 - Please specify why the 2020 target of 147gCO2/km for light-commercial vehicles, if technically achievable, should not be confirmed.
29	It is important to include subsidy provisions for investments undertaken by road transport operators into CO2 friendly technology in vehicles. TI supports the following IRU comments: It is important to express the target in terms of the reduction of fuel consumption reduction as the reduction of fuel consumption automatically leads to a reduction of both CO2 and toxic emissions. This in turn could encourage commercial road transport operators to invest in such vehicles.
33	Article 13 (1) of the Regulation (EC) 510/2011 states that on the basis of a review of the specific emissions targets, which the Commission is due to undertake by 1 Jan 2013, the Commission "shall, if appropriate, make a proposal to amend this [510/2011] Regulation, in accordance with the ordinary legislative procedure, in a way which is as neutral as possible from the point of view of competition, and which is socially equitable and sustainable." In other words, the Commission should adhere to the initial proposal for a full impact assessment and a co-decision procedure involving the European Parliament and the Council should it restate its position on the 147 g CO2/km target.
34	It is important to express the target in terms of the reduction of fuel consumption reduction as the reduction of fuel consumption automatically leads to a reduction of both CO2 and toxic emissions. This in turn could encourage commercial road transport operators to invest in such vehicles.
46	A standard light duty van does't exist. Always keep size of a light duty van into account when the EC want's to determine CO2 target's.
52	Le coût technologique est actuellement déraisonnable en raison de la valeur du véhicule. Les plafonds d'émission doivent dépendre de la catégorie du véhicule et de son utilisation. Les connaissances en termes d'utilisations des VUL doivent être approfondies avant de fixer des plafonds

COMMENTS FROM ORGANISATIONS IN RESPONSE TO QUESTION E2

Organisation Response Number	E2 - In your opinion, which are the policies in which changes might affect the setting of greenhouse gas targets for road vehicles?
1	Le Groupe, la Poste est un acheteur de transports et constate que les innovations relèvent plus d'une volonté des chargeurs que d'initiatives des transporteurs. Pour aider les transporteurs à s'équiper de véhicules émettant moins de CO2, une politique de réduction des émissions carbone combinée à des mesures fiscalement incitatives est sans doute souhaitable. Ces mesures doivent cependant s'appliquer de manière harmonisée dans les différents pays Européen, mais aussi à l'intérieur même des Etats, de façon pérenne pour lutter à la fois contre les effets d'aubaine et les distorsions de concurrence.
2	Bezugnehmend auf die Frage: "Die Emissionen von Straßenfahrzeugen könnten durch Veränderungen in anderen Politikbereichen, beispielsweise der Besteuerung, gesenkt werden. Dennoch sollten weiterhin Ziele für Straßenfahrzeuge festgesetzt werden." Der ADAC setzt sich dafür ein, dass Emissionsziele für Straßenfahrzeuge festgesetzt werden. Diese Ziele sollte jedoch durch technische Innovation erreicht werden und nicht nur restriktive Ansätze (Besteuerung, Internalisierung externer Kosten) verfolgt werden.
3	Renewable Energy Directive 98/70/EC and Fuel Quality Directive 2009/30/EC : in relation with the accounting of GHG reduction in transport sector by using biofuels, including the ILUC factor. The NREAP reports requested by the Renewable Energy Directive 98/70/EC show that EU member States plan to reduce their GHG emissions mostly by using biofuels of first generation. Unfortunately, this leads to important negative social and economic impacts in third countries, including water and land grabbing for raw materials production, both in Africa and other continents. Consequently, the setting of GHG targets for road vehicles must take into account these negative environmental, social and economic impacts. It must eliminate the use of biofuels and promote the reduction of energy consumption in order to ensure an objective that is really sustainable. It must comply with the right to food and not to displace the GHG emissions in another place on the earth.
4	The present formula is effective but I believe that Euro 6 is too ambitious and realistically, buyers will delay purchases of Euro 6 causing financial damage to the manufacturers. This is especially true of buses and coaches that typically expect (and need) twice the life of trucks due to their purchase cost being so much higher. There is another argument that it costs more in pollution terms to build a bus or coach than it does to replace it. It should be accepted that an operator must keep a bus or coach for 15 years and that Euro 6 does not allow a 10 year old Euro 2 or 3 bus or coach to be upgraded further than Euro 4 or 5 by exhaust upgrades. It will cause severe financial loss to the operator who has to stop using his bus or coach because it cannot be upgraded to Euro 6 yet it being only half way through a required life cycle. See question E3 - that should include the emissions caused by replacement in a new vehicle build.
6	In order to reduce GHG emissions from road vehicles most effectively, a combination of policies is needed. This includes setting mandatory GHG targets well in advance in order to spur development and application of innovative technologies and to push energy efficient vehicles into the market. At the same time, intelligent taxation / feebate systems in combination with consumer information and labeling are needed to create a strong pull for efficient vehicles on the demand side. In addition it has to be ensured that GHG emissions from road vehicles are reduced in real-world terms, for example by having a representative test-cycle in place.
7	Directive on the promotion on clean and energy efficient vehicles (2009/33/EC) RES Directive (2009/28/EC) Fuel Quality Directive (2009/30/EC) European strategy on clean and energy efficient vehicles (COM(2009)186: long-term strategy in STTP (Strategic Transport Technology Plan) and CTS (Clean Transport Systems White Paper "Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system" Energy Roadmap Aor Quality Directive (2008/50/EC)
10	Tax legislation which is related to car transport (such as for example on fuel, cars and tax reduction/exemptions for company cars) has a large influence on the purchasing decisions and thereby also on the types of cars offered by car manufacturers because a large part of the costs related to the use phase of a car derives from taxes. In the future, prices for fuel will continue to increase. In order for consumers to remain mobile in the future, car manufacturers need clear economic incentives to provide only as fuel efficient cars as possible to consumers. The attractiveness of public transport needs to be enhanced in order to offer better opportunities to consumers to switch from individual to collective transport and thereby reduce the negative impact on the environment. This would require investment into infrastructure and services, customer oriented offers, better interoperability of train traffic throughout Europe and possibilities to better combine the use of car and train trans

- 11** Setting CO2 targets for vehicles should only be done after a careful assessment of other initiatives taken in the fields of fuel taxation, energy efficiency and internalisation of external costs, in order to avoid a disproportionate burden on road transport users such as hauliers and logistics companies, for which CO2 costs are already (fully or partly) internalised through existing excise, taxes or charges. -The current revision of Energy Taxation already foresees the introduction of a carbon tax element and higher levels of minimum taxation for commercial diesel vehicles. -Road charging systems based on the internalisation of external costs also aim to reduce transport CO2 emissions. These systems should target all road vehicles, including passenger cars. -Finally, initiatives in the field of transport efficiency can also lead to significant CO2 reductions. The deployment of EMS (European Modular System) across the EU would increase load optimization and help reduce emissions.
- 17** - All legislation concerning air quality (Directive 2008/50/EC for example); including the noise pollution component and the Low Emission Zones component (even though LEZs should not completely ban the traffic of heavy vehicles). - Changes in the Low Carbon Economy Roadmap, Energy Roadmap or Transport Roadmap. - The 10% RES target for transport in the Renewable Energy Directive. - Policies encouraging alternative options such as smarter logistical solutions (eg reverse logistics between different type of loads), better inter-modal connections (particularly road-rail) and use of water-borne transport.
- 18** Steuerrechtliche Regelungen (Mineralölsteuer, Kfz-Steuer, steuerliche Absetzbarkeit der Kosten für Dienstwagen) haben einen großen Einfluss auf die Kaufentscheidung und damit auch auf die Produktpolitik der Hersteller, weil die tatsächlichen Kosten für den Betrieb eines PKW zu einem großen Teil durch die Steuerlast beeinflusst werden. Mittel- und langfristig wird der Erdölpreis weiter ansteigen. Damit Verbraucher auch in Zukunft noch mobil sein können, sollten die Autohersteller jetzt schon klare ökonomische Anreize haben, PKW so energieeffizient wie möglich zu bauen. In Deutschland wirkt sich insbesondere die steuerliche Absetzbarkeit von Dienstwagen in eine gegenteilige Richtung aus. Außerdem sollte die Attraktivität des öffentlichen Verkehrs gesteigert werden, um die Verbraucher zum Umsteigen zu bewegen (Investitionen in Netze und Fahrzeuge, kundengerechtes Angebot, Kombinierbarkeit von öffentlichem Verkehr und Autoverkehr).
- 19** If the fuel specifications of the Fuel Quality Directive were amended to allow for higher ethanol incorporation rates with petrol this would allow the auto industry to comply with the greenhouse gas target in full or in part. Also tax policies will have an impact on the setting of the greenhouse gas targets, especially the Energy Taxation Directive.
- 23** Taxation, industry, environment, energy and transport
- 25** Energy Taxation directive Eurovignette directive energy efficiency plans
- 26** Alternative fuels that produce lower emissions could have much lower tax rates to promote their use but for any real take up these need to be guaranteed for extended periods of time to enable the development, delivery and take up of the compatible technology.
- 28** Besteuerung von Dienstwagen
- 29** TI supports the following IRU comments: Competent authorities should • Work in partnership with the road transport sector so that it can achieve the full potential of its ambitious CO2 emission reduction targets (30% reduction by 2030) as part of the whole logistic chain; • Provide real business incentives to facilitate the penetration of innovative transport technologies, best practices and training; • Focus new legislation on the aim of reducing fuel consumption instead of reducing toxic emissions; • Promote the change of fossil fuel to alternative energy/fuel sources and ensure their cost-affordable and environmentally friendly production; • Develop international standards by standardising and harmonising vehicles, transport units, weight and dimensions; • Use international environmental Conventions to benefit the environment and create a EU wide framework to establish a sustainable energy policy instead of a using simple fiscal policy for environment related taxes and charges;
- 30** • Overall discussions/policies on climate change mitigation and more specifically on decarbonising transport (worldwide, European level) • Policies on alternative fuels • Legislation on vehicle exhaust gas emissions (EURO classes legislation): in the urban bus sector the introduction of stricter EURO standards resulted in increased energy consumption (and higher CO2 emissions) • Public Procurement Directive 2009/33 • Energy taxation Directive
- 31** Fees for urban use of vehicles Congestion charges Allowing vehicles into emissions trading programs
- 32** Dreh- und Angelpunkt ist die Besteuerung von Haltung und Betrieb von KFZ
- 33** Support for research and development; consumer information and behaviour campaigns; public procurement strategy; to some extent positive tax initiatives.

- 34** Competent authorities should: Facilitate and promote road transport to work in partnership ; Provide real business incentives to facilitate the penetration of innovative transport technologies, best practices and training; Start suggesting new legislation aiming at fuel consumption instead of reducing toxic emissions; Promote the change of fossil fuel to alternative energy/fuel sources, such as hydrogen fuel; Ensure that alternative energy sources are produced in an environmentally friendly way, remain affordable, cost-effective and available at the pump; Create a level playing field for energy taxation between the different modes of transport; "Promote and increase by incentives the use of buses, coaches and taxis; " Develop international standards to allow the widest use of the modular concept by standardising weight and dimensions; "Stop introducing measures which leads to increases of fuel taxes for commercial road transport and which will do nothing to reduce CO2 emissions; etc.
- 36** Taxation, road charging systems based on the internalisation of external costs in road transport for all types of road vehicles, and EU policy related to masses and dimensions for road freight transport (for load optimisation), are some examples of policies that should affect the setting of greenhouse gas targets for road vehicles. In particular, CLECAT members want to avoid the situation where the Commission fails to consider existing fiscal burdens on transport users by not taking into account those CO2 costs that are already (fully or partly) internalised through existing excise, taxes or charges.
- 38** La taxation au kilomètre parcouru.
- 39** Road freight transport (tonne-km) has grown sharply over the past few decades and is expected to grow by a further 60% in the EU-27 between 2005 and 2030, due not only to economic growth, increased internal EU trade and globalisation, but also to supply-side effects such as improved quality and stable or declining freight prices. From a technological point of view, there is no sign of a serious low-carbon alternative for the current fuels used for traction. Given the environmental impact of the sector and the lack of alternatives, HGVs should be subject to the stricter standards possible to reduce emissions in transport. The reduction of road-vehicle emissions via technology improvements/CO2 emission standards is not enough to reverse the unsustainable growth of GHG emissions from transport. Policy measures to improve fuel efficiency should go along with transport demand optimisation via a variety of measures (e.g. realistic pricing of transport that includes its external costs).
- 41** Infrastructure, transport, industry, energy and taxation
- 42** Euro norms have reduced most of the harmful emissions from HGV. Engine technology improvement, if technically feasible and at a reasonable cost, is the only effective way to reduce CO2 emissions. Tyre manufacturers should be called upon in order to further reduce rolling resistance and hence fuel consumption. For HGVs a revision of directive 96/53 should be taken into account in order to evaluate the feasibility of measures for longer vehicles whose fuel consumption can be reduced by specific tools in order to reduce the CX value of these vehicles. UETR stresses the importance of further research on aerodynamics of vehicles and, in case, of provisions on the shape of new commercial vehicles. Moreover, on a limited basis and ensuring road safety and modal split, member states should be allowed to implement long and heavy vehicles of up to 25,25 metres, even for intra EU cross border transportation if agreed by neighboring countries.
- 43** • Overall discussions/policies on climate change mitigation and more specifically on decarbonising transport (worldwide, European level) • Policies on alternative fuels • Legislation on vehicle exhaust gas emissions (EURO classes legislation): in the urban bus sector the introduction of stricter EURO standards resulted in increased energy consumption (and higher CO2 emissions) • Public Procurement Directive 2009/33 • Energy taxation Directive
- 45** Road use taxation and individual vehicle taxation policy. Railway use cost policy. Environmental policy (bans on use of HDVs, etc.). Product and waste policy (taxation of products based on product miles traveled, etc.).
- 47** - improving eco-driving skills and training - improving traffic management through a better use of IT - incentives for research, development and deployment of low-carbon technologies - Investments in research to develop cost-effective renewable and efficient energy technologies, improve the performance of carbon energy systems
- 48** Policies on Climate change mitigation, Fuel production, Agriculture, Use of Renewable energy sources, Trans-European networks.
- 50** The impact of a switch from setting standards to using taxation as an incentive for cleaner vehicles is considered by the Commission. However, other policies should be complementary to standards and not act as a substitute to them. In any case, an integrated policy approach towards emissions reduction from the transport sector should be pursued. Anyway, the impact of other policies such as taxation on emission standards should be carefully assessed just for finding integrated policies that sustain and promote the reduction of GHG emissions.
- 51** Transport, industry, energy, environment, climate action and taxation
- 52** Il est essentiel d'avoir une totale transparence sur les émissions réelles de chaque mode de transport et sur la fiscalité globale appliquée à chaque mode.

- 55** Tax legislation which is related to car transport (such as for example on fuel, cars and tax reduction/exemptions for company cars) has a large influence on the purchasing decisions and thereby also on the types of cars offered by car manufacturers because a large part of the costs related to the use phase of a car derives from taxes. In the future, prices for fuel will continue to increase. In order for consumers to remain mobile in the future, car manufacturers need clear economic incentives to provide only as fuel efficient cars as possible to consumers. The attractiveness of public transport needs to be enhanced to offer better opportunities to consumers to switch from individual to collective transport and thereby reduce the negative impact on the environment. This would require investment into infrastructure and services, customer oriented offers, better interoperability of train traffic throughout Europe and possibilities to better combine the use of car and train transport.
- 58** Die Veränderungen bezüglich der Einführung oben gennaten Ziele würden auf alle Wirtschaftsbereiche ausgedehnt (von Energetik bis zum Tourismus).
- 59** There are a number of policy fields that affect targets, including: - transport policy - environment policy - fiscal policy (ie. taxation) - trade policy - R&D and innovation - industrial and social policy We believe that an integrated approach must be respected and the policy areas above, and others that impact the sector, should dovetail with each other to avoid distortions of the internal market and the burdens of double-regulation.
- 60** GHG emission policies Fuel Taxation Regulated emissions

COMMENTS FROM ORGANISATIONS IN RESPONSE TO QUESTION E7

Organisation Response Number	E7 - Please specify why long term indicative targets for after 2020 should not be set
1	Les évolutions technologiques potentielles ne sont à ce jour pas modélisables ce qui incline pour une révision périodique des objectifs.
2	Aus ADAC-Sicht sollten keine längerfristigen Richtziele festgesetzt, sondern diese Werte kontinuierlich angepasst werden. Wie die Vergangenheit zeigt, bietet dieses flexible Vorgehen deutliche Vorteile gegenüber einem starren, langfristigen Ansatz (vgl. PM10-Debatte).
4	Actually I want to say "yes" but only in discussion with manufacturers who are struggling to cope with Euro 6 economically. Maybe taxation on private fuel should increase to reduce cars on the road and thus reduce congestion that causes heavy vehicles to pollute more.
11	The EEA believes that long-term, unrealistic targets for 2030 and 2050 would not bring any benefits and only create more confusion for the industry. Priority should be given to meeting the 2020 targets before introducing new targets.
23	It is difficult to set targets without knowing the existing technologies at that moment. That is why short and medium targets are better.
26	later!
29	TI supports the following IRU comments: Long-term targets should not be set by EU legislation until new EU procedures for the declaration of fuel consumption and CO2 generation of complete transport units have been designed. Until then, voluntary targets as set by the road transport industry should be encouraged.
30	VDV has doubts whether introduction of CO2 limits for buses (on a vehicle basis) has considerable impacts on reducing CO2 emissions from transport in general and more specifically from bus transport. VDV is concerned that such legislation could result in additional (administrative) burden and costs for public transport undertakings and bus manufacturers with little impact.
34	Long-term targets should not be set by EU legislation until new EU procedures for the declaration of fuel consumption and CO2 generation of complete transport units have been designed. Until then, voluntary targets as set by the road transport industry should be encouraged.
36	CLECAT believes that long term unrealistic targets would bring not benefits and just create more confusion for the industry.
42	The 2020 perspective appears adequate in order to verify datas and introduce feasible measures to reduce CO2 emissions. Introducing mandatory targets in a longer term risks to be not realistic or even harmful. As a matter of fact, experience demonstrates that in the past long-term predictions have been incorrect or inaccurate.
43	UITP has doubts whether introduction of CO2 limits for buses (on a vehicle basis) has considerable impacts on reducing CO2 emissions from transport in general and more specifically from bus transport. UITP is concerned that such legislation could result in additional (administrative) burden and costs for public transport undertakings and bus manufacturers with little impact.
44	Längerfristige Ziele machen nur Sinn, wenn die entsprechenden EU Verfahren zur Bemessung von Kraftstoffverbrauch und CO2-Emissionen entwickelt sind. Bis dahin sollte auf freiwillige Zielverpflichtungen der Personentransportindustrie gesetzt werden.
51	Lack of knowledge on the existing technologies at that time. Setting targets now would not taken into account and those targets would not be real and serious
65	is better to define objectives in a few term, not to long, because many situations can change in too long terms

COMMENTS FROM ORGANISATIONS IN RESPONSE TO QUESTION E9

Organisation Response Number	E9 - Please specify which alternatives should be considered (to vehicle-based greenhouse gas regulation)
1	Au-delà des émissions de CO2, les polluants sont naturellement à prendre en considération (NOX, HC, particules...) ainsi que les niveaux de bruit émis par les véhicules
4	Taxation based on private cars. Not nice but car use has exploded over the last few years causing road building (polluting) and congestion (polluting) issues.
6	To be discussed in the context of the upcoming post-2020 study by DG CLIMA.
7	The alternative could be putting limits for the average emissions of the full production of each manufacturer.
15	The value chain and policy makers are focused on machine performance only. Process performance ie. how vehicles are driven and used must be included in the thought process.
17	- Incentives (e.g tax rebate) for the use of more efficient and cleaner fuels, such as CNG, LNG, biomethane. - Pollutants not targeted so far by Euro regulation (e.g benzene-derived components in diesel) - Incentives for buying cleaner vehicles emitting less CO2 and GHG emissions. Probate of alternative type of motors (hydrogen, biodiesel) should be promoted. - With regards to the recycling of heavy-duty vehicles, which are not covered by the ELV directive, regulation should be put in place to facilitate - eg. through eco-design - and strengthen the recyclability of such vehicles. This would notably contribute to ensure that the heavy polluting gases (HFCs) contained in air-conditioning and refrigeration units for vehicles are properly recovered. - R&D support is needed now. We also need incentives to put the necessary fuelling infrastructure in place. With R&D support, standards for vehicles and an adequate infrastructure, further incentives might not be necessary any more.
19	ePURE holds the view that vehicle-based greenhouse gas regulation is essential. However, alternative fuels differ from current mass market fuels in the sense as their emissions occur upstream. As the existing paradigm measures greenhouse gas emissions at the tailpipe, it needs to be adapted to the degree that this shift occurs. A new balance between these elements need to be found.
27	Electrically-powered vehicles
29	TI supports the following IRU comments: As indicated earlier, vehicle-based targets may not be sufficient but should be accompanied by a wider range of initiatives in the field of transport, energy and fiscal policy. Not all emphasis should be placed on legislation; and at-source industry-lead initiatives to reduce fuel consumption, CO2 and toxic emissions should equally be encouraged.
30	<ul style="list-style-type: none"> • Making bus systems more attractive and make more people shift to attractive public transport systems, this also means incentives for reducing car usage in urban areas • Increasing the commercial speed and reliability of bus systems has major impacts on CO2 emission reduction (need to provide necessary infrastructure: bus lanes, traffic light priority etc.) this has a major influence on the attractiveness of bus systems • Support and fund European research on making bus systems more attractive • Support and fund European research in decarbonising bus systems (electrification, low-carbon fuels, etc.)
33	Vehicles as a whole, and tyres as specific automotive components are already extensively regulated in terms of technology. It should be examined to what extent other measures, such as, improving eco-driving behaviour, educated purchasing choices, and incentives for new technologies and improved infrastructure would further support the overall objective.
34	As indicated earlier, vehicle-based targets may not be sufficient but should be accompanied by a wider range of initiatives in the field of transport, energy and fiscal policy. Not all emphasis should be placed on legislation; and at-source industry-lead initiatives to reduce fuel consumption, CO2 and toxic emissions should equally be encouraged.
35	Electrically-powered vehicles (Parallel Plug-in Hybrid Electric Vehicles, Extended-Range Electric Vehicles, Battery Electric Vehicles, Fuel Cell Electric Vehicles)
38	Particules fines

- 43** • Making bus systems more attractive and make more people shift to attractive public transport systems, this also means incentives for reducing car usage in urban areas • Increasing the commercial speed and reliability of bus systems has major impacts on CO2 emission reduction (need to provide necessary infrastructure: bus lanes, traffic light priority etc.) → this has a major influence on the attractiveness of bus systems • Support and fund European research on making bus systems more attractive • Support and fund European research in decarbonising bus systems (electrification, low-carbon fuels, etc.)
- 44** Fahrzeugspezifische Regelungen alleine sind nicht ausreichend. Sie sollten durch andere Regelungen/Initiativen im Bereich von Transport, Energie und Finanzpolitik begleitet werden. Die Zielerreichung sollte nicht allein legislativ geregelt werden. Initiativen der Industrie zur Reduzierung von Verbrauch und CO2-Ausstoß sollten ebenso anerkannt und unterstützt werden.
- 59** An integrated approach should be implemented to reap the benefits of EU policy. All stakeholders must work together to deliver the benefits that are within reach: manufacturers, fuel and energy producers, architects of urban and national infrastructures, traffic management and logistics providers and their users, officials, consumers, customers and drivers. Different scenarios for different policy options based on thorough research and analysis should be presented by the Commission and discussed with relevant stakeholders.
- 60** Inclusion of GHG emissions from production of fuels used in the transport sector should be considered (fossil fuels, renewable fuels, electricity etc.)

ADDITIONAL COMMENTS

Organisation Response Number	Additional Comments (Section F)
1	<p>Commentaire associé à la question sur l'encouragement de l'innovation: La Poste en tant qu'acheteur de prestations de transport de marchandise constate auprès de ses fournisseurs que les innovations technologiques des véhicules ont pour effet de renchérir leur prix (cela est particulièrement vrai pour le véhicule électrique). Pour cette raison, la réglementation doit s'accompagner, dans la mesure du possible, d'une politique d'incitation de long terme à l'achat, via divers instruments financiers. Une telle politique devrait permettre de stimuler la demande et de contribuer ainsi à la compétitivité de l'industrie automobile européenne. Commentaire associé à la question sur l'objectif 2020 de 147g de CO2/km: : la notion de coût raisonnable évoquée dans la question mérite un examen attentif car c'est un paramètre essentiel du modèle économique du transport de marchandises. Commentaire associé à la question de la nécessité d'une réglementation supplémentaire pour réduire les émissions de gaz à effet de serre: contrairement aux véhicules légers, le marché des véhicules lourds représente un marché réduit ou les retours d'investissement sont plus difficiles à obtenir. Les sauts technologiques ont pour effet de renchérir la chaîne de valeur et d'impacter la compétitivité des transporteurs. Une politique incitative permettrait d'améliorer l'équilibre financier des transporteurs. Par ailleurs, indépendamment des innovations portant sur les moteurs et les énergies de traction, La Poste fait observer que certaines politiques volontaristes ont montré leur efficacité en matière de réduction des émissions de CO2 (limitation de vitesse, formations à l'éco-conduite, etc...). Les 70 000 formations à l'éco conduite organisées par La Poste pour ses facteurs et l'optimisation des schémas de transports ont permis à eux seuls des gains très importants de consommation de carburant. Ces initiatives apportent aussi des bénéfices pour la société dans son ensemble en réduisant le nombre d'accidents de la route et en pacifiant les comportements des automobilistes et chauffeurs routiers. De telles initiatives, qui ne ressortent pas d'une logique réglementaire, apportent néanmoins de très bons résultats qui méritent d'être soutenus. Commentaire associé à la question des types de véhicules devant être couverts par la stratégie relative aux gaz à effet de serre: Les mesures doivent cependant être adaptées aux contraintes techniques propres à chaque type de véhicules avec des délais de mise en œuvre compatibles avec l'offre des constructeurs et la politique de renouvellement des véhicules.</p>
6	<p>Please see attached document.</p>
11	<p>The EEA would like to underline some key positions on CO2 emissions reductions in the field of road transport. - No double-charging for heavy-duty vehicles The EEA would like to prevent a situation whereby freight transport operators are 'double-charged' to reduce CO2 emissions. In 2008 passenger transport emission levels accounted for 60% of GHG compared to 40% for freight transport. The Commission should therefore ensure that legislation aimed at reducing CO2 emissions is balanced and non-discriminatory across all transport users, both passenger and freight. With CO2 already being internalized through taxes (through a possible revision of the Energy Taxation Directive) or charges (through the Eurovignette Directive), the setting of new CO2 standards for heavy-duty vehicles would constitute an extra burden on road transport operators. Road charges adopted through the recent revision of the Eurovignette Directive should also be applied to other road users, including passenger cars. - No unrealistic targets for post-2020 For the time being, priority should be given to the implementation of current targets, instead of setting additional targets. The consultation refers to "alternatives to vehicle-based greenhouse gas regulations" after 2020 (question E.8). The EEA can only support such alternatives if the measures do not come in addition to existing measures, but as a replacement to them. The consultation also refers to the possibility of addressing non CO2 greenhouse gas emissions (NOx, methane, black carbon) (question E.4). While these emissions should indeed be measured, the introduction of any new standards or targets should be carefully assessed after appropriate stakeholder consultations. - Energy efficiency: the deployment of long-truck combinations (EMS, European Modular System) Allowing 25.25 meter truck combinations across Europe would result in lower fuel consumption, lower emission levels, and reduced traffic congestion on EU roads, without threatening co-modality. The expected increase in transport demand by over 50% between 2000 and 2020 cannot possibly be absorbed by rail and inland waterway transport only. EMS could fill the gap without increasing CO2 emissions. Field tests are already underway in some Member States and the EU should allow cross-border use of EMS through a revision of Directive 96/53/EC on weights and dimensions of heavy-duty vehicles. - Incentives for fleet upgrade The express industry is keen to reduce emissions of road transport, notably through investments in new technologies such as electric and hybrid vehicles and alternative fuels. The express industry already has operational electric vans across Europe (notably in the UK), therefore contributing to green city logistics in the EU. Transport operators should be incentivized in upgrading their fleet to alleviate high upfront investment. Incentives could be in kind (such as longer period of access into the city center for vans) or financial (such as tax rebates). - Speed limiters do not bring significant benefits regarding reduction in CO2 emissions and road safety In the past EU policymakers were tempted to associate CO2 vehicle standards with provisions on speed limiters. The EEA would like to underline again that studies do not demonstrate that speed limiters would entail a significant reduction of CO2 emissions. Benefits brought by speed limiters are not significant enough to impose additional obligations and costs on economic operators. From the perspective of the express industry, speed limiters, especially for LCVs, could lead to a reverse modal shift from road to air or to using more passenger cars instead of LCVs, which would have a negative</p>

impact on CO2 emissions.

- 15** Road freight transport providers have in best case no incentive to save fuel and in worst case a perverse incentive to avoid making investments in energy savings. This is the reason as to why trucks still are driven in such a manner that leads to 15-20 higher than necessary fuel consumption. Hence, only 8,1% of all transport providers view fuel savings a priority. The process drive truck is not measured nor controlled and all focus is given to solutions such as EcoDriving but not the result or efficiency of it. Other industries focuses on process improvements and measure the efficiency of a process and uses this as a ground to further improve it. The cost of fuel is passed on to the transport buyers, as fuel is sheltered by so called "fuel adjustment clauses". The purpose of FAC's are to protect the providers from changes in oil price, as a negative consequence, also the consumption is sheltered and hence no incentive to save fuel. With FAC's, a fuel saving will hit turnover and profitability, hence fuel has become a source for profit generation. The larger 3PL's such as DHL etc view FAC's a vital part of their revenue stream. In addition, many 3PL's outsource the road transport of the value chain and take a commission from the haulier, based on the revenue. With a FAC in the bottom and a commission on the top, the higher the fuel cost the higher the commission, or one could say, the higher the CO2 emission the higher the commission. Independent research supports the fact that FAC's may give a perverse incentive to avoid making fuel savings.
- 18** Die Förderhöchstmenge von Erdöl ist in diesen Jahren erreicht oder sogar schon überschritten. Zugleich steigt die Nachfrage nach Erdöl durch die aufholende Entwicklung in Indien und China und in vielen anderen Ländern der Erde. Die unausweichliche Folge sind steigende Spritkosten. Eine vorausschauende Politik zur Steigerung der Effizienz von PKW ist daher nicht nur aus Klimaschutzgründen notwendig, sondern auch um Verbrauchern langfristig Mobilität zu sichern. Klare, anspruchsvolle und schrittweise verschärfte Emissionsgrenzwerte für PKW sind hierfür ein wichtiges Instrument. Die Technik für Einsparungen beim Verbrauch und entsprechend geringere CO2-Emissionen ist noch längst nicht ausgereizt. Durch Leichtbauweise und Hybridtechnologie könnte nach Berechnungen des deutschen Umweltbundesamtes der Verbrauch von Neuwagen bis 2050 um 70 Prozent gegenüber heute sinken. <http://www.umweltbundesamt.de/uba-info-medien/dateien/3773.htm>, S. 45. Bisher wurden Effizienzverbesserungen zu einem großen Teil durch höhere Fahrzeuggewichte, energieverbrauchende Nebenaggregate sowie leistungsstärkere Motoren neutralisiert. Allein die Nebenaggregate, insbesondere die Klimaanlage, erfordern bis zu 17 Prozent mehr Kraftstoff. Für Verbraucher bringen strenge Emissionsgrenzwerte für PKW reale Ersparnisse durch geringere Spritkosten. Deshalb ist eine Strategie der schrittweisen Effizienzverbesserung von PKW aus Verbrauchersicht vorteilhaft gegenüber anderen Strategien zum Klimaschutz im Verkehr, etwa einer weiteren Steigerung des Biokraftstoffanteils. Nach den Berechnungen von Fraunhofer ISI zum Integrierten Energie- und Klimaschutzprogramm der Bundesregierung ist der Einsatz von Biokraftstoffen im Verkehrsbereich mit volkswirtschaftlichen Kosten von 84 bis 168 Euro pro Tonne CO2 verbunden, die Steigerung der Effizienz von PKW dagegen mit Ersparnissen von 128 Euro pro Tonne CO2. http://www.bundesumweltministerium.de/files/pdfs/allgemein/application/pdf/fraunhofer_bewertung_iekp.pdf, dort S. 5.
- 20** As already indicated in our comments to question C1 we believe that future European vehicle emission legislation should consider a Lifecycle Assessment (LCA) as the best available method for measuring emissions from all types of vehicles. For a more detailed explanation of the LCA in relation to vehicle emissions including practical examples and scientific studies please see our supportive document we uploaded together with this contribution. This attached document also refers to questions B3, B4, C4, E3 and E4 and gives additional background information on our answers.
- 21** There are three questions where we have answered "no opinion". This is because the debates surrounding these questions are actually quite complicated, which is difficult to adequately represent by selecting a single tick-box. For instance, measuring black carbon might be a good thing, but if it is a first step towards weakening CO2 limits, then it would be nonsensical. Cars are responsible for 14% of the EU's total CO2 emissions, and they are the single largest source of transport emissions, representing around half of the total. CO2 emissions from the transport sector have increased by 29% since 1990, whereas those of other sectors have decreased by 22%. The contribution of the transport sector to the EU's CO2 emissions now stands at 30%, up from 20.5% in 1990. The real picture is actually worse, because transport greenhouse gas emissions statistics do not include lifecycle emissions, only 'tailpipe' emissions. In the case of oil, this leads to an underestimation of 20%. Transport is also critical in the debate on Europe's energy dependence. Transport is responsible for about two-thirds of oil use. Cars are the single biggest consumer of oil in the EU, responsible for using around half of transport sector demand, and hence a third of all oil. At current oil prices, Europe imports approximately €250 billion worth of oil every year, or €700m every day. For comparison - this is roughly the same amount as the Greek, Irish and Portuguese bailouts combined - every year. This is incredibly expensive and wasteful, only serving to further sap the EU economy, exacerbate inequalities, poverty and insecurity, and make more difficult our very real sustainability challenges. The age of cheap oil is over. Reducing fuel consumption of cars is one of the most effective strategies to help achieve the EU's aspirational energy savings target of 20% by 2020. Efficiency savings is demonstrably the fastest, cheapest, most effective, flexible and safest way of getting our greenhouse gas emissions down. But it is not going to happen naturally. Instead, it requires real policy and legislative focus. We are also increasingly forced to consider the risks involved in securing traditional energy sources; inter-state wars have been fought over energy resources such as oil. Efforts to adjust energy provision in ways which maximise the potential for peace and development will fail if we refuse to become more discerning in terms of the sources and methods of energy provision which most of us take for granted. Furthermore, a wide range of studies has concluded that 'ex ante' (pre-regulation) cost estimates of environmental policy tend to systematically overestimate. For example, studies conducted ten and five years ago predicted that reducing CO2 emissions from new cars to an average level of 140g CO2/km would make cars more expensive. Meanwhile new cars have become 13% cheaper on average in real terms over the past eight years. We are aware of the complex set of factors that make up a car's retail price, and that regulatory compliance costs is just one of these factors. Nevertheless the analysis shows that fears that reduction of CO2 emissions would make cars unaffordable have been

unfounded. The absence of any relationship between reduction of CO2 and higher retail prices has important implications in future emissions compliance negotiations with carmakers in the implementation periods after 2015. According to objective analysis, carmakers in Europe are heading for very significant 'over-compliance' with the CO2 regulation and are hence likely to hit the 130 g/km CO2 target for 2015 several years in advance. The industry as a whole reduced average CO2 emissions by 3.7% in 2010, continuing the trend of much faster reductions since adoption of the EU's mandatory CO2 targets for cars. As of 2011, the carmaking industry stands at an average CO2 emission of 140 g/km. We support Transport and Environment's recommendation that 'weight' is a bad parameter to base CO2 standards on, proposing to base CO2 standards on the surface area between the car's four wheels. This is how the USA regulates CO2 emissions from different vehicles. Research commissioned by Transport and Environment found that basing CO2 standards on the car's 'footprint' is likely to allow cheaper and deeper CO2 reductions, and likely to lead to safer vehicles than weight-based standards. We also believe the Commission should publish a proposal that would account for the full climate impact of biofuels on transport emissions, including the emissions resulting from indirect land use change. The policy should be fixed by introducing feedstock-specific 'ILUC factors' that reflect emissions from indirect land use change for different types of biofuel crops. The Commission should review these factors periodically, revising them as necessary in order to reflect the best available scientific evidence. Some text copyright, European Federation for Transport and Environment

- 22** GHG related to road vehicles is strongly influenced by type of fuel, engines and human behaviour. This knowledge requires a technical targets and improvements on fuel- and engine issues. Specifically for HDV goes that the GHG-exhaust depends on circumstances, kind of operation and load. This variety of aspects demonstrates that methods and measurements require specific solutions and can not be treated easily by averages comparing passenger cars for instance. Furthermore, setting standards for GHG for HDV, any systems to be introduced should cover all kinds of transport modes to avoid measurement competition in stead of market competition including GHG performances. This aim should be put into practise as well for the harmful exhaust via an equaliz and fair taxation system covering various transport modes. Both the price of transport fuels and the GHG-caring taxation system will influence the human behaviour factor in transport, regardless the mode of transport.
- 23** Please find hereby attached our position paper concerning this issue.
- 24** As more wind energy is expected to be integrated in the electricity grid, there's a need to use more electricity in the transport sector. This can potentially lead to huge reductions in CO2-emissions from road vehicles. The EU could help this transformation by - take active part in the standardization of different types of charging stations and plugs - support the roll-out of the necessary infrastructure - produce a best practice catalogue of initiatives used to support the introduction of EVs and plug-in hybrids - for example free parking, reduced taxation, no congestion charge etc - public procurement: government/municipalities should in the very near future only be able to buy cars that emit less than 50 g/CO2 per kilometer - introduce a new labeling - that could include noise and with an A++ for EVs - highlight the benefits of EVs/plug-in hybrids for the general public. Consumers tend to be conservative and stick to the existing technology
- 26** Manufacturers will not invest heavily enough or fast enough into new technologies where there is no infrastructure in place to fuel the vehicles i.e. Hydrogen, LNG, Electricity. Without a strategy to support the delivery of fuel network manufacturers will continue to make vehicles that run on fossil fuels as the network is in place and very strong across the globe.
- 28** Die Reduktion der CO2-Emissionen sollte in Einklang stehen mit den weitergehenden Zielen "Bezahlbare Mobilität" sowie "Diversifikation der Energieträger im Verkehr". Insbesondere die Verbreiterung der Bezugsbasis für die Energieträger des Verkehrs ist stärker als in Vergangenheit zu betrachten, um zukunftsichere und bezahlbare Optionen zu realisieren. In diesem Zusammenhang sind entsprechende Maßnahmen für einen Infrastrukturaufbau für alternative Energien wie Strom, Wasserstoff oder Methan zu bewerten.
- 29** There are an estimated 1 million refrigerated vehicles in Europe, with 10 million TEQ CO2 per year due to the refrigeration equipment only. TI is aware of its environmental responsibility and is currently developing a tool to measure the energy consumption of refrigerated vehicles, taking into account a broad range of parameters and notably the duty cycles. TI supports common rules to reduce the CO2 emissions of road vehicles, including specific measures on refrigerating appliances as long as reasonable transition costs are guaranteed for operators. However, the uniqueness of mobile refrigeration equipment requires an independent set of measures and tools. TI also calls upon the EU to consider all existing standards and regulations, notably in California on this matter in order to ensure economic and technological consistency. TI is willing to share its expertise in the area and is looking forward to work together with the European Commission to develop sustainable rules.

- 30** Although it is likely that vehicle based emission targets are to be a relevant part of reducing CO2 emissions from road vehicles, VDV is not convinced whether introduction of CO2 limits for buses (on a vehicle basis) has considerable impacts on reducing CO2 emissions from transport in general and more specifically from bus transport. VDV is concerned that such legislation could result in additional (administrative) burden and costs for public transport undertakings and bus manufacturers with little impact. VDV supports the position paper that UITP has just published on “A comprehensive approach for bus systems and CO2 emission reduction” jointly developed by public transport undertakings and bus manufacturers, all members of UITP. Key findings are: • A comprehensive approach for reduction of CO2 emissions from buses is needed • A specific approach for buses is needed (“a bus is not a truck”), UITP has developed the nowadays widely used SORT standards on fuel consumption based on real operating conditions of urban buses. UITP asks to take into account the SORT standards when developing a measurement methodology for CO2 emissions from buses. • Existing legislation on the reduction of exhaust gas emissions (EURO standards) for HDV has resulted in the development of more complex technology for exhaust gas aftertreatment etc. This has resulted in additional energy consumption and thereby increased CO2 emissions in case of use of fossil fuels. Such “undesired” and rather contradictory developments have to be taken into account when developing future policy initiatives for reduction of GHG emissions from HDV. • Attractive bus systems are a key solution (and not a problem) to achieve low-carbon urban mobility • Promoting bus systems and modal shift to high quality multimodal and integrated public transport systems have very high impacts to reduce CO2 emissions in urban transport • Increasing the commercial speed and reliability of bus systems is a key strategy to reduce CO2 emissions from buses • Support for research and demonstration projects to make bus systems more attractive and low-carbon intensive is necessary
- 32** Wichtig für Zielerreichung und Akzeptanz ist die Festlegung von Grenzwerten unabhängig von Fahrzeuggrößen und Betriebsstoffen / Energiearten.
- 33** In the attached document we offer more detailed views and answers to the questions in this consultation.
- 34** You cannot introduce vehicle-based CO2 performance targets without being able to measure in a standardized way CO2 emissions and fuel consumption from the different types of Heavy Duty Vehicle (HDV) combinations involved in a wide variety of different duty cycles. Therefore, the IRU calls on the European Commission to develop a declaration and measurement procedure for CO2 emissions and fuel consumption for HDVs. A different test cycle (realistic driving cycle) from the emission cycle should be elaborated to enable all actors in the road transport sector to use a tool for fuel efficiency calculation of the different heavy commercial vehicles (trucks, truck/tractor combinations, buses and coaches). A simulation-based system able to evaluate a large number of vehicle types should be preferred, taking into consideration the balance between the fuel used versus the work done, which means that the expected declaration would indicate grams of CO2 per ton-km or per passenger/km, m3-km of goods.
- 38** Les transports en commun, et donc aussi le transport par taxi, devraient bénéficier d'une approche différente que les transports individuels (au niveau fiscal, écoscore,...). C'est déjà le cas dans plusieurs pays et/ou villes d'Europe. Un taxi remplace 10 à 20 courses en voiture privée par jour. Le transport collectif avec des minibus permet de compléter l'offre de transports en commun, avec des véhicules peu polluants et permettant une plus grande flexibilité que les grands véhicules. Le transport en taxi ou le transport collectif rémunéré avec des minibus font partie de la chaîne de transports collectifs/publics de personnes. Mesures politiques complémentaires que nous proposons: • Reconnaître la place essentielle des taxis dans la chaîne des transports collectifs/publics... • Recommander que les taxis soient autorisés à emprunter les couloirs bus dans les villes (amélioration de leur rapidité dans la circulation) • Au niveau fiscal, nous estimons qu'il faudrait encourager les États membres à demander l'application du plus faible taux de TVA aux services de taxis, y compris lorsque ceux-ci sont couverts par un billet unique bus, tram et métro.
- 40** Meeting the EU's very ambitious commitments towards a low-carbon economy by 2050 will require parallel development of energy efficiency measures, the development of renewable energy sources and the deployment of carbon capture and storage (CCS). Road transport will contribute towards this reduction if alternative fuels such as CNG and LNG are further developed within the road vehicle market. Most importantly, these developments will have to be accompanied by a significant development of new natural gas infrastructures. Natural gas is the cleanest, most efficient and versatile of the fossil fuels, making it a unique choice in the path towards a lower carbon energy mix and sustainable future. The abundance of natural gas, its competitive cost of supply, its immediate availability clearly favors it as the best alternative fuel to address emission reductions at the lowest cost. In the transition to a low-carbon economy, natural gas will play a key role in electricity production and as an alternative fuel for transports. Natural gas is the fossil fuel with the lowest CO2 emissions, and associated with biogas will contribute to achieve the CO2 reductions targets. In addition to appropriate standards for CO2 emissions from vehicles, it is important to put in place requirements on energy efficiency addressing all types of fuels. Although all fuels should be considered in the European alternative fuel strategy, Natural Gas (CNG/LNG) is the only alternative that fits to any type of vehicle (cars, trucks, ships, trains) for long and short distances. CNG is the best adapted alternative fuel for passengers' vehicles whilst LNG is the best alternative for long distance transportation. Natural gas (CNG and LNG) has demonstrated its great performance as an alternative fuel and is the only proven technology applicable to any kind of vehicles for short, medium and long distances. To further contribute to a low carbon economy, biomethane can be injected to natural gas systems allowing the biogas to be mixed with the passing natural gas. Biomethane as an additional and renewable energy source promotes indigenous production and supports meeting commitments towards sustainability, diversifies energy sources and contributes to security of supply. In order to further facilitate its usage, biogas is injected to natural gas systems, which requires that it is produced, upgraded and purified to the required quality according to the specifications applied in the relevant systems. Furthermore, Biomethane has the highest energy efficiency of all biofuels per surface of land. Biofuels should be developed where possible and not competing with agriculture. Gas infrastructures are needed to ensure the availability of CNG and LNG as alternative fuels. Gas infrastructure investment entails long-lead times and thus requires long-term visibility. A sound investment climate together with a stable and predictable regulatory framework are fundamental for the development of

infrastructure. The public sector should foster the development of the alternative fuel market by promoting the development of the refueling/recharging infrastructures. The development of this market needs significant investments in infrastructure and in converting trucks or ships. Players will be understandably reluctant to take risks to invest too much before a certain critical mass is reached and before the legislative and fiscal framework is clearer.

41 CONCRETE PAVEMENTS CONTRIBUTE TO DECARBONISING OF TRANSPORT The longevity and durability of concrete structures is well-known. Just like the fact that concrete pavements hardly need any maintenance, which makes that traffic is less disturbed and congestion is avoided. But who knows that concrete roads can contribute to CO2 reduction, even if the opposite often is told? There are several direct positive aspects of concrete which are present throughout the lifetime of the pavement : the uptake of CO2 in the hardened concrete, the light reflectivity of a concrete surface which contributes to the cooling of our planet and last but not least : the reduced fuel consumption of heavy vehicles riding on a non-deformable pavement. This third aspect has been the subject of a number of international studies and researches. All studies and researches on this subject show clearly, that stiff and rigid pavements, such as concrete roads, remarkably reduce the fuel consumption compared to flexible pavements. The findings of this studies and researches show substantial fuel savings - up to 6 % - for heavy trucks riding on concrete pavements This results correspond to the physical principle, that the rolling resistance between a wheel and a bearing surface decreases according to the rigidness and the hardness of both, wheel and surface. The lowest technical rolling resistance is known between the steel wheels of a train running on a steely rail. Even though the particular findings of the aforementioned studies and researches may presently seem fairly defined to give a final evaluation on average savings of fuel and CO2, the summation of the findings show the clear evidence of the saving-effect. This may be a strong motivation for all concerned authorities and governments in Europe to concentrate on further research in order to achieve a final perception. Summary of the researches The fuel consumption of both passenger cars and heavy duty vehicles has been investigated from the perspective of several parameters. Out of those parameters affecting fuel consumption, the type of pavement, more specifically the rigidity of the pavement, has been examined throughout research projects: • The Canadian National Research Council study show that fuel saving on concrete roads compared to asphalt roads ranges from 0.8 to 3.9%. • Transport Research Laboratories found out that the reduced deflection of concrete pavement led to a fuel saving of 1.1%. • Swedish researchers showed that there is a substantial potential to save fuel by choosing the appropriate pavement type for truck traffic where the energy lost in concrete pavement is four times less than in asphalt pavement due to visco-elastic behavior of the structure. • The Swedish National Road and Transport Institute research showed 1.1 to 6.7% less fuel consumption on concrete pavement compared to asphalt pavement, to be attributed to the stiffness of the concrete. • Japanese researchers showed that fuel consumption rate for the asphalt pavement is 0.8 to 4.8% higher than the concrete pavement, for different modes stated. • A research in U.S. showed that fuel consumption rates per unit distance were consistently lower (3 to 17%) on the concrete sections regardless of the test section, driving mode and surface condition (dry vs. wet) • The Massachusetts Institute of Technology developed a pavement-vehicle interaction model showing that asphalt pavements need to be 25 to 60% thicker to display the same fuel consumption performance as concrete. All studies and researches, related to heavy traffic loadings, lead to the conclusion that fuel consumption is lower on concrete pavements compared to asphalt pavements in a range from about 1 to 6 %. Smooth concrete pavements are not only the most favourable option in terms of life-cycle cost. They also constitute an easy and effective solution in the decarbonising of freight road transport.

42 Reduction of oil-dependency (which makes the sector vulnerable to fluctuations of oil price increases in the future less competitive) is of paramount importance for UETR. A deeply investigated cost-benefit analysis is necessary in order to prevent any future EU-legislation from having more costs than overall benefits. Such analysis must absolutely include the overall influence on transportation costs on both the micro scale (road transport entrepreneurs, SMEs in particular) and macro-economic consequences. No economically viable alternative on a EU-wide scale to the HGV diesel engine has been found yet, hence the diesel engine is bound to be predominant for the next 10 to 15 years with regards to this segment. Reduction of CO2 will hence have to be realistically sought for within these limits. LNG can be a feasible solution in the future, provided the necessary energy infrastructure (e.g. refueling stations). Should the legislator intervene in a financial or fiscal way and thus make diesel powered vehicles more expensive to run, then the consequence would be a mere cost increase with no real improvement of CO2 emissions. Therefore more is to be expected from measures that enhance technical innovation and measures that work on reductions of CO2 emissions by changing other legislation (e. g. directive 96/53). Road haulage sector is characterized by a large number of micro and small enterprises. Very often the only affordable investment regards the acquisition of vehicles. The introduction of new standards at the same time all over the EU for new vehicles is the best way to achieve the desired results. Furthermore haulage companies should be supported in order to be able to make the investments in these new vehicles. Various member states have supported their companies with subsidies for the greenest vehicles in the past: it is the best way towards a quick implementation of vehicles that will meet higher CO2 emissions standards. Despite fleet renewal in the past, economic crisis of 2008/2010 severely hit our sector, with much harder access to credit for entrepreneurs, and even by end 2011 a pressure for many just to stay on the market. Investments are being postponed because there is no alternative. Aiming at the already weakened sector by harsh fiscal measures regarding the existing fleet will worsen the situation at least for half a decade from now, both in terms of the survival chances of these companies and as to the desire decrease in CO2 emissions.

- 43** Although it is likely that vehicle based emission targets are to be a relevant part of reducing CO2 emissions from road vehicles, UITP is not convinced whether introduction of CO2 limits for buses (on a vehicle basis) has considerable impacts on reducing CO2 emissions from transport in general and more specifically from bus transport. UITP is concerned that such legislation could result in additional (administrative) burden and costs for public transport undertakings and bus manufacturers with little impact. UITP has just published a position paper on "A comprehensive approach for bus systems and CO2 emission reduction" jointly developed by public transport undertakings and bus manufacturers all members of UITP. Key findings are: • A comprehensive approach for reduction of CO2 emissions from buses is needed • A specific approach for buses is needed ("a bus is not a truck"), UITP has developed the nowadays widely used SORT standards on fuel consumption based on real operating conditions of urban buses. UITP asks to take into account the SORT standards when developing a measurement methodology for CO2 emissions from buses. • Existing legislation on the reduction of exhaust gas emissions (EURO standards) for HDV has resulted in the development of more complex technology for exhaust gas aftertreatment etc. This has resulted in additional energy consumption and thereby increased CO2 emissions in case of use of fossil fuels. Such "undesired" and rather contradictory developments have to be taken into account when developing future policy initiatives for reduction of GHG emissions from HDV. • Attractive bus systems are a key solution (and not a problem) to achieve low-carbon urban mobility • Promoting bus systems and modal shift to high quality multimodal and integrated public transport systems have very high impacts to reduce CO2 emissions in urban transport • Increasing the commercial speed and reliability of bus systems is a key strategy to reduce CO2 emissions from buses • Support for research and demonstration projects to make bus systems more attractive and low-carbon intensive is necessary
- 44** Fahrzeugbezogene CO2-Einsparziele setzen differenzierte Messverfahren für den Verbrauch und die CO2-Emissionen sowie eine längere Beobachtungsphase voraus. Es darf keine weitere Verschärfung der EURO VI-Norm geben, da eine Verringerung des Stickoxid-Ausstoßes aufgrund eines höheren Verbrauchs regelmäßig zu höheren CO2-Emissionen führt. Ein entscheidendes Ziel stellt von daher die Verbrauchsreduktion dar. Insoweit wäre u.a. auch eine Erhöhung des zulässigen Gesamtgewichts förderlich.
- 46** Always take the size of a duty vehicle into account. Shippers/carriers buy and use bigger vehicle with a clear vision. They want to move more good in one movement. This is often more sustainable than moving goods with smaller vehicles. Increase size and weight and reduce CO2 emission. This principle must not be disturbed in EC legislation.
- 47** 1. In setting policies for reducing CO2 emissions from vehicles it is crucial that consumers are well informed on the environmental impact of their vehicles. Awareness, demonstration and education are essential tools to involve consumers in the process of making vehicle cleaner. 2. In the future, considering a progressive introduction in the market of new low-carbon vehicles and technologies, well-to-wheel emissions should be considered, instead of today's tank-to-wheel values
- 51** Please be aware of the different environmental contributions of road vehicles. Buses & coaches, cars and trucks have a different carbon footprint. Measures and strategies should bear that on mind. Besides, you have to consider that vehicles are expensive and sectors with many SMEs suffer a lot if you impose them to buy certain type of vehicles. Let's do not forget the social and societal advantages that some road transport modes bring and take into account the contribution of each vehicle to generate external costs. Finally, please agree on a coherent approach of all EU policies. One of the EU transport policy objectives is to promote public collective transport. Thus, charging buses and coaches does not seem to be the right way to achieve that. Therefore, think about who the real polluters are.
- 55** The oil peak has been reached or already overstepped and we are consuming much more resources than are available to satisfy the needs of all people living on this planet today and in the future. At the same time the demand for oil is increasing at global level due to the development in countries such as China, India, Brazil and many other countries. The consequence will be an increase in fuel costs. A forward looking policy to increase the fuel efficiency of cars and deliver innovative technical solutions are needed not only to protect the climate but also to allow consumers in the long term to remain mobile. Ambitious limit values for emissions are needed which will be strengthened in a staged approach over time. The technical limits have not been reached yet to improve the efficiency of cars as for instance the German Environmental Protection Agency pointed out that new vehicles could be made considerably more efficient by 2050 compared to today's technology (http://www.umweltdaten.de/verkehr/downloads/Texte_05_2010_CO2Minderung_Verkehr_Kurzfassung_englisch.pdf). In the past energy efficiency improvements have been neutralized by higher weight, more powerful engines and energy consuming ancillary units. For consumers, stricter emission values lead to costs savings in the use phase. For this reason, strategies to improve further the fuel efficiency are preferable than strategies which aim to increase the proportion of biofuel in conventional fuel.

- 56** Improving air quality and reducing traffic congestion represent decisive challenges for the environment and for our mobility. Transport emissions account for around a quarter of greenhouse emissions at EU level, coming from cars, vans and heavy duty vehicles. The White Paper on Transport released by the European Commission in March 2011 tackles this issue, as it sets the target of cutting CO2 emissions by 20% by 2020 compared to 1990 levels, and by 60% by 2050 compared to 1990 levels. ETRA believes that it is of paramount importance to reach this target, and therefore strongly advocates a modal shift in the transport sector, from private car use to the use of two wheels, especially in urban areas. ETRA also believes it is important to promote the periodical renewal of the circulating fleet, for instance through fiscal incentives, in order to create a safer and more environmentally friendly fleet. Taking into account the fact that 50% of car trips are done for distances under 5 kms, and 30% under 2 kms, two wheels can provide a simple and very low-cost solution to reduce CO2 emissions. Estimations have been made that if by 2020, the modal share of cycling would be at the same level in Europe as it was in Denmark in 2000, this would save 62 to 139 million tons of CO2. In addition to that, if the level of cycling would double by 2020, the current 24 million tons of CO2 saved thanks to cycling would increase up to 54 million tons. Reducing CO2 emissions will also have a considerable impact on health. In the European Union, every year, air pollution is linked to 300,000 premature deaths; noise caused by transport is linked to 50,000 fatal heart attacks and 200,000 cases of cardio-vascular disease in the EU. The use of two wheels will address those issues and having a physical activity through cycling will contribute to better physical conditions. As for the costs, shifting from private car use to the use of two wheels will not include any additional financial investment. There will be no need for substantial infrastructure investment, and even the investment required is negligible compared to the investment needed in other transport modes. Furthermore, every km cycled costs 1.5 eurocents, whereas every kilometer driven by car costs just under €1. As a result a shift from car to cycle would save the economy some 97 eurocents per km. As regards powered two wheelers, ETRA believes that powered two wheelers are fairly sustainable motorised means of transport especially due to their efficient power-to-weight ratio. Their light weight results in significantly less fuel consumption as they require less energy than a car to move. Furthermore a recent study made by ADEME (French Environment and Energy Management Agency) has shown that Euro3 PTWs greenhouse gas emissions (CO2 in particular) are well below those of the average automobile vehicles sold today. Moreover a study (see footnote) conducted by Transport & Mobility Leuven states that the total external emission cost of motorcycles (all pollutants combined) is 21% lower than that of an average car. In addition the finding of the same study shows that if 10% of car drivers would give up their car for a motorcycle or a scooter, traffic congestion would be reduced by 40%, (the case study referred to one of Belgium's most congested routes - E40 Leuven - Brussels). The study extrapolates this figure to the entire primary road network and the findings suggest that 15,000 lost vehicle hours could be saved in Belgium every day, which is equivalent to a total time-saving of around €350,000 per day. In conclusion, the study shows that if 25% of all commuting trips were made on powered two wheelers, congestion could even turn into a bad memory. Since the European Commission is seeking to reduce emissions and hence to improve quality of life, part of the solution can and therefore should come from (electric) bicycles and powered two wheelers. 1 The study « Powered Two Wheelers compared with cars : driving dynamics, fuel consumption and exhaust emissions in daily use” has been published in December 2008 by ADEME
- 57** The EU has been leading the global effort to clean up road vehicles and should continue to do so. On cars and vans, the EU should have targets in place until 2025. These targets should be in line with the need to fully decarbonise the sector by 2050. For trucks, the EU should get its act together after the US and Japan have already put standards in place.
- 59** Regarding question B3 - An emission standard for HDVs should aim to provide realistic values for different vehicle variants. HDV products and markets are unique and depend largely on individual customer choices. Regarding question E1 - Just as our industry wants an integrated approach to measures to include in a forthcoming HDV GHG strategy, we likewise want an integrated policy approach that takes into account all instruments (harmonised and reduced taxation of biofuels, education for driver training, etc.) This avoids double regulation and distortions of the internal market.
- 60** Comments to some of the questions: B3: Average emissions within each class and mission profile is OK. D3: Focus on those vehicle classes that emit most CO2 D4: Combination of the most efficient and cost effective measures
- 61** The EU's existing target for new cars of 130g CO2 per kilometre has led to concrete improvements in fuel efficiency from the cars available today. This demonstrates that the 95g target should be confirmed in the upcoming review, as it seems very likely manufacturers will be able to achieve it in a cost-effective manner.