



European Economic and Social Committee

TEN/301
Reduction of
CO₂ emissions from
passenger cars and light-
commercial vehicles

Brussels, 24 October 2007

OPINION

of the

European Economic and Social Committee

on the

**Communication from the Commission to the Council and the European Parliament – Results of
the review of the Community Strategy to reduce CO₂ emissions from passenger cars and light-
commercial vehicles**

COM(2007) 19 final

On 7 February 2007 the Commission decided to consult the European Economic and Social Committee, under Article 175 of the Treaty establishing the European Community, on the

*Communication from the Commission to the Council and the European Parliament –
Results of the review of the Community Strategy to reduce CO₂ emissions from
passenger cars and light-commercial vehicles*
COM(2007) 19 final.

The Section for Transport, Energy, Infrastructure and the Information Society, which was responsible for preparing the Committee's work on the subject, adopted its opinion on 5 October 2007. The rapporteur was Mr Ranocchiaro.

At its 439th plenary session, held on 24 and 25 October 2007 (meeting of 24 October), the European Economic and Social Committee adopted the following opinion by 142 votes to one with two abstentions.

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1. **Summary and recommendations**

- 1.1 The EESC supports the European Commission's initiative aimed at reviewing the Community strategy for reducing CO₂ emissions from road traffic.
- 1.2 The Commission's proposal, which the Council plans to confirm, is to cut CO₂ emissions from passenger cars to 130g/km by 2012, by means of technological improvements to motor vehicles. A further reduction of 10g/km should be achieved, if technically possible, thanks to alternative technologies and greater use of biofuels, to reach the overall objective of 120g/km by 2012.
- 1.3 The EESC believes that this ambitious initiative will only succeed if it is conducted using diverse, balanced measures, and a timeframe that takes into account the need for manufacturers to adapt the chosen technologies to all the models they produce, a complex operation with varying costs.

In other words, when it comes to CO₂ emissions, improvements in passenger car performance must be reconciled with the manufacturers' capacity to apply them both economically and technologically and with the spending capacity of potential buyers.

- 1.4 In the light of these factors, while underlining the need to urge car manufacturers to make more rapid progress towards further reductions in consumption and emissions, the EESC also

points to the need to press ahead with efforts to introduce the most socially, economically and environmentally effective legislative framework possible.

- 1.5 The EESC therefore recommends commissioning a full and detailed impact assessment, to establish the costs/benefits of the various options, ranging from work on vehicle technology to other possible instruments: adjustments to infrastructure, alternative fuels, tax incentives, information through various forms of education for eco-driving (needed most of all in large urban areas¹) and guiding demand by means of taxation targeting CO₂ emissions. The EESC also feels that among future measures, consideration should be given to the use of low rolling resistance tyres which, according to industry data, can reduce consumption by 3-4%. The Commission's suggestion to introduce tyre pressure monitoring systems is a step in the same direction.
- 1.6 An intelligent and considered combination of all the measures available might enable the CO₂ reduction targets to be reached, without putting a brake on the renewal of the car fleet, by containing and sharing out the financial burden and avoiding penalising potential buyers of new cars.
- 1.7 The EESC also hopes that the impact of the legislative instrument chosen will be as neutral as possible when it comes to competition between manufacturers, not imposing binding limits on the models they can put on the market, but rather guiding consumer demand towards lower emission models. The CO₂ reduction targets must correlate with the existing differences within the product ranges, using those parameters judged to be most informative and proportionate to their CO₂ emissions.
- 1.8 It is extremely important that the parameters chosen act as an instrument to guide consumers towards types of vehicle that respond to their real needs, avoiding consumption and emission levels that go beyond their everyday needs.
- 1.9 In this respect, the EESC is concerned at the Commission's plan to introduce legislation for light commercial vehicles. The consumption, and thus CO₂ levels, of these vehicles, designed for professional use, are examined carefully by potential buyers as they have a significant impact on business costs. As a result, the vehicles currently on the market are already adopting the most efficient solutions –the almost exclusive use of diesel engines.

In any case, before a decision is taken, the EESC recommends that the Commission conduct an impact assessment based on an up-to-date survey of light commercial vehicle emissions, something that is not currently available.

- 1.10 Lastly, the EESC believes that the Member States should develop activities in a wider range of areas than in the past (roads, intelligent traffic lights, etc.), not least by buying

¹ See opinion CESE 615/2007 *Transport in urban and metropolitan areas*.

environmentally-sound vehicles for their own public transport fleets and committing themselves to both building infrastructure networks that can give access to the distribution of fuels of a lower environmental impact, such as natural gas, and facilitating the purchase of vehicles using natural gas or LPG, a matter on which the EESC has already expressed its view in previous opinions².

2. Introduction

- 2.1 In 1995, a Community strategy to reduce CO₂ emissions was introduced, including measures addressing supply from vehicle manufacturers and demand from consumers.
- 2.2 More specifically on the supply side, European manufacturers entered into a voluntary agreement aimed at reducing average CO₂ emissions from cars to 140 g/km by 2008. Japanese and Korean manufacturers made the same commitment the following year, to be achieved by 2009.
- 2.3 On the demand side, the European Commission's strategy simultaneously provided for consumer information on CO₂ emissions, to help them choose wisely, together with targeted use of car taxes.
- 2.4 In practice, significant improvements have been achieved on the supply side, although they are not by themselves enough to meet the objective set, as the contribution of the other two instruments – information/guidance and tax – has been lacking. The Commission acknowledges this, admitting in its communication that "... improvements in car technology have delivered the bulk of the reductions" in CO₂ emissions.
- 2.5 Average CO₂ emissions fell approximately 13% from 186 g/km to 161 g/km between 1995 and 2004, and 30% of the fleet placed on the market in 2004 had emissions of less than 140 g/km.
- 2.6 On the other hand, during the same period consumer preference has shifted towards larger, heavier, more powerful cars, on account of both the perception that they are safer and the considerable population movement away from urban centres. In consequence, information labelling has had little impact on consumer choices.
- 2.7 The other instrument for shaping demand, targeted taxation to reduce CO₂ emissions, does not yet possess a European dimension³, being restricted to national initiatives in less than half the Member States. In some cases, the measures taken have had a paradoxically negative impact

² Opinion of the European Economic and Social Committee on *The development and promotion of alternative fuels for road transport in the European Union*, OJ C 195, 18.8.2006, p. 75.

³ The draft directive on car-related tax in the EU, COM(2005) 261, which provided for a restructuring of car-related tax based wholly or partially on CO₂ emissions, was not approved.

on reducing emissions. One such example is the increased tax on diesel, which has slowed the shift to diesel that has taken place over recent years in many Member States having larger numbers of diesel vehicles.

2.8 In conclusion, due to both external factors hindering the reduction process launched with the review of car technologies in the wake of the voluntary agreements, and the failure to make use of the other planned instruments, the objectives set for 2008/2009 do not seem to be feasible. The Commission has therefore decided to review the strategy and has published the communication under examination by the EESC, laying down guidelines to be followed by a specific legislative proposal by the end of the first half of 2008.

3. **The Communication from the European Commission**

3.1 In the communication, the Commission proposes to reach the EU objective of 120 g/km by 2012. This is to be achieved through a combination of EU and Member State action.

3.2 To this end, the Commission will propose a legislative framework by mid-2008, focusing on mandatory reductions in CO₂ emissions to achieve the average new car fleet objective of 130 g/km by means of improvements in vehicle motor technology.

3.3 A further reduction of 10 g/km, or equivalent if technically possible, is to be achieved by other technological improvements and by increased use of biofuels, specifically:

- a) setting minimum efficiency requirements for air-conditioning systems;
- b) compulsory fitting of accurate tyre pressure monitoring systems;
- c) setting maximum tyre rolling resistance limits in the EU for tyres fitted on passenger cars and light commercial vehicles;
- d) use of gear shift indicators, taking into account the extent to which such devices are used by consumers in real driving conditions;
- e) fuel efficiency progress in light commercial vehicles (vans) with the objective of reaching 175 g/km CO₂ by 2012 and 160 g/km CO₂ by 2015;
- f) increased use of biofuels maximising environmental performance.

3.4 The Commission agrees that the legislative framework implementing the average new car fleet target will need to be designed so as to ensure competitively neutral and socially equitable and sustainable reduction targets which reflect the diversity of European car manufacturers and avoid any unjustified distortion of competition between automobile manufacturers.

3.5 In this regard, the Commission encourages Member States to adapt their car taxation policies so as to promote the purchase of fuel-efficient cars throughout the EU and help manufacturers comply with the upcoming fuel efficiency framework.

- 3.6 The Commission also suggests the introduction of taxes differentiated over the whole range of cars on the market, so as to gradually induce a switch towards relatively less emitting cars, as an efficient way to reduce compliance costs for manufacturers.
- 3.7 The role of fiscal incentives is mentioned as a powerful way of encouraging people to buy the cleanest light-duty vehicle classes on the market; similar emphasis is placed on the need to improve the effectiveness of information for potential buyers on vehicle consumption (the Commission is to adopt a proposal to amend Directive 1999/94/EC on labelling in 2007).
- 3.8 Lastly, the Commission points to the need for the Member States to promote eco-driving through training and/or awareness campaigns with the aim of reducing emissions.
- 3.9 Manufacturers are also invited to sign up before mid-2007 to a voluntary agreement on good practice regarding car marketing and advertising, aimed at promoting sustainable consumption patterns.

4. **General comments**

- 4.1 The EESC fully agrees that there is a need to review the Community strategy to reduce CO₂ emissions generated by road traffic, which account for some 20% of overall emissions.
- 4.2 The EESC would also point to the complexity of this review, which should aim to achieve further CO₂ emission reductions without undermining the competitiveness of the vehicle sector, which is operating on an extremely competitive world market.
- 4.3 It should be borne in mind that in Europe alone, the car industry employs 2 million people directly and another 10 million indirectly. The industry accounts for 3.5% of European GDP, with net exports worth EUR 33.5 billion and – last but not least – the Member States receive EUR 365 billion annually in car taxes.
- 4.4 Indeed, in its CARS 21⁴ communication, the Commission has sought to outline industrial policy in the automotive sector, which "plays a substantial role in the European economy".

The CARS 21 communication is the Commission's response to the final report and recommendations drawn up in December 2005 by the CARS 21 High Level Group, which comprised representatives of industry and the main components of civil society, as well as of the Commission. The document highlights that attaining ambitious objectives in complex areas, such as the reduction of CO₂ emissions while not damaging industrial competitiveness or employment, demands an integrated approach aimed at drawing together the contributions of all stakeholders to pursue a single objective of general interest.

⁴ A Competitive Automotive Regulatory Framework for the 21st Century, COM(2007) 22 final, 7 February 2007. The EESC has drafted an opinion on this subject (rapporteur: Mr Davoust).

- 4.5 The EESC shares the concerns voiced regarding the potentially excessive impact on industrial costs of decisions that might directly or indirectly jeopardise employment levels in the industry by encouraging strategic choices entailing the possibility of industrial relocation outside the EU.
- 4.6 In the light of these considerations, the EESC agrees that car manufacturers should be urged to make more rapid progress towards further reductions in consumption and emissions, but also points to the need to press ahead with efforts to introduce the most socially, economically and environmentally effective legislative framework possible for reducing CO₂ emissions.
- 4.6.1 The EESC would make the following recommendations with a view to securing the best results from future Community legislation on reducing CO₂ emissions from road traffic:
- **Infrastructure and tyres:** upgrading of road infrastructure is justified, since better road surfaces reduce friction and noise pollution, and increase road practicability. In addition, the introduction of advanced electronic traffic management (ETM) systems to reduce congestion and redundant stops at traffic lights can make a significant contribution to reducing CO₂ emissions. With the same aim, the use of low rolling resistance tyres produces proven benefits, reducing consumption by some 3-4%; the Commission's suggestion to introduce tyre pressure monitoring systems is a move in the same direction.
 - **Alternative fuels:** principally biofuels, also mentioned in the CARS 21 final report. Once the technical feasibility and environmental and social impact of first-generation biofuels⁵ have been checked (pending the introduction of second-generation, lower impact, biofuels), they could, together with other alternative fuels coming into use in Europe (natural gas, in the medium term, biogas, and hopefully in the long term, hydrogen), become a decisive factor for reducing CO₂ emissions.
 - **training, information and guidance:** training initiatives for the entire motor vehicle commercial and distribution chain should be promoted and supported, in order to steer buyers' choices towards lower CO₂ emission options, with full understanding of the facts. Direct means should also be used to influence buyers through taxation tied to CO₂ emissions and incentives for eco-driving.
- 4.6.2 All these measures would also have the effect of not undermining the process of renewing the current car fleet, by spreading the financial burden of reducing the level of CO₂ emissions. The EESC would point out in passing that according to the ECCP⁶, the potential reduction of CO₂ emissions from eco-driving could amount to 50 million tonnes in Europe by 2010 (2006-

⁵ Opinion TEN/286 *Progress in the use of biofuels*, under discussion.

⁶ European Climate Change Programme. As part of the ECCP, the Commission's consultant, TNO, has estimated the costs and CO₂ emissions reduction potential of the various possible measures.

2010), and a joint TNO/IEEP⁷ study claims that eco-driving is not only feasible, but is both effective and measurable.

4.6.3 On the other hand, the average sale price of a car would rise by approximately EUR 3 600 if the 120 g/km target were to be reached through car technology alone. Additionally, the same sources⁸ indicate that in order to reach 130 g/km, the additional cost to purchasers would in any case be substantial, around the EUR 2 500 mark.

4.6.4 As it takes Europe 12 years on average to replace its car fleet, as noted by the Commission, it is clear that price increases on that scale would further slow the car replacement cycle.

It also is clear that such increases would have a social impact, making it even harder for the more disadvantaged sectors of society to buy a car.

4.7 Lastly, the EESC disagrees with the Commission's position that complementary technologies would bring about a reduction in CO₂ emissions of 10 g/km, since the ability of biofuels to penetrate the market is still uncertain, and it cannot be assumed that they will contribute the expected 5 g/km. In the EESC's view, it is essential to introduce a raft of measures that can be monitored with certainty, as is the case, for example, with eco-driving and infrastructure.

5. Specific comments

5.1 In keeping with the general comments above, and also in the light of the current parliamentary debate, the EESC hopes that the future legislative instrument will not compromise the ability of consumers to buy new cars, in order to ensure that the car fleet is renewed, and also that it will succeed in strongly directing demand towards lower emission models.

5.2 In the absence of a full and detailed impact assessment to highlight the costs/benefits of the various options, the EESC reserves the right to draw up an opinion at a later stage on appropriate and feasible limits in terms of reduction of CO₂ emissions, but recommends at this juncture that the planned legislative instrument should take account of the fact that the car production cycle is famously complex, requiring a lead time⁹ of anything up to seven years.

5.3 In view of the time needed to prepare legislation in the co-decision process, the EESC reckons that the final text laying down the requirements to be met will not be ready before 2009. Given the earlier comments regarding the sector's typical industrial cycles, the first practicable date would be 2015, to coincide with the entry into force of the

⁷ IEEP: Institute for European Environmental Policy – TNO Consultancy.

⁸ See footnote 6.

⁹ The time needed for the industry to implement any new requirement involving changes to vehicle structures.

EURO 6 regulation on the reduction of pollutants that, as in the case of CO₂, require structural modifications to cars.

- 5.4 There is a danger that the 2012 target date is technically impracticable and could have distinctly negative effects on the competitiveness of the European car industry and its contribution to employment.
- 5.5 The EESC is, as of now, in favour of a legislative instrument which is neutral in terms of competition between manufacturers, meaning not imposing binding limits on the models they can put on the market, but rather guiding consumer demand towards lower emission models; the CO₂ reductions called for must match the existing differences within the product range, using those parameters judged to be most informative and proportionate to their CO₂ emissions.
- 5.6 In this regard, it is felt that the parameter to be selected must ensure that contributions in emissions reduction terms from the various segments and the inevitable ensuing vehicle cost increases should not be such as to erode affordability, so that customers can buy a new vehicle in keeping with their own spending power.
- 5.6.1 One possible parameter would be vehicle weight (as suggested by ACEA, the European Automobile Manufacturers' Association), as this directly affects the level of CO₂ emissions. The EESC recalls that vehicle weight rose by 32 kg between 1996 and 2005, reflected in a relative increase in CO₂ emissions of 6.6 g/km. Weight is to be used as a benchmark in Japan's CO₂ emissions strategy. In 2006, the country set a target of 138 g/km to be achieved by 2015. ACEA supports this parameter, as it represents a step towards harmonisation of CO₂ policies across the world.
- 5.6.2 It should also be pointed out that discussions are currently taking place on other parameters that could be used to identify and differentiate product ranges. Of particular note is the proposal by EP rapporteur, MEP Chris Davies, which refers to the vehicle's "footprint" (the area occupied by the car, calculated using wheelbase and track width¹⁰).
- 5.6.3 The EESC, meanwhile, considers that adopting, for example, box volume (vehicle length x width x height) as a parameter could be useful and appropriate, as a possible tool for guiding consumers towards vehicle types meeting their real needs and without redundant CO₂ emissions caused by a practical need/vehicle size mismatch. In other words, a person needing an SUV (sport utility vehicle) that can carry more passengers and more weight will be willing to pay more because a vehicle of this type is really necessary, whereas a person without these requirements will be more attracted to a lower segment.

¹⁰

WHEELBASE: distance between front and rear axles; TRACK WIDTH: distance between tyres.

- 5.7 The same European Parliament rapporteur, MEP Chris Davies, has proposed establishing a "Carbon Allowance Reduction System" (CARS) setting penalties and credits for exceeding or coming below the limits set. The EESC believes that introducing a CO₂ allowance-swapping system is not practicable in a market restricted to the automobile sector.

In view of the ambitious objectives, there is no realistic prospect of sufficient volumes of allowances for exchange being built up to ensure that the system would work.

- 5.7.1 In contrast, the EESC considers the application of an "open" emissions trading system (i.e. permitting trading with other sectors) to be possible, offering the advantage of guaranteeing an overall reduction in CO₂ emissions with an appropriate degree of flexibility, while setting limits on possible purchases for vehicle manufacturers. The EESC therefore advocates an open system, the economic implications of which will have to be defined and identified in the light of changes within the emissions market between now and 2015, underlining the need to prevent such economic implications putting the affordability for final customers at risk.
- 5.8 Turning to the communication's call for a code of good practice regarding car marketing and advertising, the EESC points out that almost all the Member States already have – usually very stringent – agreements on how to define rules in this area. In general terms, however, the EESC favours harmonising these rules and consequently is not opposed to drawing up a European code of good practice as suggested to vehicle manufacturers by the Commission.
- 5.9 The EESC also notes that in its communication, the Commission also states its intention to prepare a legislative instrument to reduce CO₂ emissions from light commercial vehicles.
- 5.9.1 It seems to the EESC that light commercial vehicles (category N1 and related passenger transport vehicles) do not require an intervention of this kind, since they are designed for commercial purposes and, consequently, consumption and CO₂ emissions are already a deciding factor for buyers, as they have a major impact on business costs. As a result, the vehicles currently on the market are already adopting the most efficient solutions – the almost exclusive use of diesel engines.
- 5.9.2 In any case, before a decision is taken, the EESC recommends that the Commission conduct an impact assessment based on an up-to-date survey of light commercial vehicle emissions, something that is not currently available.
- 5.9.3 Applying g/km targets on commercial vehicles, without precise knowledge of the relevant data, also brings the risk of reducing the carrying capacity of individual vehicles, with the ensuing inefficiency requiring either a greater number of vehicles to transport the same loads, or larger, higher category vehicles, thereby increasing overall emissions.

- 5.10 The EESC also believes that the subject of CO₂ emissions from cars and light duty vehicles should be assessed comprehensively, taking into account the entire life cycle of vehicles, from production processes to use and disposal. In the light of the above, the EESC would also stress the need to coordinate and secure coherence between legislative and regulatory initiatives relating to the motor vehicle industry with an impact on CO₂ emissions so as to preclude contradictions causing delays in their implementation.
- 5.11 The EESC believes that future research framework programmes must give priority as a matter of urgency to projects aimed at finding technically feasible and economically sustainable ways of reducing global CO₂ emissions (not only in relation to transport), taking into account the real impact of the entire life cycles of various sources of emissions. The EESC is convinced that research projects should work across a broad spectrum with a view to identifying short-, medium- and long-term solutions with affordability – for both manufacturers and final customers – as a constant objective, in order to facilitate the renewal of the vehicle fleet in the interests of sustainable mobility.
- 5.12 Lastly, the EESC believes that the Member States should develop activities in a wider range of areas than in the past (roads, intelligent traffic lights, etc.), not least by buying environmentally-sound vehicles for their own public transport fleets and committing themselves to both building infrastructure networks that can give access to the distribution of fuels of a lower environmental impact, such as natural gas, and facilitating the purchase of vehicles using natural gas or LPG.

Brussels, 24 October 2007

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