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# **Friends of the Earth/Italy position Paper and response to the public consultation of the European Commission on the new cars CO<sub>2</sub> emission policy**

*20<sup>th</sup> June 2007*

## Introduction

Foe Italy participated actively in the low carbon cars policy debate boosted by Communication of 7 Feb 2007, with press releases and campaigning, with research and dissemination of information and by organizing a workshop on 12<sup>th</sup> of June, in order to raise the debate at the national level.

The proceedings of the workshop, which was attended, among others, by the representatives of 5 Ministries, are available on [www.svilupposostenibile.org](http://www.svilupposostenibile.org) and on [www.amicidellaterra.it](http://www.amicidellaterra.it).

The full event registration is also available, and can be listened going on the Radio Radicale website:

<http://www.radioradicale.it/scheda/228033/il-rilancio-della-politica-comunitaria-per-la-riduzione-delle-emissioni-di-co2-delle-auto-quali-opportunit>

Friends of the Earth Italy welcomes the opportunity to contribute to the consultation of the European Commission on improving the fuel efficiency and reducing CO<sub>2</sub> emissions of new cars in the European Union.

## Summary of points raised

1. **120 gCO<sub>2</sub> by 2012 is feasible and social cost efficient**
2. **Need of coherence in climate change sectorial policy**
3. **Critical points of EC impact assessment**
4. **Best instruments to reach the 120g/km target**
5. **No differentiation criteria contrasting with CO<sub>2</sub>/km reduction target**
6. **Others (marketing rules and speed limits)**

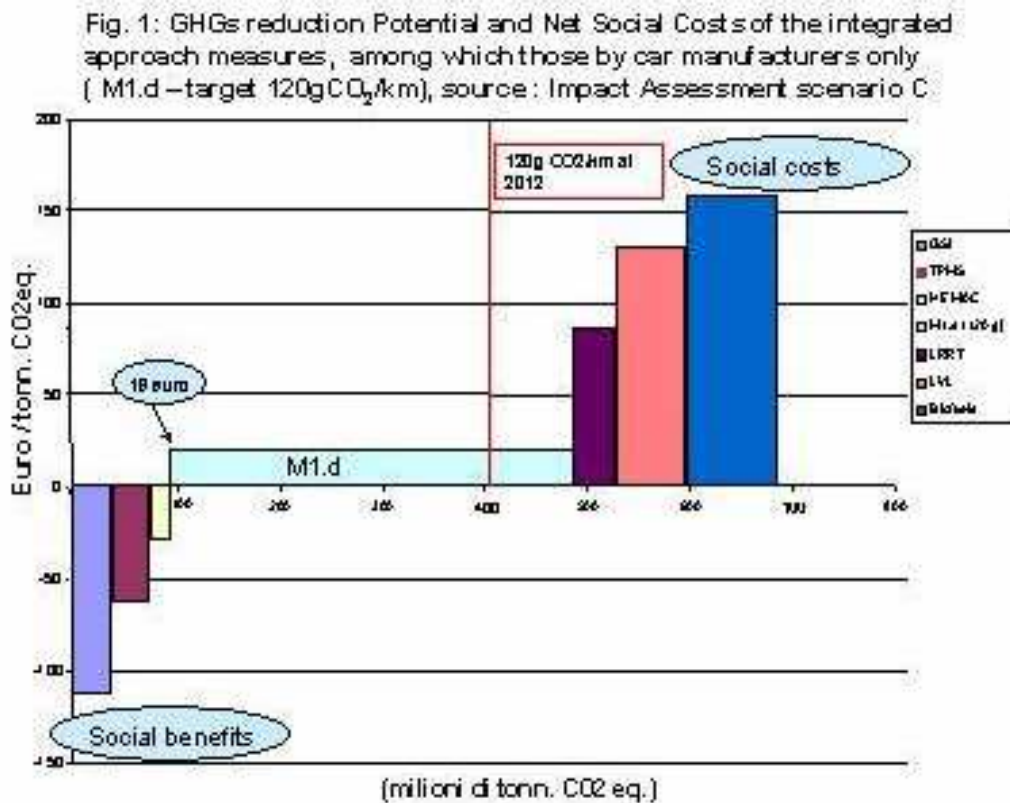
### 1) 120 gCO<sub>2</sub>/km by 2012 is feasible and social cost efficient

The EU Council of March 7-8 affirmed the EU unilateral 20% greenhouse gases reduction target by 2020, while a 30% reduction is proposed with other developed countries in the post-Kyoto negotiations.

These targets call for a serious GHGs reduction policy in the transport sector also. A EU directive regulating CO<sub>2</sub>/km emissions by new cars is a necessary step in this framework, even if it will be not enough to control GHG emissions by road transport and it should be accompanied by other actions on private transport demand.

As stated by Scenario C of sensitivity analysis made by EC Impact Assessment (this scenario is the one closer to a car weight stabilisation hypothesis), **120 gCO<sub>2</sub>/km by**

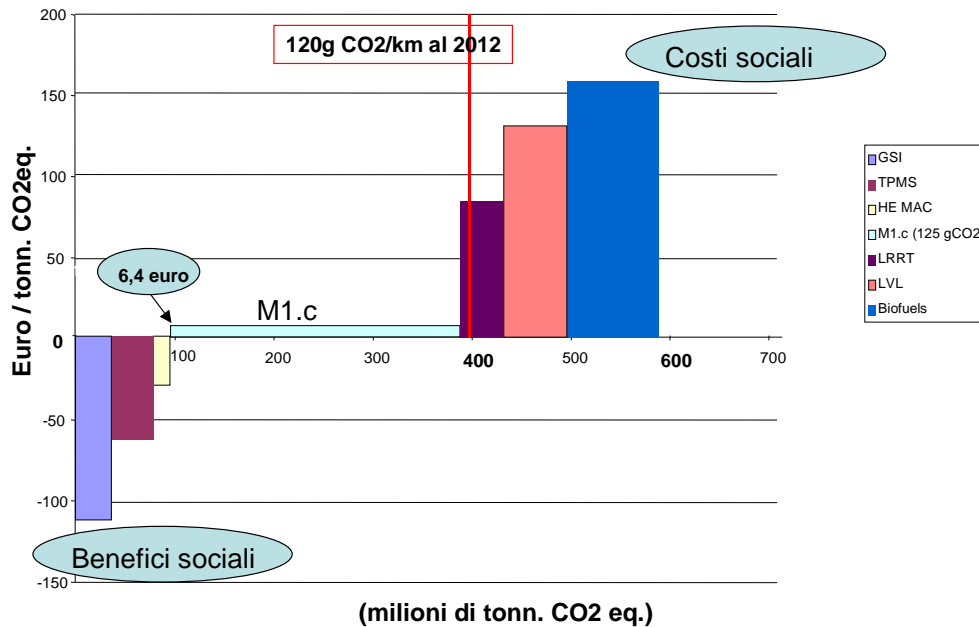
**2012, with actions by car manufacturers only, is a technically and economically feasible target (see fig. 1)** provided that clear policy principles are adopted by EU institutions and priority is given to CO<sub>2</sub> reduction by acting on the whole range of technical options (reduction of car volumes, weight, materials substitution, etc.).



**Scenario C of sensitivity analysis made by the Commission Impact Assessment shows also that the 120 gCO<sub>2</sub>/km target may be reached with net benefit to society**, if car manufacturers would contribute to reductions up to 125g, while other specific car components (gear shift indicators, tyre pressure monitoring systems, highly efficient air conditioning systems) would contribute to the other 5g reduction (in this case the **social costs/tonnes CO<sub>2</sub>eq. of M1 measures only would be 6 euro only, see fig. 2).**

These valuations demonstrate also that the target year (2012) is feasible, and that intermediate targets could be introduced by 2010 and 2011. After 2012 we believe that a 2,5% yearly target reduction is feasible until 2020.

**Fig. 2: Reduction potential and costs of the integrated approach measures to reach 120 gCO<sub>2</sub>/km, among which M1.c at 125gCO<sub>2</sub>/km, source: Impact assessment, scenario C**



## 2) Need of coherence in climate change sector policy

There is the need that the Commission re-affirms some basic policy principles on the subject, and precisely:

- A. to affirm the **preminency of public common interest in the EU CO<sub>2</sub> car policy versus the particular interests of road user**. In fact, in the last ten years, the Commission has allowed a lot of confusion on the objectives of CO<sub>2</sub> car policy. **The consumer utility approach**, which is so much influencing the Commission policy options (differentiated standards allowing for surface, power and volume increases - going exactly in the opposite direction of their reduction needed to reduce energy consumptions and C) - **conflicts with the need to strongly reduce CO<sub>2</sub> emissions, as declared by the EU Council in March**. It should be highlighted that a public utility approach, as opposed to the more limited consumer utility approach, is crucial for the implementation of a serious CO<sub>2</sub> policy. Compromise options that try to reduce CO<sub>2</sub>/km by 2012 while allowing for a continuous increase in car weight, mass, surface, or engine power, are simply not coherent with EU GHGs reduction policy;

- B.** to reaffirm the basic **principle of polluter pays**, that allows for a higher environmental protection, giving the needed flexibility and premiums to best performing industries in order to obtain financial resources to invest in product and process innovations. Any proposal that ends up with making to pay less those that perform worse in terms of CO<sub>2</sub>/km, and making to pay more those that perform best CO<sub>2</sub>/km, are in contrast with the polluter pays principle and should be deleted from the options. Indeed, economic instruments based on a GHGs benchmark, such as CO<sub>2</sub>/km certificates trading among car manufacturers (non communicating with ETS), is fully compatible with the polluter pays principle and should have a major role in achieving the EU target at 2020.

### 3) Critiques of EC impact assessment

The work until now performed by Commission Staff and expressed in IEEP-TNO-CAIR (2005) and TNO-IEEP-LAT (2006) studies specifications and in the 7<sup>th</sup> February Impact assessment cannot be said to be politically neutral. There are extremes of impartiality in the assessment done up to now:

- 1) **(Cost to producers)** The two main studies commissioned and supervised by EC staff assumed a 15% increase of the average weight until 2012 (road user utility approach, in contrast with the objectives of the last 10 years of CO<sub>2</sub> reduction policies), instead of assuming a reduction or at least a weight stabilisation. The weight increase hypothesis has a substantial influence on producers' costs. Amici della Terra - FoE Italy has estimated that a weight stabilisation hypothesis could reduce producers' costs by at least 40%. Imagine that those studies end up with results saying that industry will suffer costs even for maintaining the present level of CO<sub>2</sub>/km! (due to yearly future weight increases, that should be compensated by more innovation). Excluding weight reduction actions (by working on car volumes, components, optionals and materials) represents a very partial view of technological innovation. In a probable scenario of increasing congestion and GHGs emissions, the European industry competitiveness should be strengthened by stimulating volume reduction and material substitution, thus downsizing weight and reducing CO<sub>2</sub>/km at lower marginal costs.
- 2) **(Social costs and benefit assessment)** Moreover, external costs have not been considered among the other social cost categories in the cost/benefit analysis, thus reaching results that are strongly misleading. FOE Italy has 10 years of experience in evaluating external costs of mobility and our last Report is available for public consultation ([www.amicidellaterra.it](http://www.amicidellaterra.it)). If proper calculations would be done (but this would need a specific research yet to be done), CO<sub>2</sub> car policy would present net social benefits and no net social costs/ ton CO<sub>2</sub> eq. avoided!
- 3) **(Costs to producers should be evaluated in terms of % of car prices).**  
We have elaborated the TNO-IEEP-LAT (2006) costs to producers in terms of car price percentage. It comes out that on average (all car categories) the costs are about 6% of car prices. We don't think that this figure could justify ACEA cry of alarm on industry disruption.

We suggest that the Commission evaluates producers and consumers costs (or benefits) of the various policy options in terms of % of price category (and not in absolute terms), so to take into account the economic capacity of consumers. Instruments for reaching the 120g target that puts an expected % cost in high CO<sub>2</sub>/km cars categories equal or lower than % cost in low CO<sub>2</sub>/km cars categories should be rejected.

In order to overcome the critiques on the points raised (as stated in annex 1), we strongly demand that the new impact assessment accompanying the new Commission proposal expected for 2008 is done under new assumptions.

#### **4) Best instruments to reach the 120 target**

Indeed, we are in favour of a full implementation of economic instruments based on CO<sub>2</sub>/km benchmark. We believe that instruments fully coherent with the polluter' pays principle should be promoted (costs for high CO<sub>2</sub>/km cars categories, benefits for low CO<sub>2</sub>/km cars categories). **Emission/km trading among producers** with a benchmark at 120 gCO<sub>2</sub>/km at 2012 is simple, feasible, cost efficient, and the only one coherent with the polluter pays principle. The big innovation is that premiums would be made available for those who will invest and succeed in reaching the benchmark, while economic penalties would stimulate those who are lagging behind to invest for car innovation. An obligation for those who gain them to sell certificates should be used in the instrument implementation.

TNO-IEEP-LAT studies say that with Emissions/km trading with a 120 target, the % cost will be max 16% in the big diesel car segment, while they will be 6% max in the small diesel car segment. If the target for car manufacturers would be 125g, under emissions/km trading the % cost for high carbon cars would be reduced, while % benefits for low carbon cars would be higher: we think that these penalisations and premiums in a competition scenario based on low carbon car innovation will be economically well balanced. It should be reminded that this mechanism is not at all a simple transfer of money without efforts by manufacturers, indeed benefits are *net benefits*, coming from costs of innovation and revenues from certificates: net benefits will be gained only by the most active manufacturers in innovation and marketing.

Without **Emission/km trading among producers**, **all producers would only have costs and no benefits, thus CO<sub>2</sub> guided innovation and industrial competition based also on CO<sub>2</sub>/km benchmark will not take off.**

#### **5) No differentiation criteria that contrast with CO<sub>2</sub>/km reduction target**

We believe that target differentiation based on consumer utility and not on public utility criteria should be avoided for very strong environmental reasons:

\* ) power and weight criteria tend to increase CO<sub>2</sub> emissions, noise, and accidents external costs, so they are in strong contrast with CO<sub>2</sub> policy aims. We find it

incredible that they have been considered in at least 12 of the 18 scenarios of the Commission studies;

\*\* ) car surface (pan area) is one of the main factors influencing congestion (the highest external costs of mobility in Italy, for example). All studies and valuations converge on the fact that continuous increase of mobility demand and related congestion will be the major problem to be counteracted. It would be a serious mistake to base car target differentiations on criteria that **increases congestion**. Indeed a proper instrument for CO<sub>2</sub> reduction should promote production trends that contribute to sell smaller cars, in order to reduce congestion external costs. The typical example is the success of 5 seats small cars in those big towns where streets are very narrow and congestion is huge. As compared to other cars, small cars allow for less road congestion. We hope that Commission doesn't wish to put a higher burden on low pan area cars instead of promoting their role in limiting congestion!

\*\*\* ) **if differentiations should be considered for a new car policy, the only compatible approach with the public utility approach is the number of passenger seats.** In an increasing climate change scenario, cars should be made for transporting passengers, not for other purposes. Even in this case we suggest the use of Emissions/km Certificates Trading among producers. Differentiation of benchmark would take into accounts the number of seats: 2, 4, 5, and more seats. We suggest that the seat differentiated target should be calculated on the basis of expected figures on car sales in each (seat) class. A possible figure could be:

- -90 gCO<sub>2</sub>/km for two seats,
- 110 for four seats,
- -120 for 5 seats,
- 130 for 6,
- 140 for 7, etc.
- ban vehicles over 240 g/km

These targets could be refined, so that in average 120g/km by 2012 is respected.

## 6) Others (marketing rules and speed limits)

Marketing activities by car producers should target low carbon models. Rules in car marketing could be avoided, if an Emissions/km market is introduced. In fact this instrument would stimulate producers to change marketing patterns autonomously. In case of no emissions/km trading, binding marketing rules should be introduced.

As to speed limits, we are in favour of engine speed limits in order to reduce the external costs of accidents and energy consumption.

## **Annex 1 – Critiques to Impact Assessment of 7 Feb Communication**

The impact evaluation supporting the Communication presents two important types of evaluation, namely:

- The calculation of long term greenhouse gases reduction potential, by summing up the yearly reductions referred to the period 2010-2920
- The estimate of the net social cost due to greenhouse gases reduction, taking into account the costs sustained by producers, consumers and State.

The data on the social costs of the impact evaluation, apparently neutral, are in fact the result of a number of assumptions and/or elaborations, which, in some cases, cannot be shared, if the evaluation has to remain impartial. The impact evaluations, albeit resulting from independent studies (of which the TNO-IEEP-Lat 2006 one is particularly important), are in any case based on technical specifications chosen by the EU Commission.

We therefore think that the arbitrary or biased elements of the assumptions formulated by the Commission on the costs of CO<sub>2</sub> reduction measures should be exposed.

### **a) Assumptions on the average car weight trends in the period 2002-2012 and their influence when evaluating the costs of the technical options for reducing CO<sub>2</sub> car emissions (measure a1)**

To be sure, assumptions on average car weight trends are not without influence, when evaluating the costs of the technical options for reducing CO<sub>2</sub> car emissions, but they should be thoroughly examined in all technical aspects and carefully formulated.

It is therefore surprising that the impact evaluation done by the Commission staff does not consider a reduction of average volume and weight as a crucial option to reduce CO<sub>2</sub> emissions from cars, but sees it just as one possibility left to consumer choice, the same consumer, by the way, that the measure should help orienting. Albeit two scenarios have been formulated regarding weight, none of the two calls for a reduction or at least a stabilization of the average weight. On the contrary, two hypotheses on weight increase have been formulated:

Scenario A): a prosecution of the historical trends (with 2002 taken as base year), with a 1% yearly increase (equivalent to 16% for the period as base year).

Scenario B): a gradual reduction of the yearly weight increase, from 1.5% to 0.5% in 2012 (i.e. a 10% increase in the period 2003-2012).

While to repeat the calculation is impossible, we can safely deduce that the average weight increase determines higher costs; a weight stabilisation, on the contrary, would cause a 40% costs reduction, while a yearly 0.5 weight decrease (-5% in 2003-2012) would halve the costs presented in the scenario (and made public in the Communication' synthesis!).



Keeping in mind the upcoming Commission proposal, it would be appropriate to quantify the relevance of safety implements (air bag, ABS, etc) on the average car weight, separating those from other possible cause of weight increase, which are not consistent with CO<sub>2</sub> reduction objective`

**b) Lack of consideration, among the technical options for CO<sub>2</sub> reduction (measure a1), of the opportunities offered by alternative fossil fuels (methane gas).**

**c) Lack of consideration, among the technical options available on the CO<sub>2</sub> reduction path (measure M1), of the possibilities offered by emission/km certificates trading on a single benchmark level (120gCO<sub>2</sub>/km), which would be the most cost efficient tool for producers.**

Indeed, it is difficult to understand why the impact assessment has assumed as cost value a non optimal tool, namely the “application of a percent reduction target for producers”, excluding the optimal tool coming out from the study simulations, which is **emission/km certificates trading**.

**d) Lack of consideration of evaluating the external costs of mobility in the cost evaluation of CO<sub>2</sub> reduction measures (all measures).**

In fact, the objective of the impact evaluations should be the calculation of the average social costs/benefits of reducing a ton of CO<sub>2</sub>. However, the conceptual assumptions and the equations considered by the different studies manage to exclude the concept most relevant in a public good vision, i.e. the external costs of mobility.. All the six studies quoted fail to consider the citizens exposed to the various types of externalities (damages due to climate change, health damages, loss of time caused by congestion, economic losses due to material damages to ecosystems and property).

This matter is not a trivial or theoretical one, because it is important at the quantification level. The fact that for the impact evaluation it has chosen not to account for the external costs that the target of 120gCO<sub>2</sub>/km would allow avoiding, determines an unbalance on the social costs side, thus steering the break even point towards a watered down objective, less stringent than the one presented till now.

It is difficult to understand why the Commission offices in certain cases, when analysing the opportunity of some policies, do recur massively to external costs evaluation (a case in point is the cost-benefit analysis done in support of the thematic strategy on atmospheric pollution - CAFE) while, when addressing car emissions, a totally analogue issue coming after that, the methodology of external cost is not applied and is totally ignored, even at the conceptual perspective level.

**e) Inclusion of fiscal instruments in the evaluation of the social costs of CO<sub>2</sub> reduction (all measures).**

We find this formulation quite absurd: agreed that excise duties should be used with the aim of reducing externalities, with the Commission staff assumption the result is that the cars which produce less emissions (thus reducing external costs and the related public spending) would be taxed more heavily.

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