



Questions and Answers on Co2 legislation **17 December 2008**

Q. What does the CO2 legislation say?

- Automakers will have to reduce CO2 emissions from new cars to 130 grams per kilometre by 2012/15, with an additional 10 gramme reduction coming from ‘complementary measures’ including a greater use of biofuels.
- 65 percent of new cars will have to comply with the emission requirements in 2012, 75 percent in 2013, 80 percent in 2014 and 100 percent in 2015.
- Eco-innovations will count for up to 7 grammes.
- There are special provisions for niche manufacturers.
- A new objective of just 95 grams per kilometre was fixed for 2020. This will be conditional to an impact assessment.
- Penalties will be imposed on a sliding scale. Manufacturers that exceed their target by more than 3 grams will pay 95 euro per excess gramme. Lesser transgressions will be charged between five and 25 euros. From 2019, penalties will always be 95 euro (review in 2013).
- In 2014, there will be an evaluation of the average mass (weight) development of cars over the previous three years; with a possible adjustment of the CO2 targets implemented in 2016. There will be a review every three years thereafter.

Q. What does the European auto industry think of the agreed CO2 legislation?

A. With the vote in the European Parliament now passed and the Council expected to follow this decision, the EU is set to adopt an extremely tough piece of legislation

The legislation forms part of the ambitious European energy and climate change package, to which the industry will continue to contribute. The auto industry is ready to meet the challenging CO2 legislation for passenger cars, despite the sudden dramatic economic downturn that severely limits our resources. Manufacturers do ask for governments to support the strategic auto sector in these extraordinary circumstances to ensure a vibrant, innovative and strategic sector in the heart of Europe.

The CO2 legislation gives the auto industry some essential flexibility to adjust its development and production cycles to the legal requirements and to limit the financial risks caused by largely unpredictable factors including consumer preferences, market trends, economic developments and legal requirements in different fields. However, and despite the modifications to the original proposal, the penalty of €95 per excess gramme of CO2 remains extremely high compared to the price of CO2 in other sectors.



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The industry has to continue investing heavily in R&D and new product programs in order to reach the short-term targets. Furthermore, the long-term CO₂ target set by the EU will require technological breakthroughs, new refueling infrastructure and a swift renewal of the car fleet on Europe's roads.

The current economic situation hampers the European automobile industry's ability to allocate the required resources. Apart from funds for R&D, the sector needs a functioning financial market, low-interest loans and a range of market incentives to restore consumer demand.

Q. Has the CO₂ legislation been watered down?

A. The CO₂ targets are and have remained extremely tough. Therefore, it is important that the legislator has introduced some essential flexibility to match the legislative objectives with the nature of car manufacturing. The auto industry is characterised by 1) long development and production cycles and 2) its dependence on largely unpredictable factors including consumer preferences, market trends, economic developments and legal requirements in different fields. These can be instrumental to missing or meeting exact targets.

Over the past decade, the auto industry has been directing large investments towards the transition to a low-carbon economy, and the industry is committed to further contribute. It will not be easy to achieve low-carbon mobility anytime soon, as there is not 'one' solution, and zero-tailpipe emissions not always equal zero emissions: the source of the energy is of relevance too. All this will require enormous investments in many different technologies at the same time. The industry cannot do this on its own.

Today's legislation focuses heavily on new technologies, and far too less on forcing a change in the market and reducing CO₂-emission from existing vehicles as well as new cars, through intelligent infrastructure, eco-driving, alternative fuels and much more. Society now needs to focus its combined efforts on changing towards low-carbon solutions, and has to invest in the logistics and infrastructure requirements that come with it. This requires a partnership from policy makers, automotive and fuel industries, and other stakeholders on holistic and global scale.

Q. Critics claim that the car industry "does not have to do anything" to meet the new targets...

A. This is simply not true. For the manufacturers, there is no such thing as 'business as usual'. The industry is where it stands today because of tremendous efforts made over the past decade, and manufacturers will still have to make enormous investments in the years to come. New technologies have been developed over the past decade, and many more are to follow. Reflecting the long development and production cycles in vehicle manufacturing, these technologies have and will gradually sway the market.



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A lot depends on price and consumer acceptance, though. That is where governments can help.

The European manufacturers are world leaders in clean and low-emission technologies and Europe already has the lowest emission levels of the globe. In order to continue progress and also keep this important industry in Europe, EU leaders now have to massively support their manufacturers to ensure further progress, and safeguard this strategic sector.

Q. What will the legislation cost to the European manufacturers?

A. The European Commission has calculated an average cost per car of around 1500 euro to comply with their CO₂ proposal. Contrary to what the Commission often says, these figures have been corrected for the potential fuel savings from consumers. In other words, they do neither accurately reflect manufacturers' costs, nor retail price effects. In addition, there will be the costs for the 10gCO₂/km 'complementary measures' (gear-shift indicators, tyre-pressure monitoring, low-rolling resistance tyres, mobile air-conditioning, biofuels)

Working with an 'average' has its limitations anyway, and many other factors play an important role as well, such as market demand. Cost is a relative issue, depending in part on the feasibility to earn investments back. If a manufacturer cannot do so, there will be 'costs' in terms of loss of production and employment.

Manufacturers will be investing billions of euros again over the years to come as they have done over the past decade. In the current economic circumstances, it is fundamental they get support (low-interest loans, market incentives) to bridge the cycle and help sustain the transition to low-emission vehicles.

Q. Will cars become more expensive?

A. The European Commission has calculated an average cost per car of around 1500 euro to comply with their CO₂ proposal. In addition, there will be the costs for the 10gCO₂/km 'complementary measures' (gear-shift indicators, tyre-pressure monitoring, low-rolling resistance tyres, mobile air-conditioning, biofuels).

The reductions beyond 2020 will be significantly more expensive, as they include electrification of vehicles and the use of hydrogen.



Q. Will these costs be passed on to the consumer?

A. Vehicles have to remain affordable to consumers. In the current competitive market place, and with consumer spending under pressure, the trend in vehicle prices is rather downwards than up. In real terms, car prices have decreased by around 10% over the past decade. This trend is not likely to change.

Q. Will jobs be lost because of this legislation?

A. Manufacturers have and will further try and absorb the additional cost by focussing on cost-cutting measures and restructuring. It is fundamental that they get support (low-interest loans, market incentives) to bridge the economic downturn and help sustain the transition to low-emission vehicles.

Q. Will the industry be able to meet the legislation?

A. Ultimately, the manufacturers need a market to accept and purchase the new technologies – thereby making the CO₂ objectives a reality - and this has, for a long time, not been the case. We see demand changing somewhat now, but with the deteriorating economic circumstances, the overall drop in demand weighs much heavier.

A supportive market environment is a prerequisite for meeting the tough targets the industry faces, and governments can do a lot to help, for example with market incentives and fiscal measures. Many countries have (only recently) taken such measures, but tax-schemes ought to be coordinated throughout the EU to sort the most effect. The same is true for scrapping schemes for older vehicles.

Q. Why have you not spread the CO₂ reduction cost over a longer period, as the EU objective to reach the 120grammes/km target was set long ago?

A. The industry has been doing exactly that. But as costs are rising and will be rising further, the industry needs a supportive framework to sustain the necessary level of investment in R&D, engineering and new product programmes.

The industry is clearly committed to reducing CO₂ emissions from cars and has, through improved vehicle technology only, reduced CO₂ emissions from cars by an average 14% (1995 - 2007). That is more than any other industry has achieved so far. With this result, we also actually overachieve the EU objective of reducing CO₂ emissions by 20% compared to the 1990 level.

Between 1995 and 2008, ACEA members have introduced more than 50 new CO₂-reducing technologies into their vehicles. And the industry is determined to do more.



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The industry invests Euro 20 billion (4% of turnover) a year in research and development, a large amount of which is invested in improved fuel-efficiency and other technologies that enhance the environmental performance of cars.

Q. What needs to be done in your view?

A. There is no such thing as “one technological solution” to reduce CO2 emissions from cars. There are many options, and depending on consumer preferences and their geographical requirements, markets may demand a different approach. Legislators should not prescribe the industry which technologies to apply. The manufacturers are best equipped to find the most suitable solutions.

Furthermore, new vehicle technology alone cannot deliver the results society desires. All relevant actors have to work together: the vehicle industry, the fuel industry, policy makers and drivers. We call this an integrated approach. Reducing CO2 emissions from transport is a complex challenge that needs the involvement of all.

Last but not least, we need a market to accept and take-up the new technologies – and thereby making the objectives a reality - and this has, for a long time, not been the case. We see demand changing somewhat now, but with the economic circumstances, the overall drop in demand weighs much heavier.

It is important to ensure a supportive market environment, and governments can do a lot to help, for example with fiscal measures. Many countries have (only recently) taken such measures, but tax-schemes ought to be coordinated throughout the EU to sort the most effect.

Q. What do you think of the penalties?

A. The level of penalties remains disproportionate. The proposed 95 € per excess gramme of CO2 per car, would price a tonne of CO2 emitted by cars at up to 475€ or more than in any other sector. The Emission Trading Scheme price currently floats around 15 € per tonne and may evolve towards around 33 € per tonne, according to Commission estimates. The penalties for the car industry would also be significantly higher than any cartel fine paid in EU competition cases which concern illegal competition law infringements with huge damages for consumers.

Q. What do you think of the long-term target?

A. The industry will now first focus on the targets for 2012/15, but it has always been clear that emissions will have to be further reduced, beyond this date. Another reason for further fuel-efficiency is that fossil-based fuels will run out. All manufacturers are therefore developing various low-carbon solutions including renewable energies, hybrid engines and hydrogen.



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Q. Is this a realistic target?

A. The target set by the EU is very ambitious and will require breakthroughs in technologies, a new refuelling infrastructure and a swift renewal of the car fleet on Europe's roads. This will be a tough challenge, and all relevant actors will have to combine their efforts, including the fuel and energy sectors and policy makers.

It is essential that personal mobility remains affordable, to ensure that new technologies are accepted by the consumer. Market demand will be key in reaching today's and future targets.

Q. Can you give examples of eco-innovations?

A. The European automotive industry has identified multiple categories for eco-innovative car technologies: systems & components, running resistance, well-to-wheel efficiency, smart navigation and driver information. All categories contain numerous technology applications, from adaptive cruise-control and super efficient LED lights to robotised gearboxes and the storage and re-use of heat.

Some of these examples are readily available today; others are still in the development phase. Some are very simple, many very complex and new. Some offer modest, others substantial CO2 reduction potential. The Directive only recognizes those eco-innovations that make a verified contribution to CO2 reduction.

Q. What are the provisions for niche manufacturers?

A. The Directive defines companies producing between 10 000 and 300 000 units per year as niche manufacturers. These companies generally serve only small market segments, producing a smaller range of models. This is why their emission target is calculated in a different manner: Niche manufacturers will need to reduce the average emissions of their fleet by 25% compared to the level of 2007.

Q. What are 'supercredits' for?

A. Radically new, so-called 'breakthrough' technologies such as electric battery power and hydrogen to power cars will be crucial in the long-term to further reduce CO2 emissions. The legislation aims at encouraging the development of such technologies, despite the high costs involved, by giving supercredits for cars that emit less than 50g CO2/km until 2015.

A supercredit means that such a car counts more when it comes to reaching the CO2 target of a manufacturer's entire fleet. In 2012, a car emitting less than 50g CO2/km will be counted as 3.5 cars. The supercredits will then be phased out until 2016, when cars with such extremely low emissions will be counted like all other cars.
