

QUESTIONS & ANSWERS

KEY POINTS ADOPTED BY THE EUROPEAN COMMISSION ON DECEMBER 19, legislative proposal on reducing CO2 from cars.

Average emissions target for passenger cars: 120g/km by 2012

- 130g/km reached by vehicle motor technology
- Additional 10 g/km reached by complementary measures (not specified yet, legislative proposal to follow in June 2008)
- **Parameter** for fixing emissions target for individual models: weight of the car
- **Penalties** would be applied to manufacturers not meeting the target. These penalties will be progressive: 20 EUR/gram/vehicle sold in 2012, 35 EUR in 2013, 60 in 2014 and 95 EUR as from 2015.
- **“Flexibilities”** include ‘averaging’ and ‘pooling’
- This proposal from the EU Commission will be subject to review by the European Parliament and the European Council (i.e. the Member States). Another proposal regarding the details on the complementary measures is expected in June 2008.

1. GENERAL COMMENT

What does the European car industry think of the legislative proposal in general?

The proposal is disappointing, reduces the competitive strength of the European automobile industry, puts vehicle production in the EU at risk and would also lead to disproportional costs compared to the environmental gains and the costs of carbon reduction facing other sectors.

The suggested legislation does not offer the promised balanced framework to reduce CO2 emissions and to safeguard EU competitiveness and growth. We urge the EU governments and the European Parliament to reconsider the Commission’s strategy and engage in a partnership with the car industry, the fuel industry, all relevant authorities and consumers to ambitious carbon reductions society wants. It is Council and Parliament that will take the final decisions on this issue, in the months to come.

All manufacturers’ efforts are focussed on further reducing carbon from cars. The upcoming regulatory framework should help us in a constructive and sustainable way. Investments in eco technologies should be recognised and rewarded; industry needs sufficient preparation time ahead of new legislation.

The car industry insists on the need for a fair and realistic system with objectives it can meet in an appropriate timeframe. The suggested penalties are of an unprecedented high level. We are not looking to buy our way out. If at all, payments should be reasonable and defined in relation to the market price of carbon applied widely to other sectors

The European auto industry is fully committed to reducing CO₂ emissions from cars and supports the EU objective of reaching a level of 120 grammes CO₂ per kilometre. Improved car technology has delivered significant results over the past decade and will continue to be a major source of further CO₂ reduction.

The challenge of climate change can, however, not be solved by one sector, one technology or one measure; solutions will be multiple and may differ per region and consumer. The car industry advocates an integrated approach, combining the efforts of all relevant parties involved.

2. ON WEIGHT

The Commission proposes to put in place a system based on the weight of a car. Do you agree with this system?

The industry wants a legislation that is fair and workable. Applying a weight-based system appears to provide such a framework. Furthermore:

- It is a simple system based on one parameter that is independently verified by type approval authorities (and stated in the Certificate of Conformity documents);
- It is a parameter with a high correlation to CO₂ emissions;
- It is a good proxy for important car attributes;
- It is a system already used in Japan and China (and under consideration for the reviewed US CAFE car regulations), thus leading to a harmonised base for fuel consumption / CO₂ legislation in key world markets;
- It provides a more even impact of legislation across ACEA members compared to some other parameters that significantly disadvantage/favour a certain group or group of manufacturers.

Do you agree with the slope of the curve, which determines the burden sharing between manufacturers?

This particular part of the legislation should be determined by the Council and the European Parliament. The industry demands a legislative framework that is balanced and sustains the competitiveness of the industry. It should also safeguard the diversity of the industry and the affordability of cars throughout all segments. All manufacturers are making tremendous efforts to cut carbon and vehicle technology will continue to deliver major contributions in the future. Within a framework that involves all relevant parties – car industry, oil industry, policy makers, drivers – the automobile industry can remain innovative and competitive, and play its part.

Is it not likely that a weight-based system gives incentives to manufacturers to produce heavier cars?

It is a misconception to believe that, in a weight based legislative system, manufacturers would have an incentive to build heavier cars. As the overall reduction

target for car manufacturers is very ambitious, it will drive weight and CO₂ emissions further down. This is illustrated by the experience made in Japan, where the average weight of the new car fleet has decreased despite a functioning weight-based fuel consumption legislation specifically aimed at reducing CO₂.

It is also a misconception that heavier cars have an “easier” target to meet. Even though heavier cars will, in absolute terms, have a higher target to meet than lighter cars, the target itself would not be “easier” to meet, nor would lighter cars be “punished” with a more difficult (because lower) target. Physical laws determine that energy is needed to move mass; increased weight leads automatically to higher fuel consumption and CO₂ emissions, and vice versa.

Do all the manufacturers agree with applying a weight-based system?

Yes. All European manufacturers make considerable efforts to reduce CO₂ emissions and want a legislative framework that is fair and workable. The parameter weight will be one of the features of such a framework, and it can only be judged in its totality. We now urge the Council and the Parliament to find the right key for making the proposed framework work.

Why would “footprint” not be a better parameter?

All parameters have pros and cons. Footprint, although a good proxy for size, has some disadvantages compared to weight:

- It has a strongly negative impact on mini/city cars;
- It would punish manufacturers for installing safety or comfort features that increase weight;
- It would give the same CO₂ limit value to cars with very different body structures (and hence CO₂ emissions) that are built on the same or similar platforms (using the same platform for different models is key for cost reduction and competitiveness).

3. ON COMPLIANCE

Can the industry comply with the proposed system by 2012?

That will be extremely difficult and depends for an important part on the development of consumer demand. The European Commission’s proposal sets a vehicle engine target that is too strict in a timeframe that is too narrow, leading to exorbitant and disproportional costs.

The car industry has taken and will take many incremental steps in the coming years to further reduce CO₂ emissions from new cars. But consumer demand has been lacking behind, despite significant marketing efforts. We see the trend changing slowly, but a major shift will take time. CO₂-related taxation can provide important stimulus.

Although many CO₂-cutting technologies will continue to be implemented in cars in the coming years, new legislation should not come into force before 2015, to provide sufficient lead-time to adapt all cars to new prescriptions. Around 60% of the cars for sale in 2012 are already in production today: these cannot be changed without making significant extra costs.

As a general comment: much larger CO₂ reductions can be achieved through an integrated approach, combining further improvements in vehicle technology with efforts from the fuel industry, policy makers and drivers. Legislation on cars should always be part of a general, comprehensive CO₂ reduction strategy. The challenge of climate change cannot be solved by one sector, one set of measures, or one technology.

What does the industry think of the proposed penalties?

The proposal suggests imposing compensation payments of an unacceptably and unprecedented high level. The car industry demands a fair and realistic system with objectives it can meet. It is not looking to buy its way out. Compensation payments should be reasonable and defined in relation to the market price of CO₂ which applies to other sectors.

In the proposed legislation:

- There is no link between the penalties facing the car industry and the price of carbon facing other industries through the European emissions trading scheme. The proposed penalties price a tonne of carbon produced by cars at up to 475 euro(*), where the ETS market price will evolve towards about 33 euro per tonne, according to Commission estimates coming from currently less than 5 euro. **Based on the assumption that a car drives 200,000km over its lifetime, one gramme of CO₂ emitted above target corresponds to 200kg of excess emissions, or 0.2 tonne of CO₂. If the car industry would be fined €95 per gramme-above-target, this would equal paying €475 (5 X 95) for each tonne of CO₂, far more than any other sector.*
- Penalties for the car industry would be significantly higher than any cartel fine paid in EU competition cases, which concern illegal competition law infringements with huge damages for consumers.
- Compensation payments in US & Japan are much lower: US CAFE: about 10-15 euro/gramme CO₂; Japan: about €6000 per manufacturer

If the penalties are this high, what kind of extra costs is the industry facing?

The suggested level of payments is exorbitant and disproportionate.

- **Illustrative examples of resulting financial burden**

Volkswagen

€95 X 5g X 3.1mio sales = €1.472 BILLION

PSA

€95 X 5g X 2mio sales = €950 MILLION

Fiat

€95 X 5g X 1.15mio sales = €546 MILLION

Assumptions for calculations

- €5 per gram of CO₂
- Companies' average distance to target: 5g/km

4. ON "FLEXIBILITIES"

Is the industry in favour of "pooling"/ "averaging"/ "trading"/ "phasing in"?

The industry wants a regulatory framework that it can comply with in a cost-effective and sensible way. We are not looking to buy ourselves out of the problem.

As stated by the European Commission in its February Communication: a legislative system should safeguard the industry's competitiveness and its diversity; it should maintain affordability and accessibility of cars to consumers, and it should not endanger employment in Europe. Following these criteria, it is necessary to opt for a system that allows manufacturers some flexibility in terms of the implementation of certain technologies, or in terms of "credits" for certain efforts.

"Averaging" means that, within an company, the CO₂ performance of all cars sold in Europe will be added up and divided by the sales number to achieve the group average CO₂ result. The sum of the different group averages should result in the average 130 grammes CO₂ per kilometre target set by the legislation.

"Pooling" would allow manufacturers that do not form a group to average their CO₂ performance. This is a tool that adds some flexibility to the overall quite rigid legislative framework, which may help some manufacturers to comply (better). Reasons for pooling could include expected developments in the product portfolio, model changes and unexpected developments in market demand. Depending on these factors, the CO₂ performance of a company may differ year-on-year. Sharing a target may soften these variations.

Pooling is by no means similar to "trading". The industry opposes any form of closed trading scheme between manufacturers.

The industry is open to **emission trading** in general but only when the sector would be included in a open trading scheme. We oppose a closed trading scheme, which would lead to market distortion in the automobile industry and set different prices for CO₂ in the auto industry and other industries without justification.

5. ON IMPACT & CONSEQUENCES

Will the industry pass the costs of the penalties on to the consumer?

Most likely, these costs cannot be passed on fully to the consumer due to a hesitant demand for fuel-efficiency and the heavy competition with non-European manufacturers who have significantly lower production costs. Consequently, manufacturing capacity in Europe is at risk.

Will cars become more expensive because of the upcoming CO2 legislation?

Reducing CO2 from cars is complex and several thousand euros per car are involved. And the narrower the timeframe is to implement changes, the more expensive it gets. According to the Commission's 'impact assessment', the production costs per car will rise by 6% on average. That figure is probably too low.

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But equally importantly: vehicle technology is not a cost-effective way to reduce further carbon from cars. Within the European Climate Change Programme, the independent scientific institute, TNO, assessed that car technology is up to ten times more expensive than measures such as an increasing use of biofuels or adopting an economic driving style. This means that much larger CO2 emissions could be achieved at lower costs. The car industry stresses the need to achieve environmental targets at the lowest costs to society as a whole.

Will jobs and production in Europe be lost?

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6. ON NEXT STEPS

What will the industry now do to influence the decision by the Council and the European Parliament?

The industry will uphold a constructive dialogue with all EU legislators, as it has done in the past. The industry is committed to help reducing carbon emissions further. New car technology will play an important role in any strategy concerning cars, but the largest gains will be made if efforts are combined and all relevant parties contribute. The industry will continue to communicate and clarify this message and trusts the Council and the European Parliament will fully engage in an open debate.

7. ADDITIONAL QUESTIONS (back up)

The car industry has demanded sufficient lead-time. Why do you need more time?

The industry delivers and will deliver, but it simply takes time before the whole fleet will be involved. We will introduce many different technologies in the coming years, each of us in our own way. There is no other industry that can showcase the same kind of efforts and resolve. But mandatory requirements cannot come into force before 2015.

Over 60% of cars for sale in 2012 are already in production today and another 30% is in the advanced stage of development, where only limited changes are still possible. Development of a car takes up to 5 years and the typical production cycle is around 7 years. Vehicle and engine adjustments are highly complicated capital-intensive operations. To be able to comply with specific legal requirements, our industry needs sufficient preparation time. Every detail matters, since different types of legislation can have different effects for manufacturers and models.

Lead-time is an accepted part of legislation. Euro 6 standards, for example, were adopted in 2006 and will enter into force in 2015. In Japan, new CO₂-related agreements were accepted in 2006 and will apply from 2015. The target set in Japan is 138 grammes of CO₂ per kilometre.

Will the new legislation provide the industry with a competitive advantage, as the European Commission claims?

The European car manufacturers are already world leaders in many fields of expertise, including environmental performance, based on a long tradition of innovation and fulfilling consumer demand. Our industry continuously strives to remain at the top. We do not need new legislation to help us to be or become competitive. And only a comprehensive cost-effective framework will support us in continuing to lead the way. Everything else will lead to a distortion of our competitiveness and a loss of jobs.

Did the car industry fail to act in the past?/ Did the industry ignore certain trends or technologies ?

No. The industry is clearly committed to reducing CO₂ emissions from cars and signed a voluntary agreement to contribute to the EU Kyoto protocol objectives already in 1998. This agreement has, through improved vehicle technology only, reduced CO₂ emissions from cars by an average 13%.

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. Between 1995 and 2008, ACEA members will have introduced more than 50 new CO₂-reducing technologies into their vehicles. Many more are in the pipeline.

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

Then why will the industry not meet its 1998 voluntary commitment?

The car industry is delivering on its 1998 Commitment and has reduced new car carbon emissions by over 13% between 1995 and 2006. However, we have had to deal with market trends and EU regulations that have reduced the results of our CO₂-reduction efforts. Through technology we have improved fuel-economy by 22%. But EU regulations, in particular on air quality and safety, and market trends have added around 9%, or almost 15 grammes of CO₂, again.

The industry has known for a long time that it would have to comply with 120 grammes CO₂ per kilometre. Why did you not act?

The car industry fully supports the EU in its aim and has made significant contributions over the last decade. The objective of 120 was, however, never set as a target for vehicle technology only, but provided a global direction for future policy to-be-discussed, involving a combination of measures. That is exactly what we are discussing with the European institutions and the other relevant actors involved.

Regrettably, important policy instruments such as labelling and CO₂-related taxation have not yet materialised. The up-coming EU legislation needs to reflect the foreseeable technological limits, the need to include the existing car fleet and improve infrastructure, and should address the demand challenge: cars are bought and driven by consumers. We support a harmonised and linear CO₂-related taxation of cars and of alternative fuels.

How can infrastructure measures contribute to reducing CO₂ emissions from cars?

As part of a comprehensive package of measures, infrastructure changes have an enormous potential to reduce CO₂ emissions. Cars that are stuck in traffic jams or have to brake for every traffic light waste fuel. Reducing road congestion through a variety of measures, including better road design and the adoption of intelligent traffic management technologies, is an effective means of reducing CO₂.

Of its CO₂ reduction target from cars, Japan allocates 52% to measures other than vehicle technology, most of them infrastructure adjustments.

What role should alternative fuels play?

As part of a comprehensive package of measures, alternative fuels have a substantial role to play and the fuel industry has a clear role to further develop fuels and make them available on a much larger scale. Our industry has developed and adjusted engines for different kinds and combinations of alternative fuels and many models are

on the market already today. CO₂-related taxation should include alternative fuels as well as cars themselves.

Is it realistic to believe that eco-driving will make a real difference?

As part of a comprehensive package of measures, eco-driving can significantly reduce fuel consumption and CO₂ emissions. Studies show a long-term effect of training of a 7% reduction under every day driving conditions. If applied generally, this would result in a saving of millions of tonnes of CO₂.

One of the reasons for this substantial effect is that eco-driving is very easy to apply (shift gear early, anticipate, use navigation systems, etc.). Eco-driving should be part of the learning package of new drivers and training could also benefit professional drivers and their companies.

8. Key figures:

Important employer

- 2.3 million direct jobs
- indirect employment for another 10 million families

The world's largest vehicle producer

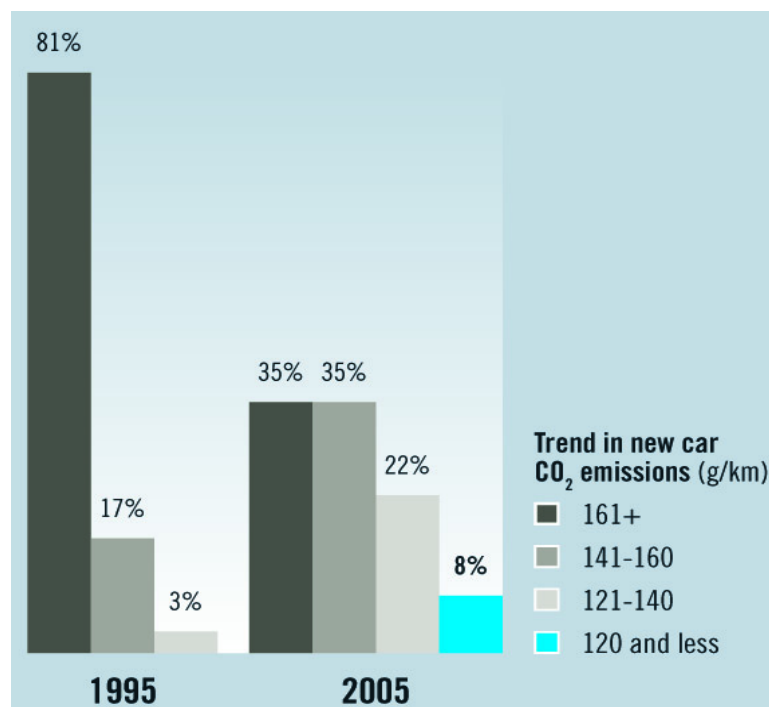
- Of 50 million cars produced globally, one third is manufactured in the EU

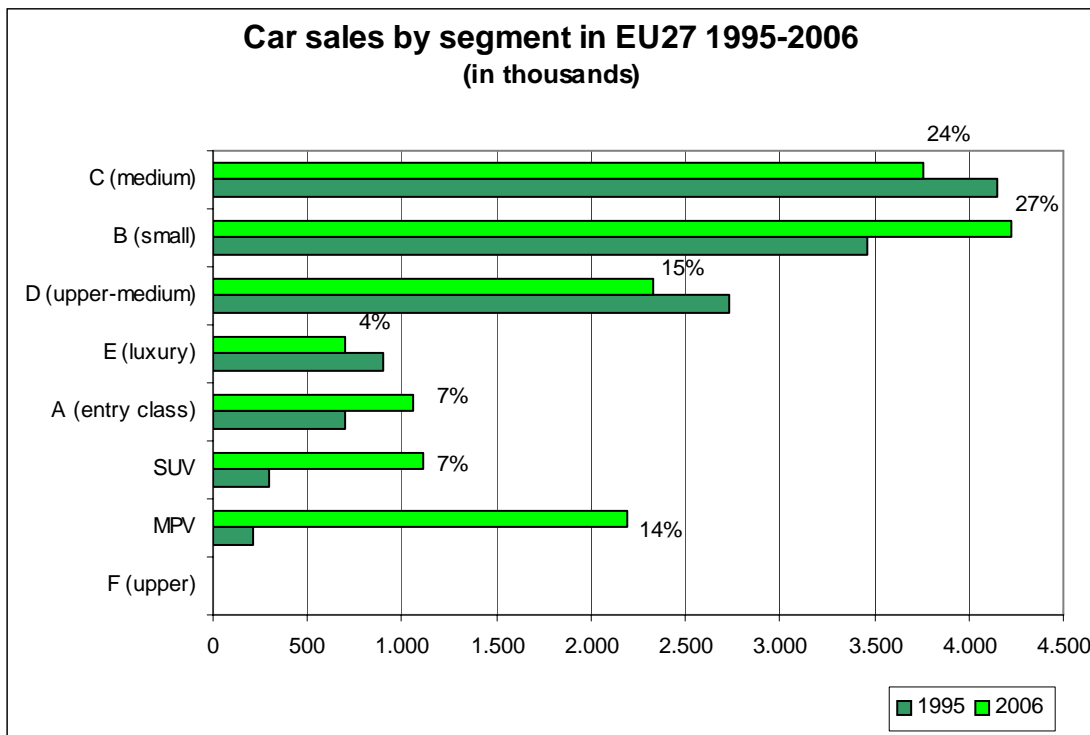
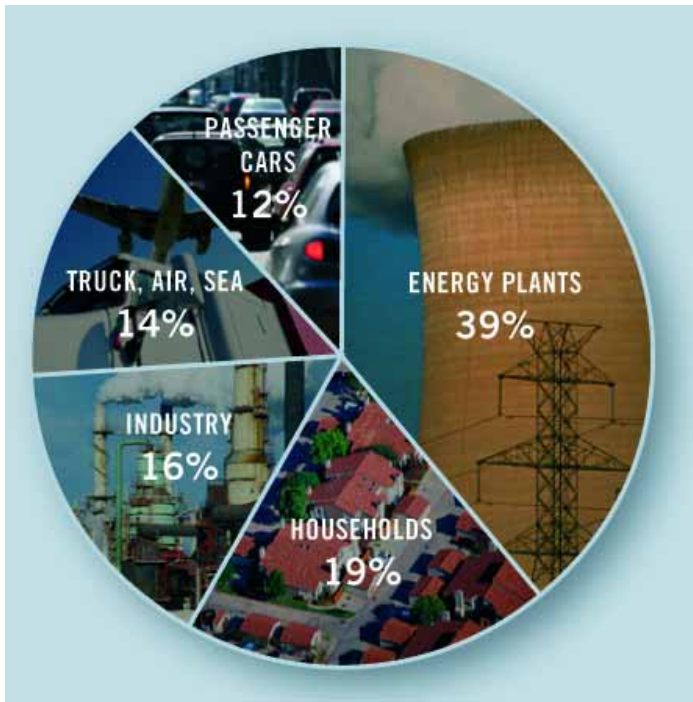
Yearly investment of 20 billion euros in R&D

- 4% of turnover
- largest private investor in R&D in the EU

One of the most regulated sectors in the EU

- more than 80 EU directives
- 115 UN-ECE pieces of legislation





The ACEA members are BMW Group, DAF Trucks, Daimler, FIAT, Ford of Europe, General Motors Europe, MAN Nutzfahrzeuge, Porsche, PSA Peugeot Citroën, Renault, Scania, Volkswagen and Volvo. Toyota Motor Europe will join from January 2008.