



# CO<sub>2</sub> emission limit values for passenger cars

## EU proposals overshoot the mark

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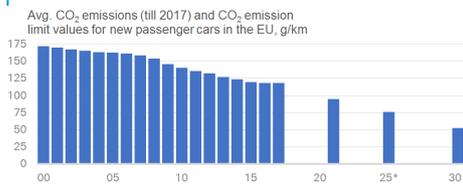
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The European Parliament's Environment Committee agreed on setting stricter CO<sub>2</sub> emission limit values for new passenger cars. By 2030, CO<sub>2</sub> emissions shall be reduced by 45% compared with 2021. The targets overshoot the mark. Besides lacking economic efficiency, they are ineffective in terms of meeting the ecological goals.

The European Parliament's Environment Committee agreed on setting stricter targets for new passenger cars after 2021. By 2030, CO<sub>2</sub> emission limit values shall be reduced by 45% from 2021 levels, with an interim goal of 20% by 2025. The resolution still has to be debated in the EU Parliament.

### CO<sub>2</sub> emissions of cars are supposed to decline



\* Resolution of the European Parliament's Environment Committee  
Sources: European Environment Agency, EU Parliament, Deutsche Bank Research

What are the implications? A glance at the facts, as usual, helps to put matters into context: Under the current regulation, the CO<sub>2</sub> emission limit value to be achieved by new passenger cars by 2021 is 95 grams per kilometre (g/km). In 2017, the CO<sub>2</sub> emissions level of new cars in the EU was 118.5 g/km. This represents a reduction of 31% compared with 2000, i.e. over a period of 17 years. From 2017 to 2021 – i.e. in just four years – CO<sub>2</sub> emissions would have to decline by a further 20%. This short-term target, in itself, is already fairly ambitious and can only be achieved if the share of electric vehicles in total new car registrations increases sharply in the years ahead. Irrespective of the electricity mix in the individual EU countries, battery electric cars qualify as zero-emission vehicles under the current legal framework.

The resolution of the EU Environment Committee would imply an average CO<sub>2</sub> emission limit value of 52 g/km by 2030 or a decline of 56% compared with 2017. In the 13 years up to 2030, the reduction in CO<sub>2</sub> emissions of new passenger cars would thus be almost twice that in the period between 2000 and 2017.

Such a target can be regarded as bold or visionary, as the majority of the EU Environment Committee members seem convinced that mass market adoption of electric vehicles is either looming in the years ahead – or, if not, can be coerced somehow.



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### **Electric cars continue to be a niche market**

Alternatively, it might be argued that this resolution disregards the laws of physics as well as current and foreseeable economic conditions. It is self-evident that these targets cannot be achieved with combustion engines alone. The electrification of the powertrain is deemed to be the solution to the problem. Currently, however, electric cars account for substantial market shares only if they are supported by (mostly government-funded) subsidies or where vehicles with combustion engines are subject to strict regulation. In the second quarter of 2018, the share of electrically chargeable cars in total new car registrations in the EU was just 1.7%.

Though it may disillusion or even frustrate ecologically-oriented NGOs and some parts of politics and media that routinely praise the benefits of electric mobility, the facts indicate that the average car buyer is not yet convinced of e-mobility. Whilst some market observers actually argue that the primary responsibility for low EV market penetration lies with the auto manufacturers, it is still the consumer who decides in a market economy which product is best suited to his specific needs. It may well be, however, that the EU Parliament's Environment Committee did not attach much importance to consumer preferences when voting for the new targets.

By setting stricter limit values, the Environment Committee aims to ensure that road transport in the EU makes a contribution to international climate protection via the roll-out of e-mobility. For the Committee, it seems to be irrelevant in this context that CO<sub>2</sub> limit values in other countries are less ambitious. But with the diesel scandal playing into the hands of the supporters of strict CO<sub>2</sub> limit values, imposing regulatory burdens on the automotive industry is currently fraught with few risks of opposition from politicians and the media. In times like these, some political decision makers seem to lose touch with reality.

### **Technological progress, subsidies or penalties?**

What will happen if the Environment Committee's CO<sub>2</sub> limit values win approval when the EU Parliament votes on the issue? In an optimistic scenario, the technological development of e-mobility makes fast progress and enough car buyers, voluntarily and without the benefit of subsidies, opt for an electric car. In a second scenario, market penetration of electric cars also increases, albeit mainly thanks to subsidies. If these are granted in the form of government subsidies, the funds will not be available for other purposes (e.g. in the area of climate policy). Cross-subsidisation of electric car sales by the auto makers themselves would come at the expense of returns and/or higher costs would have to be compensated elsewhere. In a third scenario, market penetration of electric cars is, for whatever reasons, not making enough headway to achieve the CO<sub>2</sub> limit values and automotive industry will have to pay penalties.

Neither of these scenarios is likely to materialise in its pure form. From the current perspective, the first scenario seems to be the one with the least probability, even though electric cars look set to become increasingly competitive in the years ahead. In the end, however, the car buyer will have the final say.



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The resolution would, in a sense, take a sledgehammer to climate policy. If implemented, consumer sovereignty and property rights would be curtailed further. It fits in with a series of EU climate policy goals which – if at all – can only be accomplished by means of regulatory law (limit values, prescriptions and prohibitions) on the one hand or subsidies on the other. Regrettably, market solutions are an exception. In the specific case of excessively strict CO<sub>2</sub> limit values for passenger cars, another disturbing factor is the lack of economic efficiency and effectiveness in terms of meeting the environmental targets. As CO<sub>2</sub> emissions could be reduced in other sectors at a lower cost, the macro- and microeconomic expenditure on climate protection would be unreasonably high. What is more, CO<sub>2</sub> limit values are not really an indicator of the actual absolute CO<sub>2</sub> emissions of a car, which depend on the total mileage per passenger car and the individual driving behaviour and – in the case of electric cars – on the electricity mix.

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