# CEP Centrum für Europäische Politik

# CO<sub>2</sub> EMISSIONS FROM NEW PASSENGER CARS AS OF 2020

cep Policy Brief No. 2012-46 of 12 November 2012

# **KEY ISSUES**

**Objective of the Regulation:** The EU sets the permissible emission values according to weight for passenger cars per kilometre driven as of 2020.

Parties affected: Manufacturers of passenger cars and their suppliers, car buyers.



#### Pros: -

**Cons:** (1) It is precisely the emission targets per kilometre driven that means that the targeted reduction in CO<sub>2</sub> emissions cannot be ensured. Therefore, it would have been better to integrate road transport into the European emissions trading system (EU ETS) instead.

- (2) Manufacturers of heavy passenger cars are burdened twice for no objective reason and placed at a competitive disadvantage.
- (3) The additional incentives to develop passenger cars with particularly low CO2 emissions are too small to be effective.

# CONTENT

#### **Title**

**Proposal COM(2012) 393** of 11 July 2012 for a **Regulation** of the European Parliament and of the Council for **amending Regulation** (EC) No 443/2009 to define the modalities for reaching the 2020 target **to reduce CO2 emissions from new passenger cars** 

# **Brief Summary**

All quotes refer to the Regulation (EC) No. 443/2009 in its current ("Article") or in the proposed version ("New Article").

#### Background and objectives

- In order to address global climate change, by 2050 the EU wishes to cut its CO₂ emissions by 80-95% compared to 1990 levels. According to the Commission, by 2050 transport emissions (excluding international maritime transport) must be cut by 54-67% compared to 1990 levels [COM(2011) 112, p. 6; see CEP Policy Brief].
- CO<sub>2</sub> emissions from road transport (p. 2)
  - increased significantly in comparison to other sectors, seeing a 26% increase between 1990 and 2008,
  - and represent approx. 20% of total EU CO<sub>2</sub> emissions.
- In order to reduce the average CO₂ emissions of a manufacturer's fleet of new cars, the Regulation No. 443/2009 [KOM(2007) 856; see CEP Policy Brief] has until now defined
  - $CO_2$  targets and their relevant measures (e.g. super-credits for passenger cars with low  $CO_2$  emissions, exceptions, sanctions) for 2012 and up till and including 2019,
  - as of 2020 only  $CO_2$  targets.
- The Commission proposes measures for achieving "in a cost-effective manner" and "as neutral as possible from the point of view of competition" the CO₂ targets valid as of 2020 for a manufacturer's passenger car fleet (Recital 1).

#### Scope

- Affected are all new passenger cars with at least nine passenger seats, including the driver's seat, which
  are registered in the EU for the first time and have not previously been registered outside the EU
  (Art. 2 (1)).
- Exempted from the obligation to comply with  $CO_2$  targets are manufacturers who in the previous calendar year and together with all of their affiliated undertakings were responsible for less than 500 new passenger cars registered in the EU (new Art. 2 (4)).

# ► CO<sub>2</sub> targets for manufacturers of passenger cars: present legal position until 2019

- As of 2012, each manufacturer must ensure that the average CO₂ emissions of its newly manufactured passenger cars do not exceed a manufacturer-specific CO₂ target (Art. 4). This CO₂ target results from a fixed basic amount and a variable additional amount which either increases or reduces the basic amount (Annex I; see CEP Graphic).
  - The basic amount is 130 grammes of  $CO_2$  per kilometre (Art. 1). Decisive are not the  $CO_2$  emissions of a single new passenger car, but the average  $CO_2$  emissions of a fleet of new passenger cars produced by one manufacturer (Art. 3 (1)).



- The basic amount of 130 g CO<sub>2</sub>/km is either increased or reduced by an additional amount depending on the weight of the manufactured passenger car (reference mass "M<sub>0</sub>" by 2015: 1,372 kg) (Annex I; see CEP Graphic).
  - If a passenger car is heavier than 1,372 kg, the basic amount is increased by an additional amount of 0.0457 g CO₂ per kg mass: The manufacturer-specific CO₂ target becomes less strict.
  - If a passenger car is lighter than 1,372 kg, the basic amount is reduced by the additional amount of 0.0457 g CO<sub>2</sub> per kg mass: the manufacturer-specific CO<sub>2</sub> target becomes stricter.
- Manufacturers have been granted a phasing in period until 2015: to determine average CO₂ emissions of a manufacturer, the following percentages of their passenger cars newly registered in the respective year shall be taken into account (Art. 4):
  - 2012:65%,
  - 2013: 75%,
  - 2014: 80%,
  - from 2015: 100%.
- The reference mass "M₀" is to be adjusted every three years to the average weight of all passenger cars newly registered in the EU. For the first time, by 31 October 2014 the reference mass "M₀" will be redefined on the basis of the passenger cars newly registered within the previous three calendar years (2011-2013) and will take effect on 1 January 2016 for three years. (Art. 13 (2))

# ► CO₂ targets for manufacturers of passenger cars: future legal position as of 2020

- As of 2020, the basic amount will be 95 g  $CO_2/km$  instead of 130 g  $CO_2/km$  (Art. 1).
- As of 2020, the additional amount that either increases or reduces the basic amount will be 0.0333 g  $CO_2$  per kg mass instead of 0.0457 g (new Annex I).

# ► Super-credits for new passenger cars with especially low CO<sub>2</sub> emissions

- New passenger cars with CO<sub>2</sub> emissions below 50 g CO<sub>2</sub>/km are to be counted several times when calculating the average CO<sub>2</sub> targets of a manufacture, namely as: (Art. 5)
  - 3.5 cars in 2012 and 2013
  - 2.5 cars in 2014
  - 1.5 cars in 2015
  - 1 car as of 2016.
- New passenger cars with CO₂ emissions below 35 g CO₂/km are to be counted as 1.3 cars when calculating the average CO₂ target of a manufacturer for 2020 to 2023 (new Art. 5a (1)), whereby the number of super-credits should not exceed a cumulative total of 20,000 new registrations of passenger cars per manufacturer (new Art. 5a (2)).
- A manufacturer may relax their specific CO<sub>2</sub> target by up to 7 g CO<sub>2</sub>/km if CO<sub>2</sub> savings are achieved through "innovative technologies" (e.g. solar roofs, "eco-innovations", Art. 12 (1)).

#### ► Exceptions for small-sized manufacturers of passenger cars and for "pooling"

- A manufacturer with less than 10,000 passenger cars registered in the EU per year may apply to the Commission for a less strict CO₂ target for a maximum period of five years if (Art. 11) they
  - are independent,
  - belong to a group of connected manufactures who are responsible for less than 10,000 newly registered passenger cars per year, or
  - belong to a group of connected manufacturers but operate their own production facilities and design centres.
- A group of manufacturers who have not been granted less stricter CO<sub>2</sub> targets (Art. 11) may, for a maximum of 5 years, establish an emissions pool in order to comply with a CO<sub>2</sub> target applicable to all members of the pool (Art. 7 (1)). An emissions pool must allow manufacturers wishing to join to do so (Art. 7 (5)).

#### ► Monitoring and sanctions

- Member States must, on an annual basis, record and pass on to the Commission (Art. 8 (1 and 2) in conjunction with Annex II) information for each new passenger car registered in its territory. Such data are
  - made available to manufacturers and importers (Art. 8 (1)) and
  - kept in a central register by the Commission for public access (Art. 8 (4)).
- Where manufacturers or emissions pools exceed their specific CO<sub>2</sub> target, the Commission imposes an excess emission fine on them (Art. 9 (1)).
  - For the period from 2012 to 2018, excess fine are calculated according to how many grammes  $CO_2$ /km the average  $CO_2$  emissions exceed the targets (Art. 9 (2)).
  - As of 2019, the excess fine will correspond to the product from the excess amount, the amount of 95 Euros per gram CO<sub>2</sub>/km and the number of the manufacturer's passenger cars newly registered in that respective year (Art. 9 (2)).



## **Fundamental Amendments to Status guo**

- ► New is that as of 2020 the additional amount for determining the CO<sub>2</sub> target will be 0.0333 g CO<sub>2</sub> per kg mass (instead of 0.0457 g CO<sub>2</sub> per kg mass).
- ▶ New is that manufacturers who together with their connected companies are responsible for less than 500 new passenger car registrations per year are exempted from the obligation to comply with the CO₂ target.
- ▶ New is the granting of super-credits to manufacturers of new passenger cars with CO₂ emissions of less than 35 g CO₂/km as of 2020.

# **Statement on Subsidiarity by the Commission**

According to the Commission, EU action is necessary in order to ensure EU-wide harmonised CO<sub>2</sub> thresholds for passenger cars and to reduce the costs for manufacturers.

# **Policy Context**

In 2007, the Commission proposed binding CO<sub>2</sub> targets for new passenger cars for the first time [COM(2007) 856; see CEP Policy Brief]. In its Communication on achieving a low-carbon economy by 2050 [COM(2011) 112; see CEP Policy Brief], it explains how emissions could be reduced by 80% in the most cost efficient way. In its White Paper on transport [COM(2011) 144; see CEP Policy Brief], the target of a 60% reduction in greenhouse gas emissions in the EU transport sector by 2050 is defined. Parallel to the current Regulation Proposal, the Commission is proposing a Regulation on the reduction of CO<sub>2</sub> emissions from light commercial vehicles [COM(2012) 394], in which an average CO<sub>2</sub> target of 147 g CO<sub>2</sub>/km for the period following 2020 is confirmed.

# **Legislative Procedure**

11 July 2012 Adoption by the Commission

# **Options for Influencing the Political Process**

Leading Directorate General: DG Climate Policy

Committees of the European Parliament: Environment, Health and Food Safety (leading), rapporteur: Thomas

Ulmer (EPP Group, D); Industry, Research and Energy; Internal Market

and Consumer Protection; Transport and Tourism

Committees of the German Bundestag:

Decision mode in the Council:

Environment, Nature Conservation and Nuclear Safety (leading)
Qualified majority (approval by a majority of Member States and at

least 255 out of 345 votes; Germany: 29 votes)

# **Formalities**

Legal competency: Art. 192 TFEU (Environment)
Form of legislative competence: Shared competence (Art. 4 (2) TFEU)
Legislative procedure: Art. 294 TFEU (ordinary legislative procedure)

# **ASSESSMENT**

# **Economic Impact Assessment**

#### **Ordoliberal Assessment**

The Commission's target to also reduce harmful  $CO_2$  emissions in road transport is appropriate in principle. However, the ordoliberal fundamental criticism of its approach remains (see <u>CEP Policy Brief</u>, in German only): rules and bans linked to sanctions in the case of infringement should only be applied where mechanisms in line with the market are not available for achieving objectives. **With the European emission trading system (EU-ETS) the EU already has an instrument with which a politically prescribed reduction in CO\_2 emissions can be achieved accurately while imposing less restrictions on people's freedom of choice. Among transport carriers, only rail and air transport are currently included in the EU ETS.** 

Unlike the EU-ETS, it is precisely the EU's emission targets per kilometre driven that mean that the targeted reduction in CO<sub>2</sub> emissions cannot be ensured, for this depends both on the number of emitting passenger cars and their driving behaviour, in particular of the kilometres driven. Therefore, the EU should extend the EU ETS to all transport carriers, including road transport, instead of prescribing emission values for motors. A workable approach for road transport is "upstream emissions trading", which focuses on the first level of trade, namely refineries and importers of fossil fuels (see CEP-Dossier, p. 20).



#### Impact on Efficiency and Individual Freedom of Choice

Stipulating early the measures that must apply as of 2020 in order to meet the existing  $CO_2$  emissions targets creates planning safety for motor vehicle manufacturers. This is important, as new cars are developed in multiannual cycles.

As of 2020, the Regulation places without any objective reason a double burden on the manufacturers of large and thus heavy cars: firstly, it is more difficult for them to reduce the basic amount by 27% from 130 g CO<sub>2</sub>/km to 95 g CO<sub>2</sub>/km, and this is linked to higher costs than for the manufacturers of smaller and therefore lighter passenger cars, since heavier passenger cars need more fuel and thus emit more CO<sub>2</sub> than lighter ones. Secondly, also reducing by 27% the additional amount on the basis of which the relevant CO<sub>2</sub> target is calculated for car manufacturers – from 0.0457 g to 0.0333 g CO<sub>2</sub> per kg mass – distorts competition to the disadvantage of manufacturers of large and therefore heavy cars and to the benefit of small and therefore lighter cars. The basic amount for heavy cars is now to be increased by a smaller additional amount than has been the case until now, which leads to stricter CO<sub>2</sub> targets. At the same time, the basic amount for light cars is to be reduced by a smaller additional amount, which leads to less strict CO<sub>2</sub> targets [s. also SWD(2012) 213, p. 59].

Example	1,272 kg mass	1,372 kg mass	1,472 kg mass
To date: ± 0.0457 g/kg	95 g – 4.57 g = 90.43 g	$95 g \pm 0 g = 95 g$	95 g + 4,57 g = 99.57 g
In future: ± 0.0333 g/kg	95 g – 3.33 g = 91.67 g	$95 g \pm 0 g = 95 g$	95 g + 3,33 g = 98.33 g

It is not consistent that both until 2015 and as of 2020, but not in between, an incentive is set for producing passenger cars with low CO<sub>2</sub> emissions (less than 50 and/or 35 g CO<sub>2</sub>/km) by multiple counting of such passenger cars. The gap of four years weakens the effectiveness of the incentive system. Only a maximum number of 20,000 passenger cars per manufacturer may be counted several times in the period 2020-2023, which means that annually an average of 5,000 passenger car registrations per manufacturer may be counted throughout the entire EU. This low number and the low counting factor of 1.3 represent only a very small additional incentive to develop and produce passenger cars with such low CO<sub>2</sub> emissions. Moreover, the Commission fails to justify the necessity for a maximum number of 20,000 passenger cars.

#### Impact on Growth and Employment

Stricter  $CO_2$  targets create incentives for research and development of passenger cars with lower  $CO_2$  emissions and tend to have a positive impact on growth and employment due to the increased innovation activities. On the other hand, increased development costs lead to higher sale prices for new passenger cars, which has a negative impact on growth and employment due to lower sales figures.

#### Impact on Europe's Quality as a Business Location

The Regulation is location neutral as it also applies to passenger cars manufactured outside the EU if admitted in the EU.

## **Legal Assessment**

# Competency

Unproblematic. The EU may adopt environmental policy measures to protect the climate (Art. 192 TFEU). Moreover, EU-wide uniform CO<sub>2</sub> thresholds for passenger cars serve to ensure the functioning of the internal market (Art. 114 TFEU).

#### Subsidiarity

Unproblematic. EU-wide uniform CO<sub>2</sub> thresholds for passenger cars can be adopted at EU level only.

#### Proportionality

Unproblematic.

Compatibility with EU Law

Unproblematic.

Compatibility with German Law

Unproblematic.

#### **Conclusion**

It is precisely the emission targets per kilometre driven that mean that the targeted reduction in CO<sub>2</sub> emissions cannot be ensured. Therefore, it would have been better to integrate road transport into the European emissions trading system (EU ETS) instead, with which a politically prescribed CO<sub>2</sub> reduction can be accurately achieved. As of 2020, the Regulation will place without any objective reason a double burden on manufacturers of heavy passenger cars: on the one hand, reducing the basic amount to 95 g CO<sub>2</sub>/km is linked to higher costs; on the other hand, by reducing the additional amount from 0.0457 g to 0.0333 g CO<sub>2</sub> per kg, they are placed at a competitive disadvantage to manufacturers of light passenger cars. The additional incentives to develop passenger cars with particularly low CO<sub>2</sub> emissions are too small to be of any effective use.