



# CLIMATE ACTION

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## Reducing CO2 emissions from passenger cars

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**Cars are responsible for around 12% of total EU emissions of carbon dioxide (CO<sub>2</sub>), the main greenhouse gas.**

EU legislation sets mandatory **emission reduction targets** for new cars. This legislation is the cornerstone of the EU's



strategy to improve the fuel economy of cars sold on the European market. Similar targets have been set for new [vans](#).

## 2015 target

The law requires that the new cars registered in the EU do not emit more than an average of **130 grams** of CO<sub>2</sub> per kilometre (g CO<sub>2</sub>/km) by 2015.

## Read more

- [Publications](#)
- [Climate law](#)

## Latest news

26/11/2015 CO<sub>2</sub> emissions from new cars and vans continue to decrease

18/06/2015 Commission kicks off debate on 'driving road decarbonisation forwards'

16/04/2015 New cars' CO<sub>2</sub> emissions well below Europe's 2015 target

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## Latest events

18/06/2015 Driving Road Decarbonisation Forwards

30/01/2015 Stakeholder meeting to present the draft final report: Cost-benefit analysis of options for certification, validation, monitoring

This means a fuel consumption of around 5.6 litres per 100 km (l/100 km) of petrol or 4.9 l/100 km of diesel.

The average emissions level of a new car sold in 2014 was 123.4 g CO<sub>2</sub>/km ([provisional data](#)), well below the 2015 target. Since monitoring started under current legislation in 2010, emissions have decreased by 17 g CO<sub>2</sub>/km (12 %).

## 2021 target

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By 2021, phased in from 2020, the fleet average to be achieved by all new cars is **95 grams** of CO<sub>2</sub> per kilometre.

This means a fuel consumption of around 4.1 l/100 km of petrol or 3.6 l/100 km of diesel.

The 2015 and 2021 targets represent reductions of 18% and 40% respectively compared with the 2007 fleet average of 158.7g/km.

## Limit value curve

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Emission limits are set **according to the mass of vehicle**, using a limit value curve. The curve is set in such a way that the targets set for new cars fleet average emissions are achieved.

The limit value curve means that heavier cars are allowed higher emissions than lighter cars. Only the fleet average is regulated, so manufacturers are still able to make vehicles with emissions above the curve provided these are balanced by vehicles below the curve.

## Phase-in of requirements

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The target of 130g/km was **phased in** between 2012 and 2015. From 2015 onwards, all newly registered cars must comply with the limit value curve.

A shorter phase-in period will apply to the target of 95g/km. **95%** of each manufacturer's new cars will have to comply with the limit value curve in **2020**, increasing to **100% in 2021**.

and reporting of Heavy Duty Vehicles fuel consumption and CO<sub>2</sub> emissions

09/12/2014 Stakeholder meeting to present studies on CO<sub>2</sub> emissions from light-duty vehicles

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## Latest consultations

19/10/2015 Public consultation to support the evaluation of the car labelling Directive

26/03/2015 Consultation on addressing greenhouse gas emissions from agriculture and LULUCF in the context of the 2030 EU climate and energy framework

26/03/2015 Consultation on the preparation of a legislative proposal on the effort of Member States to reduce their greenhouse gas emissions to meet the European Union's greenhouse gas emission reduction commitment in a 2030 perspective

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## Penalty payments for excess emissions

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If the average CO<sub>2</sub> emissions of a manufacturer's fleet exceed its limit value in any year from 2012, the manufacturer has to pay an **excess emissions premium** for each car registered.

This premium amounts to

- €5 for the first g/km of exceedance
- €15 for the second g/km
- €25 for the third g/km
- €95 for each subsequent g/km.

From 2019, the cost will be €95 from the first gram of exceedance onwards.

## Eco-innovations

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Innovative technologies can help cut emissions, but in some cases it is not possible to demonstrate the CO<sub>2</sub>-reducing effects of a new technology during the test procedure used for vehicle type approval.

To encourage eco-innovation, manufacturers can be granted emission credits equivalent to a **maximum emissions saving of 7g/km per year** for their fleet if they equip vehicles with innovative technologies, based on independently verified data.

These eco-innovation credits will be maintained for the 2021 target.

## Super credits

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The cars Regulation gives manufacturers additional incentives to produce vehicles with extremely low emissions (**below 50g/km**).

Each low-emitting car is counted as

- 3.5 vehicles in 2012 and 2013
- 2.5 in 2014
- 1.5 in 2015
- 1 from 2016 to 2019.

Super-credits will also apply in the second stage of emission reductions, **from 2020 to 2023**.

Each low-emitting car will be counted as

- 2 vehicles in 2020
- 1.67 in 2021
- 1.33 in 2022
- 1 from 2023.

For this second step, there will be a cap on the scheme's contribution to the target of 7.5g/km per manufacturer over the three years.

## Pools acting jointly

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Manufacturers can **group together** and act jointly to meet the emissions target.

In forming a pool, manufacturers must respect the **rules of competition law**. The information they exchange should be limited to average specific emissions of CO<sub>2</sub>, their specific emissions targets, and their total number of vehicles registered.

## Targets for smaller manufacturers

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Manufacturers selling **between 10,000 and 300,000 cars per year** can apply for a fixed target of a 25% reduction from their 2007 average emissions for the period 2012 to 2019, and a 45% reduction from the 2007 level as of 2020.

Manufacturers selling **between 1000 and 10,000 cars per year** can propose their own emissions reduction target if they cannot or do not wish to join a pool. The target is subject to approval by the Commission based on agreed criteria.

Manufacturers selling **less than 1000 new cars per year**, as well as **special purpose vehicles** – such as vehicles built to accommodate wheelchair access – are excluded from the scope of the legislation.

## Monitoring of emissions

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The Commission has set out rules for monitoring the CO<sub>2</sub> emissions of new cars. Monitoring

reports can be found under the Documentation tab above.

## Long-term target

The legislation requests the Commission to **review the legislation by 2015** and if appropriate make proposals for CO<sub>2</sub> emission targets for new cars for the period beyond 2020, including possibly setting a 2025 target.

The Regulation asks the Commission to **maintain a clear emissions-reduction trajectory** comparable to that achieved up to 2020 and to consider the competitiveness of the car industry and its dependent industries.

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