

Introduction of the legislation on CO₂ emissions from cars and vans and labeling of cars

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Outline

- The EU first introduced mandatory CO₂ standards for new passenger cars in 2009. A similar CO₂ standard for new light-commercial vehicles (vans) was introduced in 2011.
- The legislation on CO₂ from cars and vans define how to reach a targets.
- The legislation is the cornerstone of the EU's strategy to improve the fuel economy of cars sold on the European market.
- The car labelling Directive aims to raise consumer awareness on fuel use and CO₂ emission of new passenger cars.



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GENERAL POLICY CONTEXT

- The EU commitment to reduce GHG emissions;
- Innovation and competitiveness;
- Energy use.



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Regulation (EC) 443/2009 CO₂ from cars and Regulation (EU) 510/2011 CO₂ from vans



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TYPES OF VEHICLES AFFECTED

CO₂ from vans Regulation:

The legislation affects motor vehicles of **category M₁** (*vehicles designed and constructed for the carriage of passengers and comprising no more than eight seats in addition to the driver's seat*) which are **registered in the Community for the first time** and which have not previously been registered outside the Community (*new passenger cars*).

CO₂ from vans Regulation:

The legislation affects light commercial vehicles, which means vehicles used to carry goods weighing **up to 3.5 tonnes** (*vans and car-derived vans, known as "N1"*) and which less than 2610 kg when empty, **which are registered in the Union for the first time** and which have not previously been registered outside the Union (*new light commercial vehicles*).



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KEY ELEMENTS OF THE REGULATIONS

Regulations set mandatory **fleet-based CO₂ reduction targets for the new car and van fleets** respectively.

The Regulations contain a number of "**modalities**" or **parameters** which impact on how the targets are achieved:

- Utility parameter, shape and slope (these together define the **limit value curve**);
- Excess emissions premium;
- Derogations;
- Manufacturer pooling;
- Eco-innovations;
- Phase-in of targets;
- Super-credits.



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TARGETS

CO₂ from cars:

2015 target: Regulation set a **2015** target of **130 g CO₂/km** for the fleet average.

2020 target: from 2020 onwards, Regulation sets a target of **95 g CO₂/km for the average emissions of the new car fleet**. There is a one-year phase-in period, requiring 95 percent of new car sales to comply with the target in 2020 and 100 percent from the end of 2020 onwards. **Effectively, the 95 g CO₂/km target therefore applies from 2021 on.**

CO₂ from vans:

2017 target: Regulations sets set a target of **175 g CO₂/km** for 2017.

2020 target: from 2020, Regulation sets a target of **147 g CO₂/km for the average emissions of new light commercial vehicles registered in the Union.**



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How have the targets been set?

The targets were established during the political process involving the European Parliament and Council.



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HOW WE CALCULATE THE TARGETS?

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- The targets are to be achieved **on average across all new cars sold**. Individual cars can be above or below the limit. Vehicle manufacturers have to ensure that the average of their new sales meets these levels. **Each manufacturer gets an individual annual target** linked to the size (measured by weight) of all its new cars registered in the EU in a given year. If car manufacturers exceed these limits they are obliged to pay fines.
- Vehicle weight as underlying utility parameter—that is, the heavier a manufacturer's car fleet, the higher the CO₂ emission value allowed by the regulation.



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Limit value curve

- The limit value curve is a function specified in Annex I of the Regulations and **basses on vehicle mass**. That means: that 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.

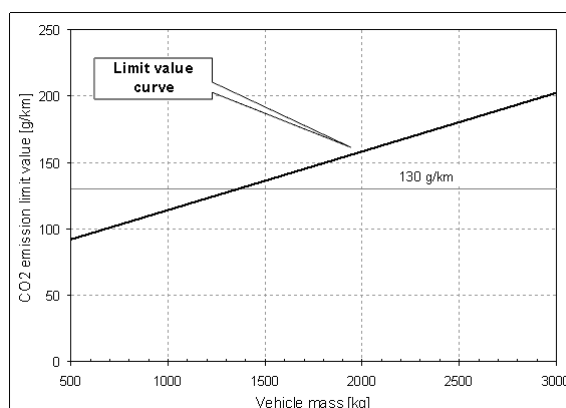


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Limit value curve CO₂ from cars Regulation 2015 target



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CO₂ from cars Regulation 2020 target

For 2020 the slope of the curve would remain at 60%, based on 2006 fleet data, the same as in the legislation for 2015.

The line proposed would require **the same level of reduction effort (27%) from all vehicle types** as compared to the 2015 limits. This 27% reduction represents the difference between the 2015 target of 130g and the 2020 target of 95g.



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PHASE-IN OF TARGETS CO₂ FROM CARS REGULATION

The target of 130g/km was **phased in** between 2012 and 2015:

- 65 % in 2012,
- 75 % in 2013,
- 80 % in 2014,
- 100 % from 2015 to 2019,

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**.



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PHASE-IN OF TARGETS CO₂ FROM VANS REGULATION

The 2017 target is **phased in**:

- In **2014** an average of **70%** of each manufacturer's newly registered vans must comply with the limit value curve
- In **2016** – **80%**
- From **2017** onwards – **100%**

The 2020 target is effective in **2020 with no delay**.



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SUPER-CREDITS FOR LOW-EMISSION VEHICLES**CO₂ FROM CARS REGULATION**

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.

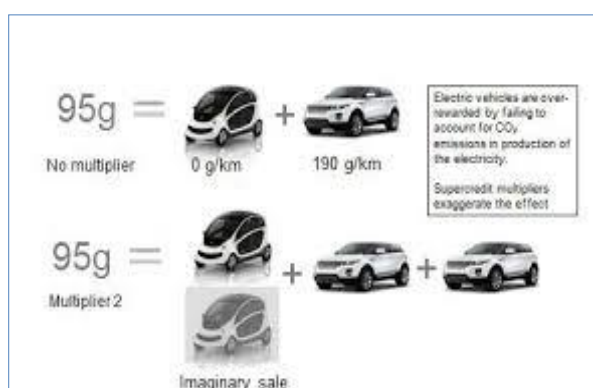
For this second step, there will be **a cap** on the scheme's contribution to the target of **7.5g/km** per manufacturer over the three years.



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WHAT IS THE EFFECT OF SUPER-CREDITS?

<https://www.transportenvironment.org/sites/t/files/publications/Briefing-Effect%20of%20supercredits2.pdf>



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SUPER-CREDITS FOR LOW-EMISSION VEHICLES CO₂ FROM VANS REGULATION

In calculating the average specific emissions of CO₂, each new light commercial vehicle with specific emissions of CO₂ of less than **50 g CO₂/km** shall be counted as:

- 3,5 light commercial vehicles in 2014,
- 3,5 light commercial vehicles in 2015,
- 2,5 light commercial vehicles in 2016,
- 1,5 light commercial vehicles in 2017,
- 1 light commercial vehicle from 2018.

For the duration of the super-credits scheme, the maximum number of new light commercial vehicles, with specific emissions of CO₂ of less than 50 g CO₂/km, to be taken into account in the application of the multipliers set out above **shall not exceed 25 000 light commercial vehicles per manufacturer.**



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THE EXCESS EMISSIONS PREMIUM

The **excess emissions premium** aims at ensuring compliance with the target. An excess emissions premium is payable in a particular calendar year if the actual average vehicle emissions for a manufacturer's entire fleet are **above the manufacturer's target.**



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PENALTY PAYMENTS FOR EXCESS EMISSIONS

• CO2 from cars regulation:

If the average CO₂ 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.

• CO2 from vans regulation

If the average CO₂ emissions of a manufacturer's fleet exceed its limit value in any year from 2014, the manufacturer has to pay an **excess emissions premium** for each van 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 onwards, the cost will be €95 from the first gram of exceedance onwards. This value is equivalent to the premium for passenger cars.



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ECO-INNOVATIONS

- Innovative technologies can help cut emissions.
- 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.



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MANUFACTURER POOLING

- The possibility for manufacturers to form a **pool** is a flexibility allowing a less costly way to meet the targets. It is **neutral as regards the overall stringency of the legislation and the CO₂ reductions achieved**.
- 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 CO₂, their specific emissions targets, and their total number of vehicles registered.



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DEROGATIONS

Derogations allow certain manufacturers (small volume) to have **targets which are independent of the limit value curve**, and in case of the small volume manufacturers are based on their individual reduction potential.



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TARGETS FOR SMALLER MANUFACTURERS

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- **CO₂ from cars Regulation:**
- 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.
- **CO₂ from vans Regulation:**
- Manufacturers responsible for **fewer than 22,000** new van registrations per year can propose their **own emissions reduction target**, which is subject to approval by the Commission based on agreed criteria.
- Manufacturers responsible for **fewer than 1000** new van registrations per year in the EU are **exempted** from having a specific emissions target.



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The Regulations **are directly applicable in the Member States** and does not need to be transposed into national law through national legal instruments.



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Duties of the Member States

CO₂ from cars Regulation

Monitoring and reporting of average emissions:

- For the calendar year each subsequent calendar year, each Member State shall record information for each new passenger car registered in its territory. This information shall be made available to the manufacturers and their designated importers or representatives in each Member State. Member States shall make every effort to ensure that reporting bodies operate in a transparent manner. Each Member State shall ensure that the specific emissions of CO₂ of passenger cars which are not type-approved in accordance with Regulation (EC) No 715/2007 (*on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information*) are measured and recorded in the certificate of conformity.
- By 28 February of each year, commencing in 2011, each Member State shall determine and transmit to the Commission the information listed in the Regulation
- Member States shall designate a competent authority for the collection and communication of the monitoring data in accordance with this Regulation and shall inform the Commission of the competent authority designated.



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Duties of the Member States

CO₂ from vans Regulation

Monitoring and reporting of average emissions:

- For the calendar each Member State shall record information for each new light commercial vehicle registered in its territory. This information shall be made available to the manufacturers and their designated importers or representatives in each Member State. Member States shall make every effort to ensure that reporting bodies operate in a transparent manner.
- By 28 February of each year, each Member State shall determine and transmit to the Commission the information listed in the Regulation.
- In each Member State, the competent authority for the collection and communication of the monitoring data in accordance with this Regulation shall be the one designated in accordance CO₂ from cars Regulation.



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Review and long-term targets

- The Regulations are constant subject to review.
- The Regulations request the Commission to **review the legislation by 2015** and if appropriate make proposals for CO₂ emission targets for new cars for the period beyond 2020, including possibly setting a 2025 target.



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EXPECTED EFFECTS OF THE REGULATIONS, AS DETERMINED BY THE COMMISSION'S IMPACT ASSESSMENT, INCLUDE:

- **Fuel-cost savings** per car of around €340 in the first year, and an estimated total of €2,904–€3,836 over the car's lifetime, as compared with the 2015 target. For vans, fuel-cost savings are estimated at €400 in the first year and €3,363–€4,564 lifetime.
- €30 billion per year in **total fuel-cost savings to consumers**.
- **An increase in EU GDP** of €12 billion annually, and in annual spending on employment of €9 billion
- **25% reduction in fuel consumption**, saving 160 million tons of oil at around €70 billion at today's prices
- **Avoided CO₂ emissions** of around 420 million tons in the period to 2030



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**Directive 1999/94/EC
relating to the availability of consumer
information
on fuel economy and CO₂ emissions in respect of
the marketing of new passenger cars**



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Background

The EU strategy to reduce CO₂ emissions from passenger cars partly relies on the requirement that information on fuel consumption and CO₂ emission values of new cars is easily accessible for consumers.



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Car labeling directive

- The European Union **has set target values for CO₂ emissions** from new passenger cars **and taken measures to ensure that information on the CO₂ performance** of new passenger cars is readily available for citizens.
- **To help drivers** choose new cars with low fuel consumption, EU Member States are required **to ensure that relevant information is provided to consumers**, including a label showing a car's fuel efficiency and CO₂ emissions.



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A “push-pull” effect

- Car labeling Directive 1999/94/EC and CO₂ from cars Regulation (EC) No 443/2009 are **complementary policy measures** that seek to share the burden of reducing CO₂ emissions from new passenger cars between consumers and manufacturers while remaining in line with consumer preferences and market incentives.
- **Information plays an essential role in market activities.** Removing information barriers regarding the fuel economy of passenger cars enables consumers to more easily compare passenger cars according to this product attribute. Ultimately, the access to fuel economy information has the aim to encourage consumers to purchase cars which use less fuel and emit less CO₂.
- In turn it should provide **an additional incentive to encourage manufacturers** to take steps to reduce the fuel consumption of new cars.
- These two approaches might best be described as a **“push-pull” effect**. The Directive “pulls” the market through increased consumer demand for more efficient vehicles while the Regulation “pushes” the market by improving the efficiency of the vehicles supplied. The combination of these two policies provides benefits that are not possible through the use of one policy instrument alone.



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The purpose of the Directive

The Directive seeks to “*ensure that information relating to **the fuel economy** and CO₂ emissions of new passenger cars offered for sale or lease in the Community is made available to consumers in order to enable consumers to make an informed choice*”



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Policy tools

The Directive issues a set of policy tools to be used throughout the Member states. According to the Directive, information should be provided to consumers through the following means:

- A fuel economy **label** for all new cars to be displayed at the point of sale;
- A **poster** (or a display) showing the official fuel consumption and CO₂ emission data of all new passenger car models displayed or offered for sale or lease at or through the respective point of sale;
- A **guide** on fuel economy and CO₂ emissions; and
- All **promotional literature** must contain the official fuel consumption and specific CO₂ emission data for the passenger car model to which it refers.



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Policy tools

In addition, the Commission issued **Recommendation 2003/217/EC** to expand the scope of the original Directive to all promotional material used in marketing, advertising and promoting of new passenger cars across **multiple media formats**.



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Policy tools

Since its original completion, Directive 1999/94/EC has been amended to take new considerations into account and to adjust to additional applications. Most notably, **Directive 2003/73/EC** amended Annex III of Directive 1999/94/EC and requires that an **electronic poster** be displayed at the point of sale instead of the traditional poster. The electronic screen should be no less visible than the traditional poster and should be updated every three months instead of every six months as was required under the original Directive



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Implementation of the Directive

- Annexes to the Directive set out minimum requirements that each of these consumer information items must meet.
- EU directives set out results that all EU Member States must achieve. National authorities then have the choice of form and method to meet this result.
- The cars labeling directive allows Member States plenty of room for divergent national implementation. As a consequence, the car labelling scheme has not been implemented in the same way in the different Member States.



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Evaluation of the current EU legislation on CO₂ labelling of cars

In spring 2015 the Commission has launched an evaluation of the current EU legislation on CO₂ labelling of cars. This evaluation shall examine the actual implementation and the achievement of the car labelling Directive compared to what was expected. It will provide conclusions on how the Directive has performed, what experience has been gained and what lessons can be learned. The analysis will cover the relevance, effectiveness, efficiency, coherence and EU value added of the legislation. It will provide indications of the degree to which the legislation is still considered to be fit for purpose.



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Thank you for your attention 😊



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