

WWF-Statement regarding the “Consultation on reducing CO₂ emissions from road vehicles”

Contents

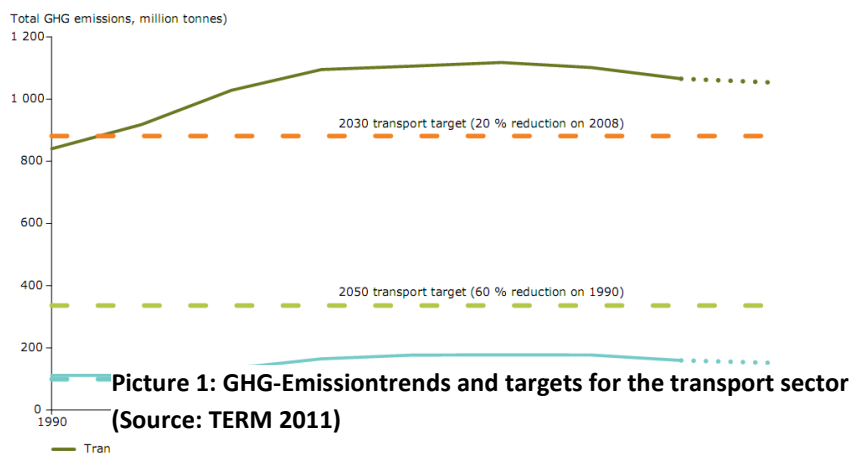
1. Urgency of Transport Sector contribution to climate change mitigation
2. Role of the Legislation regarding CO₂ from cars and LDVs
3. Specific considerations of WWF regarding the review of the regulation
4. Recommendations

1. Urgency of Transport Sector contribution to climate change mitigation

The CO₂-emissions from the transport sector in the EU have risen by 27% since 1990¹. Transport is the only sector that has not achieved reductions in Greenhouse gases since 1990. Today the sector is responsible for 24 % of the EU’s Greenhouse gas emissions, and this share has the tendency to rise in the future.

In 2011 the Commission issued a White Paper on Transport, postulating a CO₂-Reduction target for the transport sector of 60% until 2050. Even though this is a first step it is by no means sufficient in order to reach the 80-95% reduction target,

Figure 2.3 Trends and targets: EU-27 GHG emissions



Note: Dotted line segments represent data series extrapolation from 2009 to 2010 using proxy data.
Source: EEA, 2011.

which Europe as industrialised region has to achieve in order to keep dangerous warming of the global climate below two °C by 2050.

Also it is of the essence that such a target be underpinned with a decarbonisation pathway for the sector and sub-targets for this path. The 2030 mid-term target the White paper sets with a 30% reduction over 2008 emissions is set for too late, until 2030 substantial reduction must already be underway in order to meet the 2050 target.

¹ EEA 2011: TERM

It is therefore necessary that the transport sector shifts stronger into the focus of the EU's climate policies.

In the future, freight transport will have a rising share in the transport sector's Greenhouse gas emissions.

To date this subsector is not addressed directly by efficiency regulation, however it is subject to the transport related provisions of the Renewable Energy directive and the 10 % CO₂ reduction target for the non-ETs sectors.

2. Role of the Legislation regarding CO₂ from cars and LDVs

For the transport sector to decarbonise, raising the efficiency of the vehicle fleet is a crucial contributor. WWF has released two decarbonisation pathway studies in recent years, the "Energy report" for the global level and "Blueprint Germany" which models a possible decarbonisation pathway for Germany. Blueprint Germany comes to the conclusion that efficiency gains in conventional vehicles as well as electrification of the car fleet will each contribute roughly one third to the decarbonisation of the sector along with Modal shift and the sourcing of renewable energy (electricity and liquid fuels).

According to the European Environment agency the share of vehicles with other than conventional drive trains at the moment is well below 1%. Even though the EU and many member countries do have ambitious targets for the introduction of electric vehicle fleets, conventional vehicles' efficiency gains will determine the success of transport sector decarbonisation in the short and medium term before a high uptake of electric vehicles will fully deliver reduction contributions.

A stringent regulation of vehicle efficiency in line with the 80-95% targets is therefore necessary not only for passenger cars and light duty vehicles but also for heavy duty vehicles.

A reduction in line with the White Paper target of 60% over 1990 represents a cut of 68%² over 2009 values. This would result in necessary annual reductions of 2,8% starting now until 2050. Contrary to this setting the trend since 1990 has been a 1,4% increase per year.³

3. Specific considerations of WWF regarding the review of the regulation

Effectiveness of the regulation

The regulation (EC) No 443/2009 has been very effective in helping manufacturers cut specific emissions of their vehicle fleet after it was agreed in 2008.

Most manufacturers are now well underway to meeting the 2015 target of 130g CO₂/km. Since 2007, when the regulation has been introduced, the average efficiency improvement per year has risen to 3% as opposed to 0.7% for the time when the voluntary agreement was in place.⁴

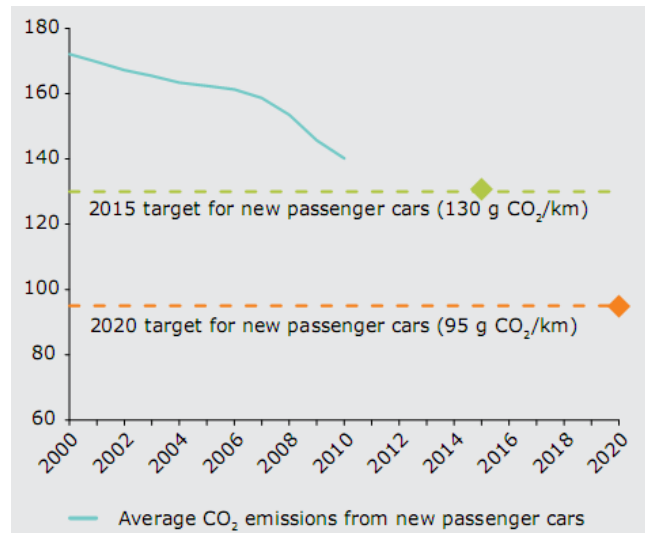
This is also represented by the steep fall of the emissions line after 2007 in the picture below:

² EEA 2011: "TERM 2011 - Laying the foundations for greener transport"

³ T&E 2011: „How clean are Europe's cars?“, p. 8

⁴ AEA 2011: „Effects of regulations and standards on vehicle prices“, p. 138

Statement of WWF regarding the "Consultation on reducing CO₂ emissions from road vehicles"



Picture 2: Trends in passenger car emissions (Source: TERM 2011)

WWF therefore entirely agrees that setting such standards is a crucial element of GHG-reduction policies in the EU. This standard setting should furthermore be extended also the other types of vehicles, such as HDVs, which have to date not been regulated with regards to efficiency. However, standards are a necessary but not a sufficient condition to meet the challenges the transport sector is facing in trying to reduce its GHG-emissions in line with the 80-95% reduction target of the EU. The efficiency standards should be in line with the 80-95% target as a reference or with the 60% target set in the White Paper where this is in line with the overall reduction targets.

WWF agrees that setting targets has also had a positive effect on the automotive markets and fostered innovation in the European automotive industry. Costs related to these efficiency standards have not led to higher prices for the consumers. A Commission assessment states that prices for new cars have fallen significantly by 12-22% since 2002.⁵

Calculations based on data from the Commission's competition department have shown that since the notion of binding targets was introduced in 2007, the average price of new cars has fallen by 2.5% annually.⁶ Between 2002 and 2006 average price reduction had been much smaller with 0.6% annually.

Application of standards

WWF agrees that standards should apply to the whole vehicle fleet, set by the average GHG-emissions of a new vehicle entering the fleet.

Standards are currently set on a basis of tailpipe emissions in g CO₂/km, they are therefore not in a strict sense efficiency standards and don't deliver adequate comparability between different drive train technologies. WWF considers this not to be very problematic in the market uptake phase of alternative drive train technologies. However, it represents a weakness of the regulation in the long term as alternatively powered vehicles enter the fleet in larger numbers after 2025. This weakness can be remedied by phasing in an energy based standard after a certain threshold is reached in the electric vehicle (and possibly other alternative drive trains) penetration of the entire fleet, probably after 2025. This energy based standard will provide for adequate comparability of different drive trains as well as within certain technologies. While electric vehicles in general are more efficient than conventional ones, there likely will be vast efficiency differences within the EV fleet that will need to be addressed by the regulation.⁷

Incentivising new technologies

⁵ AEA 2011

⁶ T&E 2011

⁷ For a detailed proposal on an energy based standard see WWF's contribution to the 2007 stakeholder consultation:

http://ec.europa.eu/reducing_co2_emissions_from_cars/doc_contrib/wwf_en.pdf

Statement of WWF regarding the "Consultation on reducing CO₂ emissions from road vehicles"

Stringent and ambitious targets for 2020 and beyond will ensure the necessary uptake of new technologies, mainly the electric drive train in all forms, without compromising efficiency gains in the conventional fleet. WWF believes that rather than multipliers, it will be the setting of ambitious (long term) targets, which incentivises the needed uptake of new technologies while ensuring that throughout the entire fleet relevant GHG- reductions are delivered.

Putting a focus on freight transport

WWF entirely agrees that the EU needs a strategy for reducing the climate impact of the freight transport sector, especially of HDVs as road freight transport modal share in land-based transport in the EU is 79 %.⁸

To this end, WWF considers a package of measures necessary: stringent efficiency targets and a methodology to derive them need to be introduced for all types of HDVs starting in 2017 the latest. Longer term targets for 2020 and 2025 should be part of this regulation.

In the longer term for after 2020, WWF deems it necessary that the EU influences the fuel use in transport for the most effective allocation in order to allocate limited renewable energy supplies in a way to optimise overall GHG-reduction potential. This means that the allocation of all liquid fuels, especially of renewable origin must be shifted to favour the freight transport sector as far as road transport is concerned, as long as technological drive train alternatives are sparse for HDV (and other means of transport such as aircraft and ships).

Long term regulation

All efficiency regulation should devise a clear and predictable reduction path in line with the 80-95% reduction target ideally until 2050.

This should be done in increments of at least 5 years. This would give the industry long term planning stability and low exposure to unexpected regulative risks.

Recommendations:

For the review of the existing regulation WWF recommends:

- That a target of 80g CO₂ /km be set for 2020
- That a long term target for cars and LDVs for 2025 be set in line with the 80-95% GHG-reduction target for the overall economy, compared to 1990 levels, which means a minimum of 80% for the transport sector”
- That a target for HDVs be introduced for 2017 with longer term targets for 2020 and 2025
- That an energy based standard for the tank-to-wheel energy use be phased-in to replace the tailpipe emissions based standard after a certain threshold of EV uptake has been exceeded
- That electric vehicles may not be counted multiple times in the regulations after the current provisions for this expire
- That well-to-tank emissions of vehicles remain addressed under the scope of regulations such as the ETS, the FQD and the RED
- That the regulations aim to be solely an efficiency regulation and supportive and additional measures such as eco-driving be incentivised by other legislation
- That a new test-cycle be introduced that accounts for all actual emissions and integrates measures such as the so-called eco-innovations
- That an indicative reduction path in line with the 80-95% GHG-reduction target until 2050 be mapped out

Further information:

WWF EPO

Jason Anderson, janderson@wwfepo.org, +32 (2) 740 09 35

Viviane Raddatz, viviane.raddatz@wwf.de; + 49 (30) 311 777 237

⁸ TERM 2011

Statement of WWF regarding the “Consultation on reducing CO₂ emissions from road vehicles”