

Briefing

The German proposals on super credits

Context

In July 2012 the Commission published its proposal to review Regulation 443/2009 which sets CO₂ emission targets for new passenger cars. This proposal includes incentives for the sales of ultra-low carbon vehicles through so-called super credits. Germany has suggested significant changes to the Commission proposal. This briefing assesses the impact of the German proposals and compares them to other available solutions.

Super credits explained

Super credits are designed to encourage manufacturers to supply ultra-low carbon vehicles. They do this by artificially multiplying the sales of ultra-low carbon vehicles (ULCV) so that within the Regulation each ULCV counts as more than one vehicle. The number of imaginary sales depends upon the multiplier used.

Figure 1 illustrates how super credits work. Without a multiplier, selling one battery electric vehicle (BEV) with theoretical emissions of 0g CO₂/km, enables a carmaker to sell 1 gas-guzzler (190 g/km) and still, on average, achieve a 95g/km target. In Figure 1 the effect of a multiplier of 2 is shown: one BEV sale counts as two sales enabling the carmakers to sell two gas-guzzlers and still achieve an average of 95 g/km.



Figure 1

The effect of super credits is to enable manufacturers to sell more gas-guzzlers with high emissions and to weaken their target so that they do not need to deploy such efficient technology. In theory the money saved would help by subsidising ultra-low carbon vehicles.

The Commission proposal

The European Commission impact assessment recognises that super credits are not cost-effective¹, but under intense car industry pressure a limited scheme was included in the proposal.² The proposed system operates from 2020 until 2023 with a multiplier of 1,3 and

¹ Commission Impact Assessment, 2012, p88.

² <http://www.euractiv.com/climate-environment/oettinger-tells-carmakers-fear-p-news-515359>

credits for a maximum of 20.000 vehicles. The eligibility threshold is 35g, down from the 50g threshold which applies for the 2015 target.³ The scheme proposed by the Commission would result in a weakening of the 2020 target by less than 1 gram.

The German proposal

Germany has proposed to substantially expand the super credit scheme. The key points of the German proposal are discussed below:

1. High multipliers

The introduction of high multipliers, decreasing from 3,5 in 2016 to 1,5 in 2020 is a key element of the German proposal. The potential for weakening through super credits grows exponentially as multipliers are increased but is also closely linked to the market share of low carbon cars. This is illustrated by figure 3.

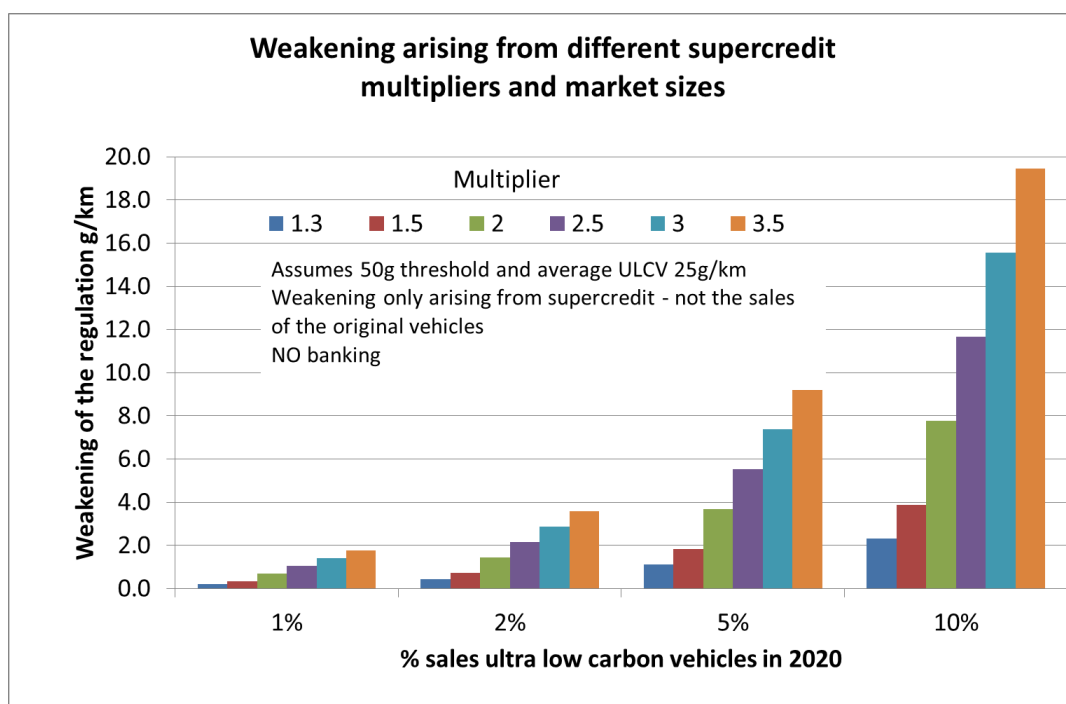


Figure 2

The more successful super credits are at promoting green car sales, the less green the rest of the new car fleet becomes.

2. Banking

Germany proposes to introduce super credits between 2015 and 2020 and allow credits earned to be “saved or banked” for use in the period 2020-2023. Figure 3 illustrates the annual effect of weakening arising from the German proposal if the German target of 1 million electric vehicles on the road is extrapolated to the whole of the EU.

The calculation shows the total weakening would be very significant, in excess of 10 grams. These credits could be

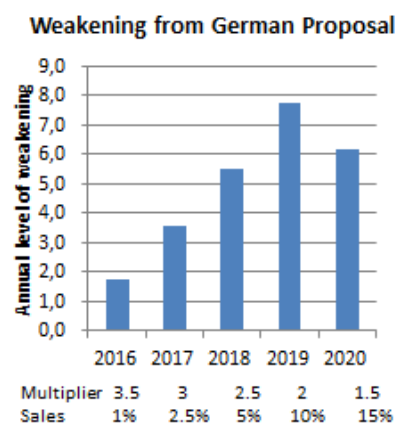


Figure 3

³ Proposal for a Regulation amending Regulation (EC) No 443/2009, 2012, p9.

used from 2020 to 2023 to delay meeting the 95g target until 2024. Figure 4 (red line) shows the 'phasing-in' effect of using banked credits.

Banking of credits is a provision that exists in the US CO₂ emission legislation, but there it is **combined with annual targets**. Figure 4 shows that in a system without annual targets, manufacturers easily accumulate (yellow area) and use these credits to phase in meeting the target (red area).

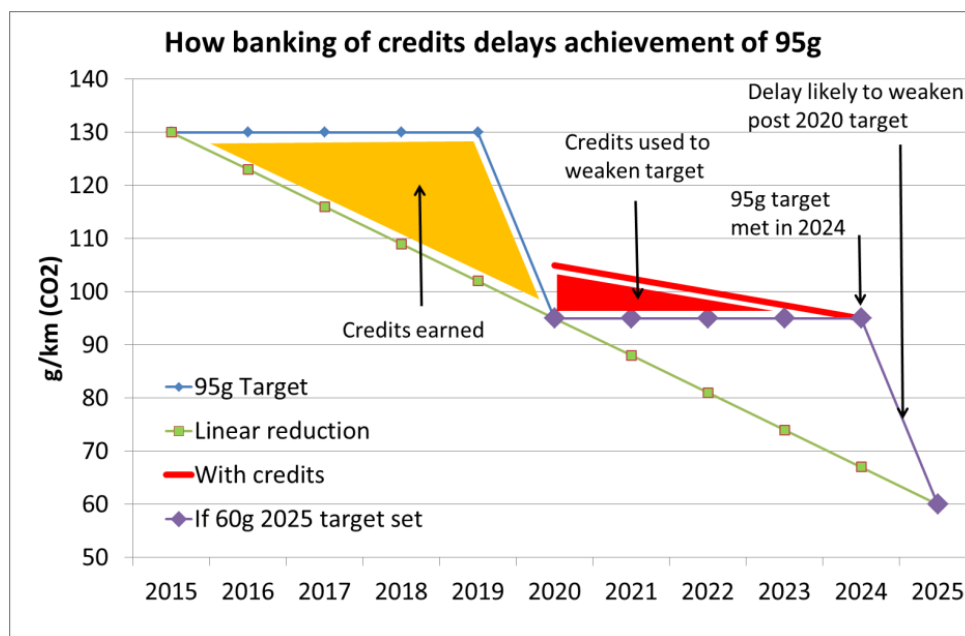


Figure 4

Banking of credits more than doubles the amount the target is weakened compared to normal super credits. The German proposal phases in the regulation until 2024.

3. Weakening of the eligibility threshold

To qualify for super credits under the German scheme, a car needs to emit less than 50% of the individual target value of the car with a maximum value of 65g. A 65g threshold would also allow plug-in-hybrids (PHEV) and perhaps even normal hybrids to qualify⁴ and is a significant expansion of the scope of the scheme as proposed by the Commission (35g) or even the 50g in the current Regulation.

In addition:

- The 50% rule favours larger cars by allowing them a higher threshold whilst smaller cars will need to comply with a more stringent threshold.
- The proposal specifically excludes technologies other than BEVs, PHEVs and fuel cell electric vehicles – very efficient hybrids won't qualify. This raises questions about the technological neutrality as well as competitive impacts of the proposed scheme.

⁴ http://www.motortrend.com/future/future_vehicles/1211_radical_new_toyota_prius_in_pipeline/styling.html

The German proposal is not neutral from a technology or competition point of view.

An effective and transparent alternative to super credits - a flexible mandate

Super credits encourage the supply of ultra-low carbon vehicles at the cost of reducing the efficiency of conventional vehicles. This makes super credits self-defeating: as soon as they achieve the objective of high greens car sales, the rest of the fleet becomes a lot less green.

Stimulating the supply of ultra-low carbon cars in Europe is better achieved through a **flexible mandate**, as proposed by MEP Fiona Hall, rapporteur of the European Parliament's Industry Committee. In this system, manufacturers that sell more than 3% ultra-low carbon cars are rewarded but those that achieve less than 2% sales are expected to make an additional effort to improve the efficiency of conventional cars.

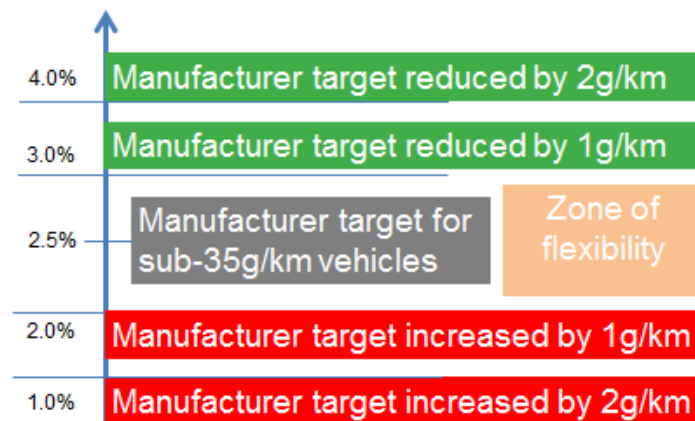


Figure 5

This system encourages all carmakers to supply a small number of ultra-low carbon vehicles and rewards those that do more. The amount the system weakens the regulation is known and limited.

Conclusions

The German super credit proposal has the potential to significantly weaken the 95g target, especially if it achieves its objective of encouraging ULCV sales. The proposals also deviate from the principle of technological neutrality and are likely to favour some manufacturers more than others.

The Commission proposal is less damaging but also less effective in stimulating ultra-low carbon vehicles. The alternative of a flexible mandate, presented by MEP Fiona Hall, seems to offer the best way forward. It is technologically neutral, likely to be effective because of the bonus-malus, and gives absolute transparency as regards the maximum credits and weakening that can be obtained.