

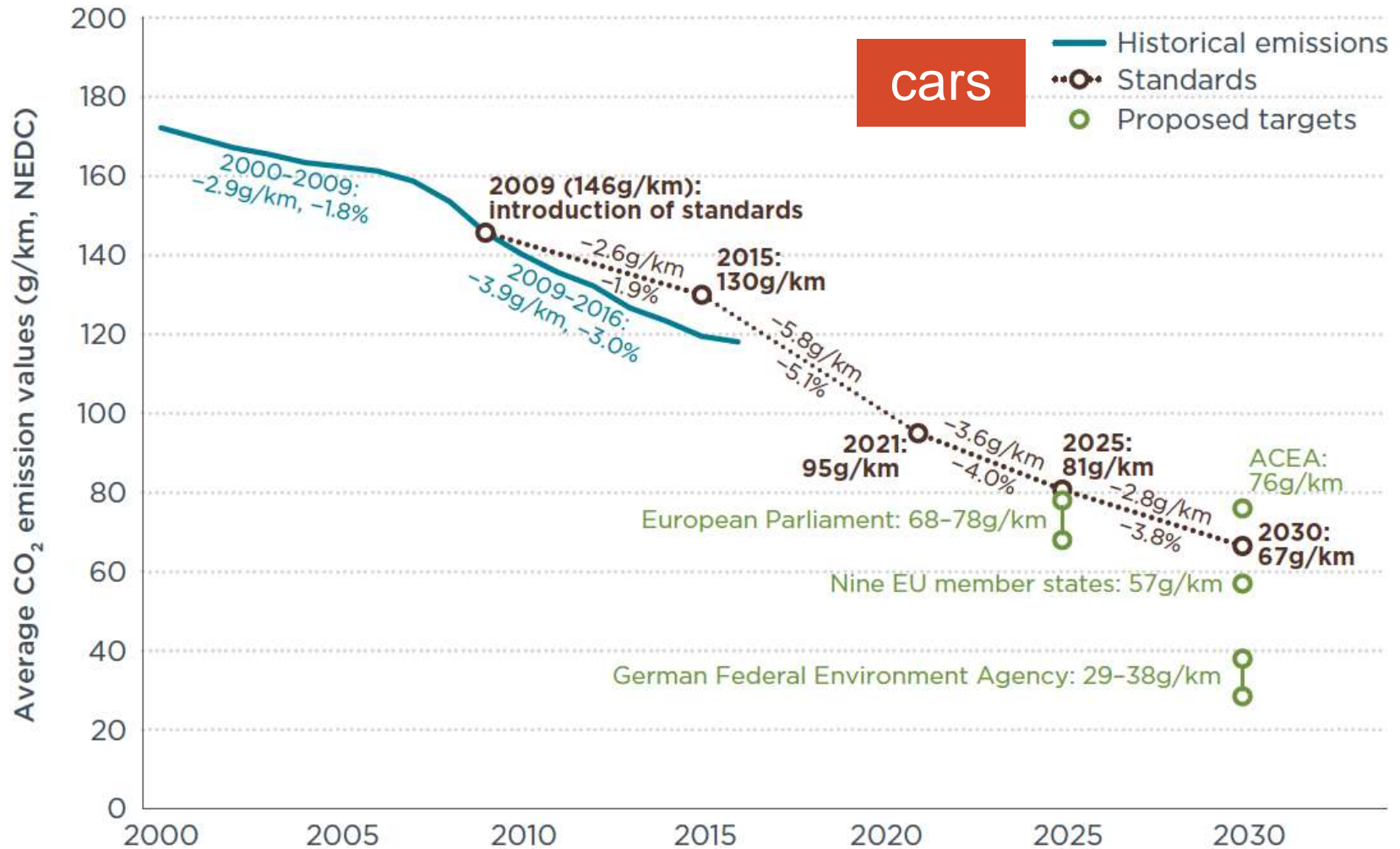
Post-2020 CO₂ standards for cars and vans

A summary and evaluation

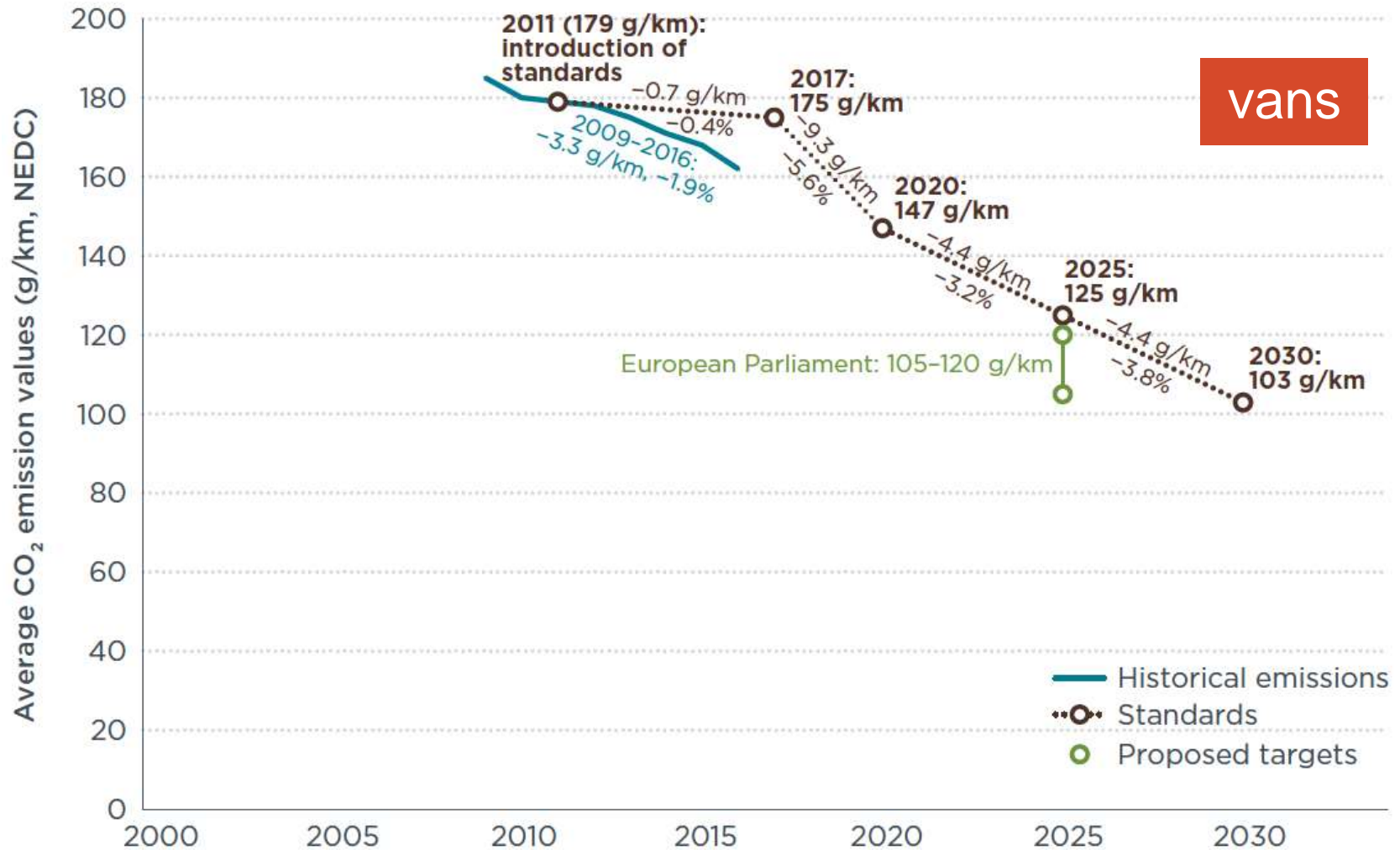
Jan Dornoff, Josh Miller, Peter Mock, Uwe Tietge
ICCT Europe

March 27, 2018
European Parliament, Brussels

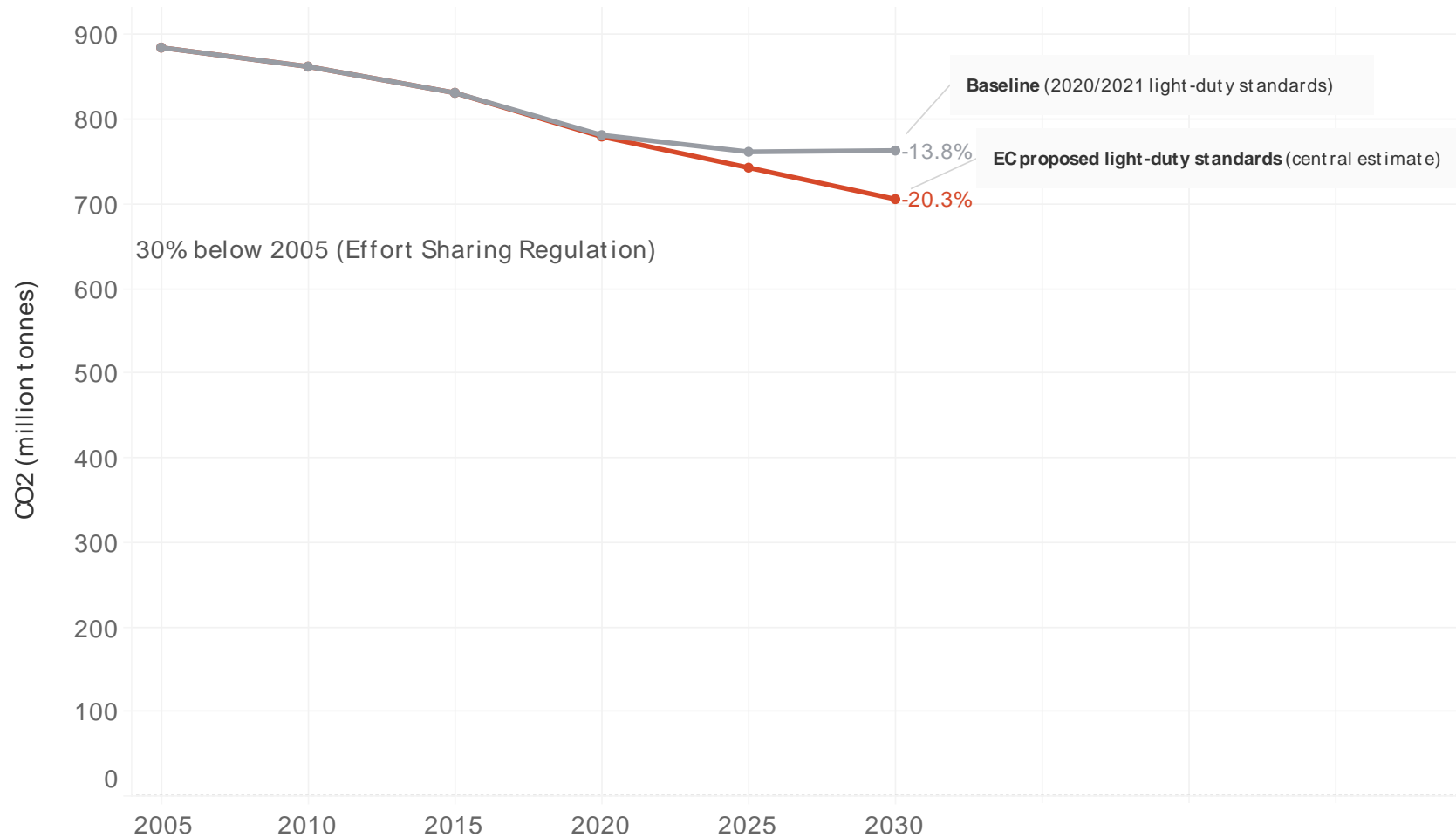
The proposed annual CO₂ reduction rate is below current regulation and Parliament recommendation



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










Overall road transport CO₂ would decrease by 20% by 2030, not being in line with EU climate targets

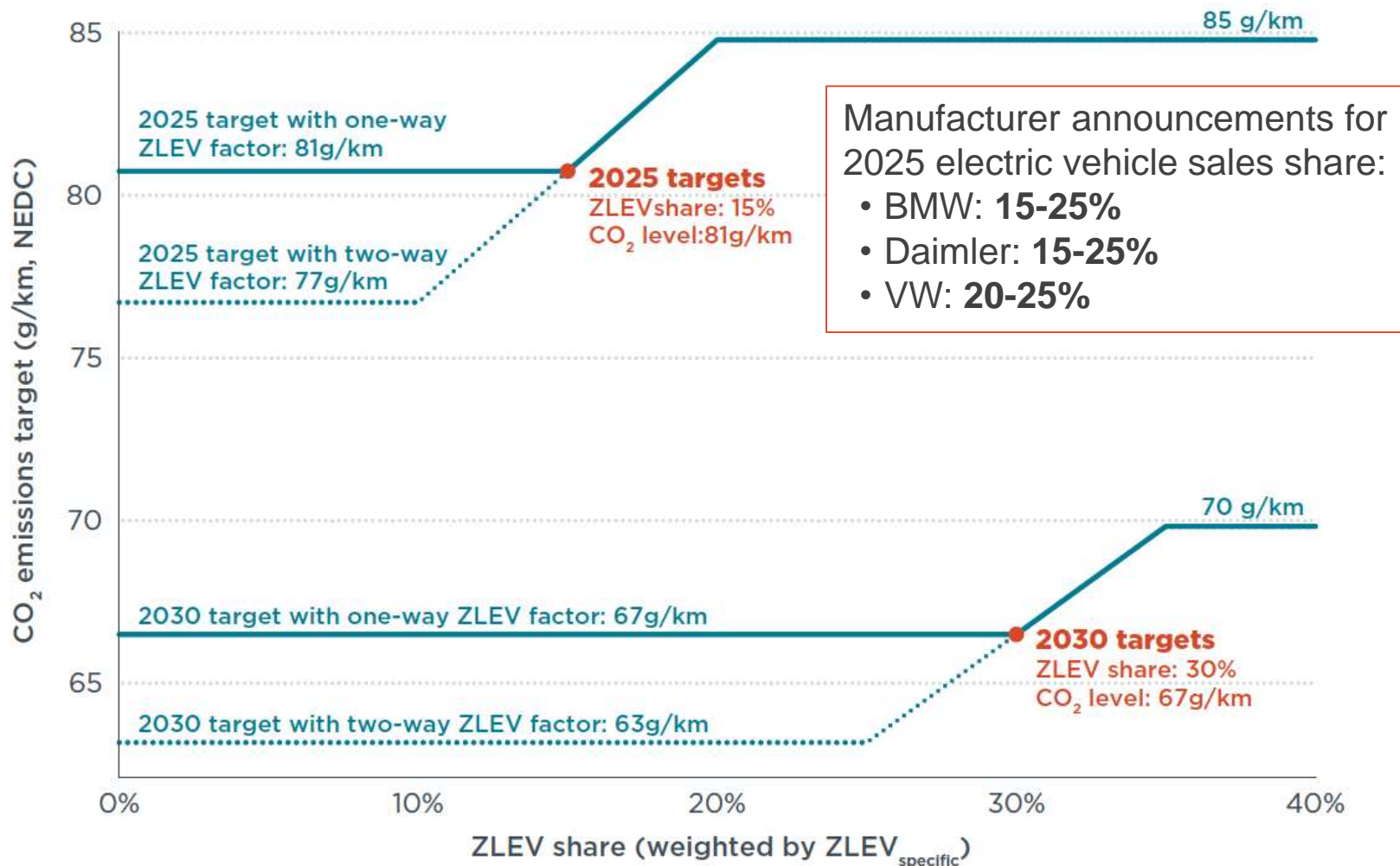


A higher CO₂ reduction rate is technically feasible and would result in a (higher) net benefit for society

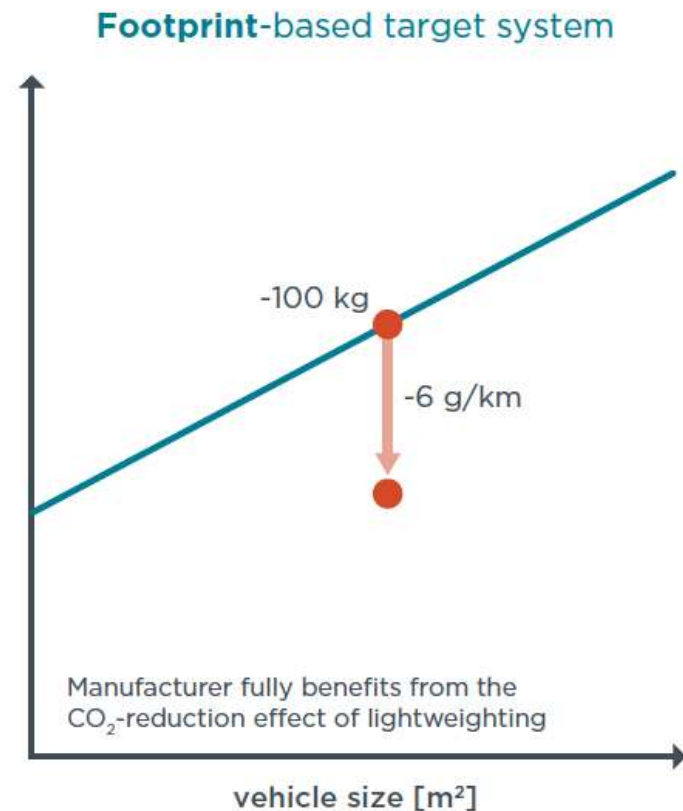
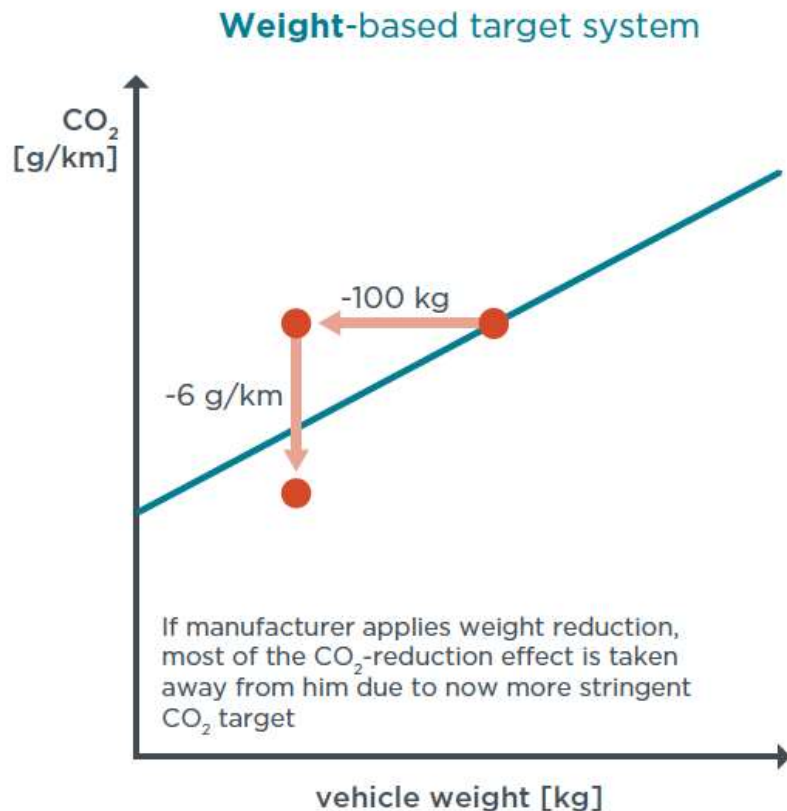
- The technology cost curves used for the impact assessment are more pessimistic than our ICCT findings, and also than original Commission consultants' study.
- Using Commission figures, 2021-2030 CO₂ reduction requirements of 40% and 50% still deliver a net cost benefit. Using ICCT's cost curves, ~70% delivers the maximum net benefit.

Decrease of CO ₂ target level (2021-2030)	EC Additional manufacturing costs in 2030 (EUR/car)	ICCT Additional manufacturing costs in 2030 (EUR/car)	Net operation & maintenance savings in 2030 (EUR/car)	Avoided CO ₂ cost in 2030 (EUR/car)	EC Net benefits in 2030 (EUR/car)	ICCT Net benefits in 2030 (EUR/car)
20%	419	264	1,221	303	1,105 	1,260 
30%	1,020	691	1,898	451	1,329 	1,658 
40%	1,812	927	2,377	593	1,158 	2,043 
50%	2,752	1,163	2,750	728	726 	2,315 
70%*		1,636	4,000	1,000		3,364 

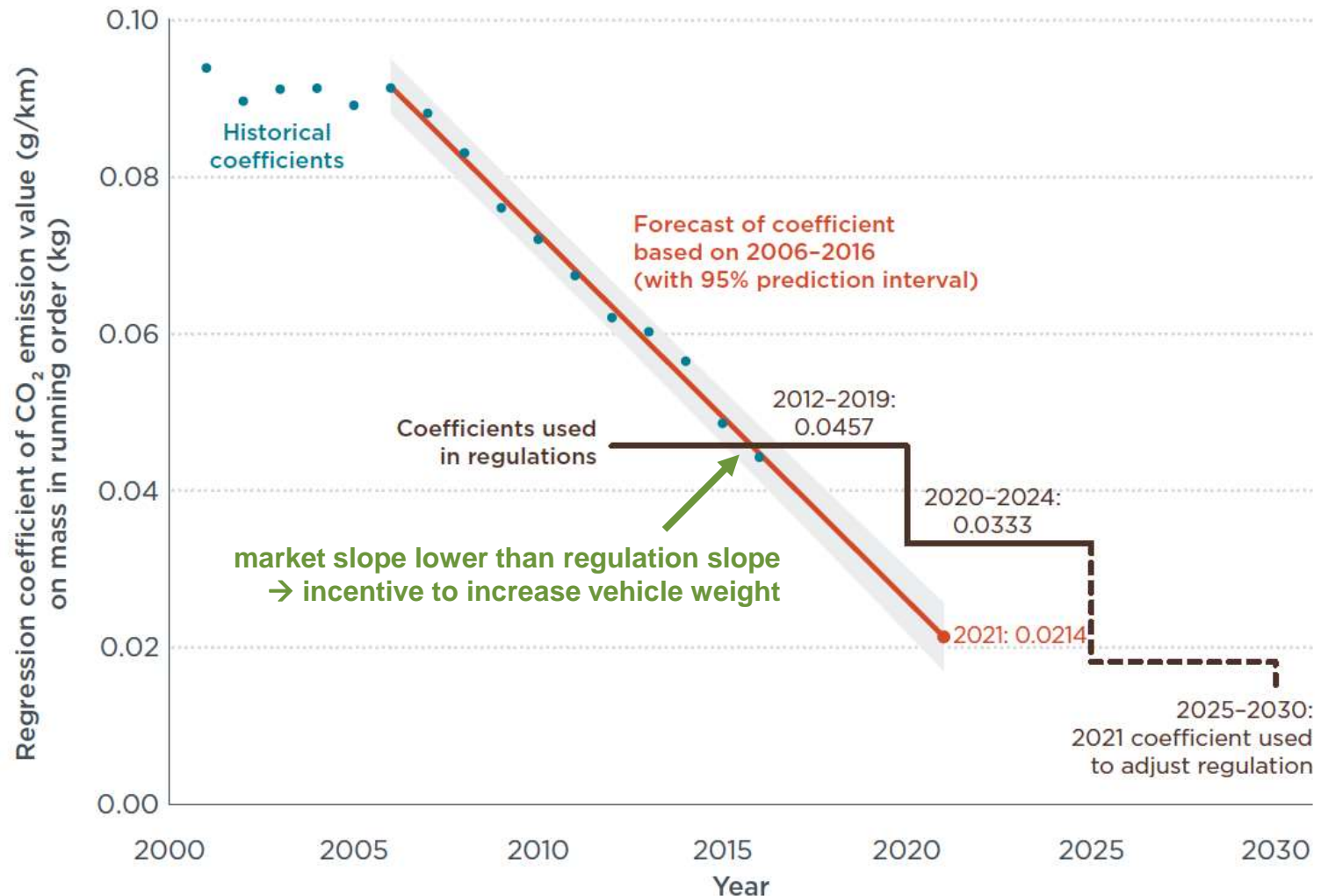
Electric vehicle requirement stays behind industry announcements and includes no penalty for failure



Proposed target system is based on vehicle weight, thereby discouraging the use of light-weighting



The slope factor foreseen does not reflect market situation anymore and encourages weight increase



Summary

- CO₂ reduction rate proposed stays behind current regulation, earlier European Parliament recommendation and EU climate target commitments.
- A higher reduction rate is technically feasible and would result in (higher) net benefits for society.
- The proposed electric vehicle market share requirement stays behind industry announcements and does not foresee any penalty in case of non-compliance.
- The proposed weight-based CO₂ targets will always dis-incentivize light-weighting, compared to a system that is based on vehicle size or that uses absolute targets.
- Without adapting the proposed slope value, each individual manufacturer has a strong incentive to actually increase vehicle weight.