AERIS EUROPE
Air Quality Intelligence

EURO 7 IMPACT ASSESSMENT: THE OUTLOOK FOR AIR QUALITY COMPLIANCE IN THE EU AND THE ROLE OF THE ROAD TRANSPORT SECTOR

Explanation of Emission Factors used

ACEA Webinars 24 and 29 March 2021

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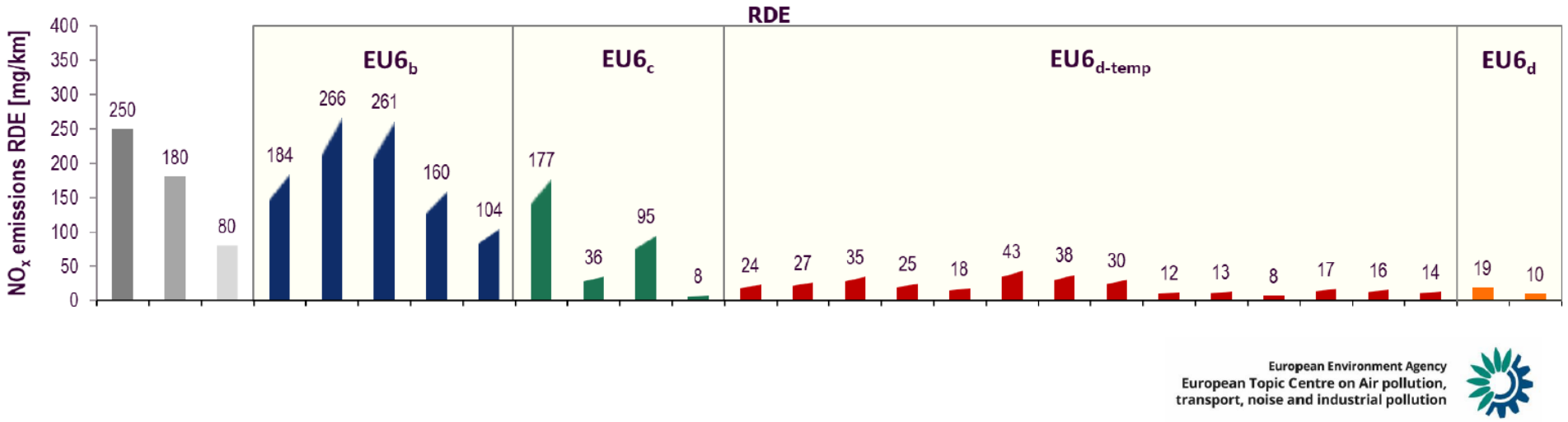
Emission Factor Adjustments

COPERT version 5.3.26 was used in this study but with important modifications to Euro 6/VI diesel NOX emission factors. These modifications were made following back calculation of emission factors from the SIBYL Baseline data which showed that Euro 6d temp (mandatory from 2017) and Euro 6d final (mandatory from 2020) emission factors were higher than are observed in use. Similarly, back calculations showed that Euro VI emission factors did not include the regulatory Steps D and E. Accordingly, to better reflect Euro 6 performance, the Euro 6d temp NOX tailpipe emissions conformity factor (CF) was set to a conservative value of 2 and the Euro 6d final NOX tailpipe emissions conformity factor was set to a conservative value of 1. These conformity factors were applied to all relevant Euro 6 technology passenger cars and light duty vans. To reflect the NOX emissions of Euro VI Steps D and E more accurately, coefficients of 68% for articulated and 54% for rigid were applied to all relevant emissions from Euro VI technology HDV and heavy vans.

Why this update?

- NOx emission levels of Euro 6 diesel RDE ($6_{d\text{-}temp}$ and 6_d) cars in real-world conditions are lower than initially anticipated
- Euro 6 diesel before RDE continued to emit much higher than limit
- Latest Euro $6_{d\text{-}temp}$ already by far fulfil Euro 6_d



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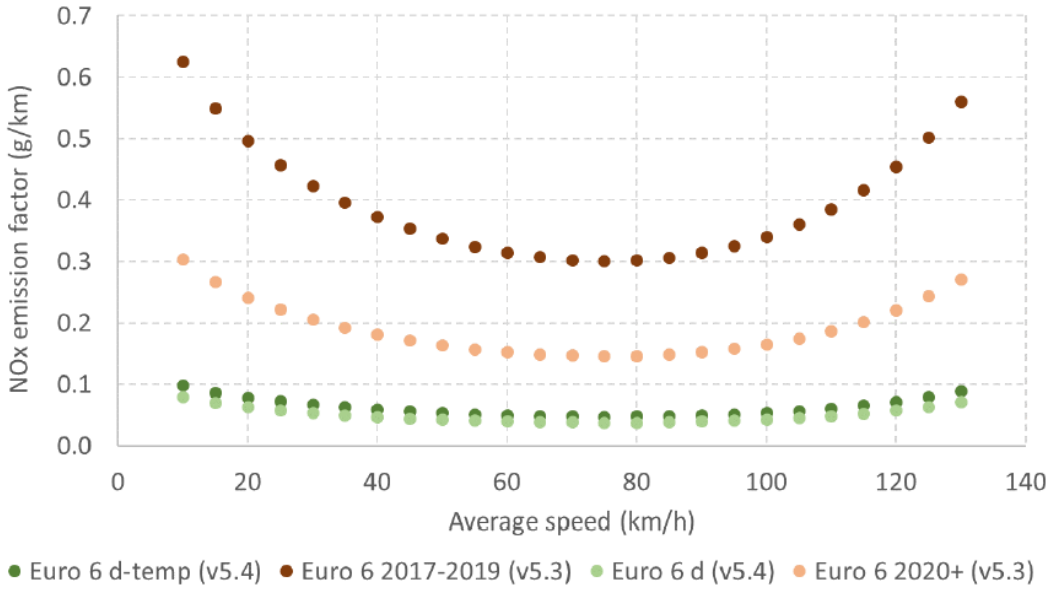
Affected emission factors

- Emission factors of Euro $6_{d\text{-}temp}$ and Euro 6_d diesel cars reduced by about 85% and 75% respectively

		Petrol	Diesel
CO	PC	↔	↓
	LCV N1-I	↘	↓
NOx	PC	↘	↓
	LCV N1-I	↓	–
VOC	PC	↔	–
	LCV N1-I	↓	↓



European Environment Agency
European Topic Centre on Air pollution, transport, noise and industrial pollution

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