

# **The importance of particles and carbon dioxide in air pollution and in-vehicle human exposure**

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## **ABSTRACT**

One of the consequences of Dieselgate in Europe has been falling sales of new diesel cars and the dominant trend is a switch back to gasoline cars. In the pursuit of reduced nitrogen oxide emissions, the unintended consequence may be an increase in tailpipe particle and carbon dioxide emissions. Not only does this have an effect on air pollution and climate change, but the exposure of drivers to these pollutants may be particularly significant.

The latest data on tailpipe emissions of nitrogen oxides, particulates and carbon dioxide will be presented, including cars certified according to the new Real Driving Emissions regulation. The relative performance of diesel and gasoline vehicles will be shown. Furthermore, data from a new EQUA Index programme on in-cabin air quality will be presented, covering the rate of particle infiltration from a range of modern cars, and the propensity of carbon dioxide concentrations to rise when the air recirculation mode is activated.