

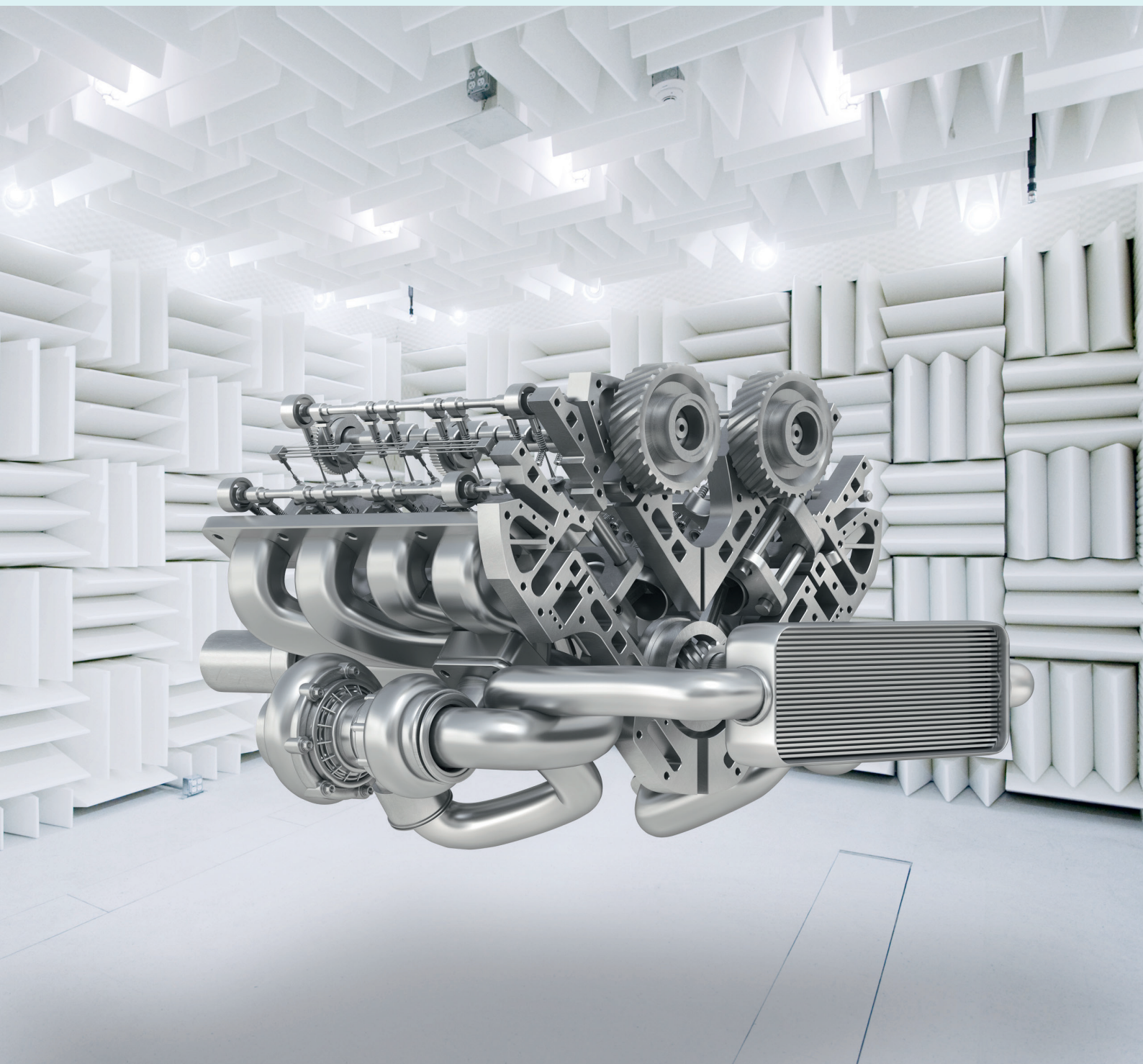
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Carbon dioxide life cycle assessment of battery electric powertrains

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Abstract

Considering the background of the omnipresent topic of climate change and the political ambition to lower greenhouse gas emissions, electro-mobility is seen as the saviour in the automotive industry and electric cars are hailed as zero-emission-vehicles. The emission advantages compared to vehicles powered by combustion technology are based on the established method of measuring emissions in proximity to vehicles. However, from a holistic point of view, operating conditions and framework conditions of the vehicles play a significant role which is rarely included in current discussions. With the societal and political background in mind, it makes sense to determine and evaluate the advantages and disadvantages of battery-electric-vehicles by means of a carbon dioxide life cycle assessment.

Keywords

Carbon dioxide life cycle assessment — Electromobility — Cradle-To-Grave

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