

## **Life Cycle Analysis and Economic Impact**

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## Life Cycle Analysis and Economic Impact

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### Abstract

This chapter presents a life cycle analysis of different potential fuels and power trains for passenger cars. The focus of the study is electric vehicles powered by batteries and fuel cells. First the cumulative energy demand (*CED*) is introduced as an instrument to compare the different technologies. Subsequently, several process chains for transportation are shown in a holistic approach. Finally, an economic and ecological comparison of the different drive technologies is used to work out the constraints and the necessary future development for hydrogen and electric power trains. The results are taken from several reports for the Bavarian Hydrogen Initiative (*wiba*), which is coordinated by the authors.

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