

Modeling the cost price of battery electric vehicles

Climate Change. Sustainability. E-Mobility. These three topics are shaping the future of the automotive industry. Companies like Tesla, Daimler, BMW and Volkswagen advertise sustainable vehicles. But how does the sustainability trend affect vehicle manufacturers? How do managers need to position their companies to remain competitive in the volatile market? These questions will be answered as part of the Life Cycle Assessment (LCA).

As part of a student team, you will model and then validate the cost price of a battery electric vehicle in this thesis. This is to illustrate the impact of more sustainable vehicles at a business level.

The work packages include the following:

- Familiarization with the state of the art of cost modeling in automotive
- Breakdown of the complete vehicle into components and systems
- Selection of suitable methodologies for cost modeling
- Development of a cost model and subsequent validation on the basis of real vehicles
- Demonstration of implications for companies

There is the possibility to publish the results in form of a scientific paper.

The work can be done in home office and in German or English.

Prerequisites

- Independent and motivated way of working
- Interest in sustainability and electric vehicles
- Previous knowledge in cost management/cost modeling
- Ideally previous knowledge in the field of Life Cycle Assessment (LCA)

Did you find the description appealing? Are you ready to make a significant contribution to sustainable vehicle development? Then send your CV and transcript of records to

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