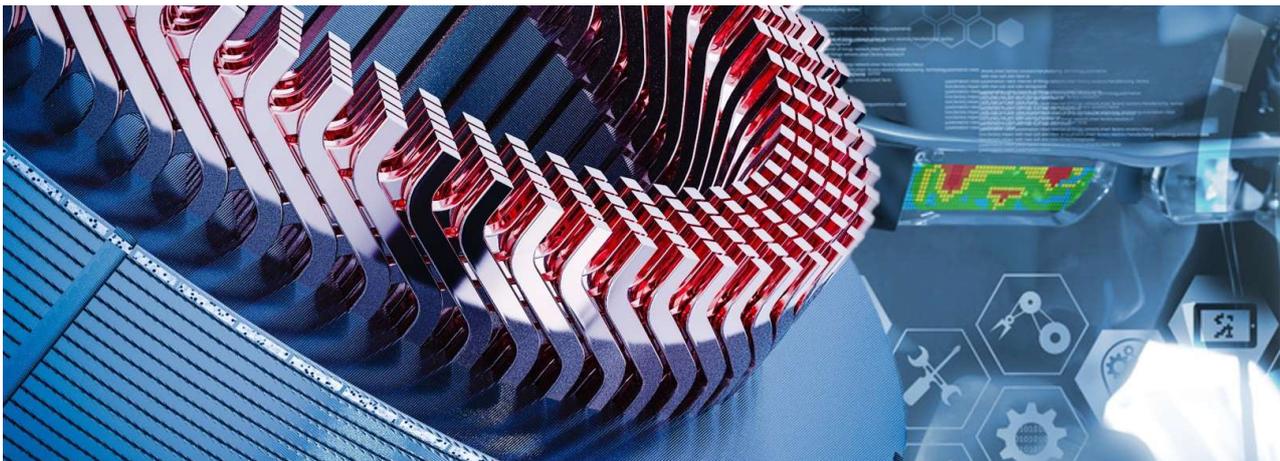


## Master thesis / Bachelor thesis

*Definition of the term sustainability in the context of electric drive production taking current developments and trends into account (e.g. Industry 4.0, Biological Transformation...)*



*Bildquelle: PEM der RWTH Aachen*

### Initial Situation:

Due to the continuing global warming and increasing scarcity of natural resources, sustainable and resource-efficient management is essential to reduce CO<sub>2</sub>-emissions and other relevant environmental impacts to a minimum in order to enable future generations to live on this planet. A central element for achieving this goal is the electrification of the mobility sector. However, it is also necessary to consider and further optimize the components and processes for the production of the electric drive train with regard to their sustainability in order to achieve an actual improvement and not just a shifting of the problem. While comprehensive concepts and tools already exist for the battery, the topic of sustainability in connection with the electric motor is still in its beginnings. Therefore the aim of this work is to define the term sustainability in this context and narrow it down by taking current developments and trends into account.

### Your Task:

Your task consists of a general outline of the term sustainability and a subsequent narrowing down in the context of an application in the electric drive production. In doing so, current product- and process-related trends are to be included.

- Elaboration of the general concept of sustainability and transfer to the concrete application case of the electric motor production
- Research on current trends and developments at the product and production level of the electric drive in the context of sustainability
- Answering the question: What is sustainability in the context of electric motor production?

### Prerequisites:

- Study in Engineering, Mechanical Engineering, Informatics (or comparable)
- Solid skills in using MS Office

### Our offer:

- Fast processing
- Defined tasks and flexible working
- Professional mentoring and insight into the industry and work practice
- Self-responsible execution with regular Teams- or personal meetings

### Interested?

Please send me a transcript of your grades and your resume to the address below.

### Your Contact at the PEM

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