



OTTO VON GUERICKE  
UNIVERSITÄT  
MAGDEBURG

EIT

FAKULTÄT FÜR ELEKTROTECHNIK  
UND INFORMATIONSTECHNIK



LENA

## Non-Technical Project

for Ms./Mr. xx xx (123456)

**Topic:** Identifying the Barriers to the Diffusion of Battery Electric Vehicles:  
A Literature Review

**Task:**

The transportation sector, essential for economic growth and social development, is responsible for high greenhouse gas emissions worldwide. For this reason, within the concept of energy transition in transport, battery electric vehicles (BEVs) have emerged as a promising alternative for the electrification of this sector, aiming not only to reduce the emission of polluting gases, but also dependence on fossil fuels. However, the widespread adoption of BEVs faces significant barriers that need to be addressed for successful diffusion.

In this context, this work aims to identify and present the barriers related to the diffusion of BEVs. In order to achieve this objective, a literature review is carried out in the main databases, presenting the factors discussed in the different scientific studies.

The study has to cover the following points:

- Overview and determination of databases and keywords for the study
- Research and characterization of the barriers to the diffusion of BEVs
- Identify benefits and challenges of using BEVs in the power grid
- Analysis of the aspects influencing the growth of BEV penetration
- Documentation of the results

Magdeburg, xx.xx.2023

Date of edition: xx.xx.2023

Date of submission: xx.xx.2023

Supervisor: M.Sc. M. dos Santos Ortiz

Examiner: Prof. Dr.-Ing. habil. M. Wolter

Prof. Dr.-Ing. habil. M. Wolter

Task tutor