

Master Thesis / Bachelor Thesis

Monitoring the Battery Market – Comparison of Battery Manufacturers in Asia, America, and Europe



Source: PEM

Initial Situation:

To reduce greenhouse gas emissions, a transition from vehicles with internal combustion engines to electric vehicles is currently in progress. As the demand for electric vehicles increases, so does the demand for battery cells. The market for lithium-ion batteries, the currently predominant battery cell technology, is expected to grow with an annual growth rate of 18% in the following years. Due to the large growth potential, the market for battery production is highly competitive. Especially in Europe, new battery manufacturing companies emerge that compete with experienced companies. Battery manufacturers can be compared by their production performance, innovative capability and profitability.

Your Task:

You will elaborate the prerequisites for a long term market analysis. Therefore, you will define multiple key performance indicators (KPIs) for profitability, innovative capacity, and production performance of battery manufacturers. The KPIs are initially determined to compare different battery manufacturers. Based on your work, the KPIs can be used to track changes over time and to identify future market trends. Depending on the type of thesis, different emphases can be set.

Your qualities:

- Strong commitment and high willingness to learn
- Structured way of working
- Studying in the field of (industrial) engineering
- Good knowledge of PowerPoint, Word and Excel

We offer:

- Intensive supervision
- Participation in an exciting and relevant field of research
- Fast and remoted processing possible

Interested?

Please send your CV with certificates and your latest transcription of records to the e-mail address below.

Your contact at the PEM:

Matthias Smulka, M.Sc.
m.smulka@pem.rwth-aachen.de