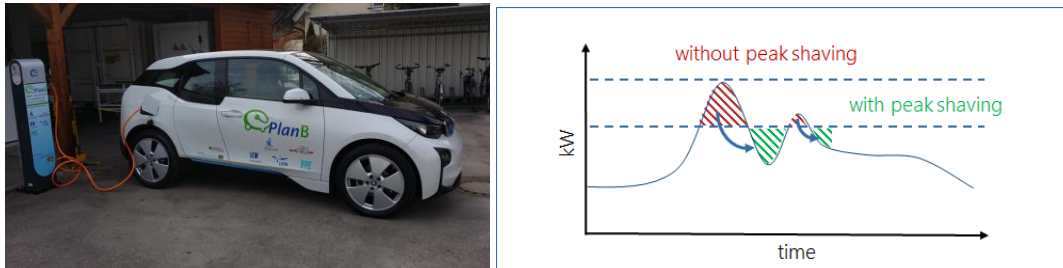


Bachelor's thesis / Master's thesis / Internship

# Peak Shaving with Electric Vehicles

## – a cost-benefit analysis



Volatility in the electric grid increases along with the rise of renewable energy. Bidirectional charging, i.e. enabling electric vehicles to also feed energy back into the grid when connected for charging, promises to mitigate a part of this new volatility.

In this thesis/During your internship you will study how electric vehicles can be used to shave demand peaks for commercial and industrial consumers aiming at a reduction of electricity costs.

You will gain experience in modelling and optimizing a complex use case in the electricity sector. Your work will take place in a cooperative environment with flat hierarchies, giving you the opportunity to bring in your own ideas to the project, and be fully integrated into the team.

Depending on the current anti-corona measures, you can start on site or at home.

We offer

- An open and cooperative working environment
- Opportunities to bring your own ideas to the project
- Gaining experience modelling use cases in the energy sector
- No delay of your thesis/internship due to anti-corona measures

We are seeking

- A high level of commitment, and an independent way of working
- Decent programming skills in a higher-level language (Python, Matlab, ..)
- Current student in engineering or the natural sciences
- Good knowledge of English (writing/speaking)

We are looking forward to hearing from you!

Possible starting date: December 2020 – March 2021

Duration: 3-6 months

Supervisor: Alexander Djamali

Tel.: 089 / 158121-37

Please send your application containing your CV, letter of motivation, certificates, and current grades to [bewerbung@ffe.de](mailto:bewerbung@ffe.de).