

Master thesis/ Masterarbeit

Modeling of a European Electricity Grid Infrastructure Considering various Spatial Resolution Levels and Time Horizons

Background

The expansion of the power grid will play a crucial role in the energy transition. It is therefore necessary to identify and understand the status quo and the development potential of the grid. This information base plays a crucial role as input parameters for energy system models. Depending on the objective of the study, there are different requirements for the spatial resolution or the time horizon. The aim of the work is to develop a tool to process open-source information on grid data and to output it in the formats required by the TUM-ENS.

What are the goals of the work?

The aim of the work is to develop a tool to process open source-information on grid data and output it in the formats required for the TUM-ENS.

- Research into the data base for the European electricity grid
- Tool development for flexible data output
- Deposit of the European power grid in the TUM-ENS models
- Evaluation, Validation and interpretation of the results using TUM-ENS models

What should you bring with you?

- Interest in modeling and optimizing energy systems
- Programming knowledge of Python, MATLAB, C, ... (or another language)
- Independent and structured way of working

Kontakt

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