



## Bachelor & Master Theses

### In the field: modelling of energy markets

#### Field description:

The process of energy market modelling usually involves a transformation of any real-world energy system into mathematical model with the purpose of *improving the understanding* or *predicting the future states* of these systems, as well as *drawing insights* into how energy markets can be designed more efficiently.

The methods used in this research area come primarily from the fields of game theory and mathematical programming. Our team has an extensive experience with applications of linear problems (LP), nonlinear problems (NLP) and mixed-complementarity problems (MCP) to model behavior of energy-economic systems.

We are glad to have interested and motivated students joining our modelling team by writing a bachelor or master thesis. Interested students are welcome to submit their topic proposals or research interests using contact information.

#### Our expectations:

- Interest in energy economics and mathematical modelling
- Very good grades
- Knowledge of GAMS / Python is preferable

#### Contact information:

[iegor.riepin@b-tu.de](mailto:iegor.riepin@b-tu.de)

Tel: 0355 / 694043

Room: LG 3E - R 2.22