



2. January 2024

## Call for master's thesis

### Discrepancies between market and literature data of selected energy conversion technology

We offer the following topic in the field of energy economics and the energy transition as a master thesis. Besides academic skills, the thesis prepares well for a job in the energy field, especially data wise. If this sounds interesting to you, please don't hesitate to contact us.

**Thesis type:** Master's thesis

**Language:** English

**Start date:** Anytime

**Working title:** Discrepancies between market and literature data of selected energy conversion technology

**Background:** Most of political or business decisions in the field of energy supply systems are based on advanced techno-economic analysis. Often, these analysis use data from energy conversion technology taken out of literature sources. Real market data can deviate from literature data which can reduce the accuracy of existing analysis substantially. Revealing the discrepancies between market and literature data identifies the potential technology specific scale of this analysis error. This would help to better estimate the level of result inaccuracy provoked through inaccurate energy conversion technology data.

#### Frame:

Spatial scope: Germany (core), EU (supportive)

Temporal scope: 2010-2024

Technology: Heat pump, gas condensing boiler, photovoltaic, wind, geothermal, solar thermal, H<sub>2</sub>-electrolyzer, battery storage, ...

Data: CAPEX, OPEX, lifetime, efficiency, capacity, project costs, ...

#### Research objectives:

1. Selection of relevant 'technology' and 'data'
2. Research of market and literature data of the technology of 1.
3. Evaluation of the accuracy level of the literature data through a comparative analysis of the data of 2.

#### Your profile:

Studies: Economics, business, engineering

Skills: Some knowledge in the field of energy economics or energy engineering, passionate about the energy transition, good MS-Office skills and B2 English language skills or higher.

#### Our profile:

We, the chair for energy management and engineering, are an inter-disciplinary team of energy and sustainability enthusiasts with a focus in techno-economic analysis, often supported by computer models. Most thesis topics are embedded in cutting-edge research projects. The thesis supervision is relaxed, modern and flexible.

We are looking forward to your questions or direct application including your CV and complete transcript of records send to [lerch@wifa.uni-leipzig.de](mailto:lerch@wifa.uni-leipzig.de).

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