IER - Institut für Energiewirtschaft und Rationelle Energieanwendung

WiSe 24/25

The restructuring of energy systems is one of the major challenges of the 21st century. The Genese research project focuses on analysing the effects of social change on future energy demand and how this will change the energy system of the future.

Based in the Energy Economics and Social Science Analyses team, the focus of the thesis will be on determining changes in energy demand in the residential sector as input for energy system analysis.

Bachelor/Master thesis
Determining the influence of social trends on energy demand in the residential sector

The aim is to develop a systematic that can be used to quantify and analyse the influence of social trends on future energy demand in the residential sector. In addition to socio-economic parameters, the influence of changing social values will be analysed. For example, one research question could be to analyse the influence of the sharing economy on future energy demand in the residential sector.

Your **possible tasks** include, among others

- Giving an overview over the current state of research on the influence of social trends on energy demand in the residential sector
- Analysing the relationship between social trends and energy demand in the residential sector
- Implementation of a systematic for quantifying the effects of change
- Visualisation of results and written documentation of key findings

The following **requirements** are expected:

- Interest in working at the interface between social science and energy economics
- Affinity for data research and processing (e.g. using Python)
- Independent, interdisciplinary and structured way of working
- Very good knowledge of German or English



Are you interested or do you have any questions? Then please contact Felicitas Ortlieb by e-mail by **16 September 2024**. felicitas.ortlieb@ier.uni-stuttgart.de