

IER - Institut für Energiewirtschaft und Rationelle Energieanwendung

Context & Description

At the Institute of Energy Economics and Rational Energy Use (IER) at the University of Stuttgart, we are looking to fill a position for a Master's Thesis in the Department of Energy Economics and Social Science Analyses (ESA) to start as soon as possible.

Energy System Optimisation Models (ESOMs) analyze technologies and policies to define transformation pathways under specified conditions. Technologies are represented using generalized techno-economic parameters, depending on data availability. Identifying and characterizing factors influencing these parameters is crucial to ensure their relevance to the ESOM analysis. The thesis aims to identify these key factors for hydrogen technologies, analyze their influences on an existing database, and develop guidelines to make the reported values comparable and implementable.

Master's Thesis (m/f/d)

Exploring Contextual
Influences on the TechnoEconomic parameters of
Hydrogen Technologies

Requirements and qualifications:

- Enrolled in a higher semester Master's Degree course with aspects of Sustainability and Renewable Energies (RE)
- Preferably experience with techno-economic analysis and understanding of different RE technologies and their roles
- Basic knowledge and understanding of Energy System (& representative) models
- Good data handing skills for comparative analysis
- Motivation to familiarize with new topics and analysis methods

What you can expect:

- Thesis supervision for duration of 6 months
- Insights and knowledge about current research topics and other energy system models employed at the institute
- Freedom to contribute your own approaches and ideas
- Possibility of contributing to a paper related to the thesis topic
- Flexible working hours and work-from-home opportunities
- Working language: preferably English and/or German

Application deadline: 01.03.25

Contact:

If the position interestes you, please submit your application mentioning "ConClear" in the email subject along with your CV and an overview of grades. Motivation letter along with sample previous works are also welcomed (advisable but not decisive for the application) to: jithin.jose@ier.uni-stuttgart.de

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