

Vacant PhD Position (4 years, full time)

Flexibility Modelling in Sector-Coupled Energy Systems

The Energy Economics Group (EEG) at Faculty of Electrical Engineering and Information Technology at TU Wien has been working together with many renowned international universities and research groups for more than 20 years, making valuable contributions to decision-making in the urgently needed decarbonisation of the energy systems. The secret of EEG's success has always been highly motivated young people who have contributed their talents and ideas! Would you also like to immerse yourself in the fascination of scientific work in general and energy system analysis and modelling in particular over the next few years? Would you like to work in a collegial and friendly environment in an interdisciplinary team at the forefront of academic research with many development opportunities, combined with international research stays at top addresses worldwide? Like many PhD alumni before you, would you like to summarize in a few years' time that it was a fascinating time with many positive experiences in every respect?

Then you've come to the right place: Energy Economics Group (EEG), TU-Wien

Your tasks...

- Cutting-edge research in the field of sector-coupled energy system modelling with a focus on flexibility integration in different sectors and at different levels. Depending on the research objectives, this includes both the development of customised models from scratch and the further development of functionalities of existing models and tools.
- Active participation in European and national research projects and willingness to take on responsibility in these projects to achieve the respective goals.
- Active participation in international and national scientific conferences/seminars and formats like international PhD days or similar.
- Extensive and high-quality publication in scientific journals.
- Support of teaching activities in the field of energy system analysis and modelling as well as supervision of students at different educational levels (Bachelor, Master).
- Active participation in daily scientific discussions within the group and contribution of own ideas.

Your profile...

- Completion of a relevant Master degree with strong analytical skills and proven knowledge in source code development (e.g. Python, Matlab, R) and willingness to extend this portfolio (e.g. Julia).
- Willingness to delve into sophisticated modelling of sector-coupled energy systems, whereby the focus can be adapted to individual interests.
- Interest in conducting cutting-edge research at international level and its further development (incl. willingness to frequently contribute to scientific conferences and undertake research stays abroad).
- Willingness to produce high-quality publications.
- Interest in and enjoyment of teaching and working with students.
- Organisational skills, structured way of working as well as ability to work in a team.
- Very good written and spoken English skills.

We offer...

- Strong team spirit in a young, highly motivated interdisciplinary team with cosmopolitan mindset.
- Customised scientific and personnel development opportunities in an international research environment.
- Many joint activities throughout the year related to your job (e.g. excursions, PhD days, ...)
- And much, much more...

Your salary...

Year 1: 50 k€/year (gross); according to collective labour agreement at TU Wien

Year 2-4: 60 k€/year (gross), i.e. 20% overpayment, in case of positive evaluation

Application documents...

Please send your convincing application documents to the scientific coordinator of the energy system modelling Dr. Sebastian Zwickl-Bernhard (zwickl@eeg.tuwien.ac.at) and Prof. Dr. Hans Auer (auer@eeg.tuwien.ac.at).

Deadline...

This vacant PhD position is open until filled!