

Research assistant position on open energy data

80%-100%, Zurich, fixed-term

The Swiss energy system is changing. Open energy data makes such change transparent and publicly available. Ultimately, understanding the facts on the Swiss energy systems can help everyone to better evaluate arguments in discussions on energy and climate policies. One example of providing access to open energy data is the [Swiss Energy-Charts](#). When accessible, transparent and openly available, energy data also largely improves the quality of scenarios provided by energy system models. [Nexus-e](#) is a tool to create such scenarios and is based almost entirely on open energy data.

Project background

To use open energy data, we developed a process to collect, store, and process such data to make it input-ready for an energy system model. In Nexus-e, all data is ultimately stored in a database that is used as a joint source of data for all models on the Nexus-e platform.

The main objective of your work will be to improve the functionality of this process (collecting, storing, and processing (open) energy data). You will be an integral part of the Nexus-e team and learn how to create scenarios using the database and model settings. You will also be responsible for collecting, storing, and visualizing open energy data in the Swiss energy charts.

Job description

- Understanding the current process of collecting, storing, and processing (open) energy data in Nexus-e and the Swiss Energy-Charts
- Identify and implement required changes to the process in Nexus-e and the Swiss Energy-Charts
- Collect (open) energy data (e.g., generator location and marginal cost function within Europe)
- Test and develop a manual for the input data collection and processing

Your profile

- You just completed your Master's or Bachelor's degree in mechanical engineering, electrical engineering, or a relevant domain at ETH Zurich or a similar university.
- You are able to communicate well using German and English.
- You are able to understand and write Python and/or Matlab code
- You are responsible and able to work independently on your tasks.
- You understand the basics of energy systems and their current transformation

Your workplace

Energy Science Center, ETH Zurich, Sonneggstrasse 28, Zurich.

We offer



Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich



We offer a research assistant position at ETH Zurich in a high-impact and practical project. Salaries are competitive and paid according to [ETH standards](#). The expected working duration is 12 months with the option to extend to 2 years.

[Working, teaching and research at ETH Zurich](#)

We value diversity

In line with our values, ETH Zurich encourages an inclusive culture. We promote equality of opportunity, value diversity, and nurture a working and learning environment in which the rights and dignity of all our staff and students are respected. Visit our Equal Opportunities and Diversity website to find out how we ensure a fair and open environment that allows everyone to grow and flourish.

Contact

Are you interested? Please send your CV, a short letter of motivation (max. one page), and transcripts of previously obtained degrees (with grades) to Dr. Marius Schwarz (mschwarz@ethz.ch).

We look forward to receiving your application!

Zurich, July 2022