22J023 – Internship Proposal

Support on the assessment of potential of renewable energy resources at municipality level for France

Context

The European Institute for Energy Research was founded by EDF and the KIT in 2002 aiming at enhancing collaboration through joint projects applied to industrial issues. With its applied research orientation EIFER is bridging the gap between science and industry since more than 20 years. In the context of the European energy transition, EIFER provides research-based innovative energy solutions for the sustainable growth of cities, local communities and industries.

The team Local Multi-Energy Systems is looking for a student (f/m/d) interested in providing support on the assessment of potential of renewable energy resources.

Internship description

Assessing the renewable potential involves linking several topics, such as GIS data processing, technical and economic information. In EIFER, a tool for the assessment of renewable energy potential at municipality level has been developed. All the process concerning the GIS data input treatment and the link with the databases is nowadays, not automatic, even if, some of the processes have been already automatized. The main goal of the internship would be, to support the maintenance of the tool and to improve all the processes that are already implemented in a more efficient way. Moreover, this internship, should support the transition to new potential solutions in order to add value to the activity.

The assigned tasks involve

- Support in download, store, management, cleaning and organization of data coming from different open data sources.
- Analysis of collected data through: statistics, spatial analysis and mapping
- Automatization of processes that are nowadays done manually
- Exploration of new solutions with prototype building

Required qualifications / skills

- Studies in the field of computer sciences / informatics
- Knowledge associated to GIS and statistics
- Programming experience (Access/Python)
- Database experience (SQL, preferable already worked with PostgreSQL)
- Interested in the field of energy and environment
- Professional working proficiency in English (institute’s official working language), French or German knowledge is an advantage.
What you can expect

- An international experience in a stimulating multi-disciplinary, multi-cultural environment at the interface between research and one of the largest energy utilities worldwide.
- Opportunities to explore new technologies and methods if it fits in the context of the project
- A contribution to the key challenge of our era: the fight against climate change through the decarbonization of the energy supply.

Conditions

- Duration: 6 months
- Starting date: as soon as possible
- Location: EIFER, Emmy-Noether-Str. 11, 76131 Karlsruhe, Germany
- Working hours: 39.5 hours per week
- Monthly compensation: 450 € for compulsory internship

Contact

If you want to join our motivated team, please forward your electronic application with one single PDF of max. 5MB to jobs@eifer.org (cover letter + curriculum vitae). Please refer to the offer number 22J023.
For additional information concerning the work, please contact stefano.sanfilippo@eifer.org