Chair of Renewable and Sustainable Energy Systems
TUM School of Engineering and Design
Technical University of Munich

Winter semester 2025/26

Project Lab Renewable and Sustainable Energy Systems

Notes on registration

If you are interested in participating in this project internship, please proceed as follows:

1. Select the topic relevant to you for the project internship in the topics listed below. Also consider which other topics would be suitable for you.
2. Get in touch with the supervisors about the topics of your choice and make an appointment for a short video call. Please send your CV, grade transcript, and a short motivation statement explaining why this topic is of interest to you to the supervisors.

InfoMeeting:

Date: October 02, 2025 / 03:30 – 04:30 pm.
https://tum-conf.zoom-x.de/j/63411749791?pwd=mk8cyCipOxmQOpCe8w7gcEymyqWDal.1
Meeting-ID: 634 1174 9791
Kenncode: TUM

First, the supervisors will give you a brief overview of their topic.
Afterwards you can speak with the supervisors for 3-5 minutes to get an impression of whether the topic is suitable for you.

3. If you would like to apply for one or more topics after the interview with the supervisor, please register for the corresponding groups in TUM online by Wednesday, **October 08, 2025,** at the latest and please make it clear how you prioritize the topics.
4. By Monday, **October 20, 2025,** at the latest, we will inform you whether and, if so, in which topic you can work on the project internship.

If you have questions concerning the organization of the lab course, please contact Dr. Kuhn (propens.ens@ed.tum.de).

If you have any questions about the content of the different topics, please contact the supervisor directly.

Please be sure to pay attention!

In order to participate in the project internship, it is essential that you

1. had a **short video-call with the supervisor** of the topic **AND**
2. register **in TUM online for the course**.

If you do not meet one of the three requirements, you will not be included in the selection for participation.

Organizational matters

Weekly attendance times are mandatory for the project internship.

The language (German or English) depends on the composition of the group.

Topics

No.	Topic	Students	Brief description	Supervisor (email)	Time slots for meetings
1	**Planning and Managing Enhanced Geothermal System (EGS) Projects for District Heating in Germany**	**5**	Geothermal energy is necessary for Germany's energy transition, however conventional projects can only supply regions with sufficient natural thermal water resources. **Enhanced Geothermal Systems (EGS)** using horizontal drilling and multistage stimulation, to engineer the required reservoir in previously unsuitable regions, therefore making geothermal scalable technology. In this project, you will act as a **project management team** to develop an **EGS project for district heating as a case-study for a pilot project in north Bavaria**. Your task is to conduct a **feasibility study** and prepare a **project implementation plan** covering the description of geological conditions (based on existing data and literature), heat demand estimation, economics, and risk evaluation and mitigation. Alongside the technical work, you will practice project management by structuring work packages, defining milestones, and coordinating results.	**Fabian Uth** fabian.uth@tum.de	TBD

No.	Topic	Students	Brief description	Supervisor (email)	Time slots for meetings
2	**Development of new financing concepts and models for geothermal projects in Germany**	**5**	Geothermal energy plays an increasingly important role in Germany's path toward decarbonisation. At present, most geothermal heat projects rely on similar financing models. However, with the growing need to expand both conventional geothermal and enhanced geothermal systems (EGS), new and more flexible financing approaches will be required. In this project, you will: • Analyze the current financing schemes used for geothermal projects in Germany. • Compare these schemes with financing approaches in countries where geothermal energy is more advanced. • Examine established financing models from other renewable sectors such as wind and solar energy and evaluate whether these can be adapted for geothermal projects. • Develop recommendations for innovative financing concepts tailored to the German context. By the end of the project, you will propose a set of financing models and strategies that could help accelerate geothermal development in Germany, contributing to the broader energy transition.	**Anastasia Sidorova** anastasia.sidorova@tum.de	TBD