



At BayWa r.e. we r.e.think energy - how it is produced, stored and can be best used to enable the global renewable energy transition that is essential to the future of our planet. Based in 30 countries, BayWa r.e. is a leading global renewable energy developer, service provider, distributor and energy solutions provider. Operating throughout Europe, the Americas and Asia-Pacific, we are strategically investing in emerging markets around the world, actively shaping the future of energy and taking a stand against climate change.

BayWa r.e. Solar Projects GmbH provides an extensive range of services, from greenfield development and turnkey construction to financing options and the operation of ground-mounted or floating solar parks and hybrid plants. Thanks to our global expertise, our local teams can cater to our customers' needs and requirements.

## Due to our dynamic growth, we are expanding our team in Munich and are currently looking for a Master Thesis/Working Student (m/f/d) Erosion Control for Utility Scale PV Plants in the Mediterranean Region

Development of Utility Scale Photovoltaic Power Plants is becoming a key aspect to achieve the renewable energy transition goals. In Europe, the Mediterranean region has a great potential for these developments due to the climate conditions. Some sites, however, are located at foothills where surface runoff during storm events can cause soil erosion. In ground mounted steel structures for PV modules, erosion can jeopardize the integrity of the foundation systems leading to the failure of the structures. BayWa r.e. Solar Projects GmbH is investigating erosion control elements that can decrease the flow velocity that our compatible with its ground mounted PV structures to define internal development standards.

### What you will do:

- Literature research about erosion control mechanisms in dry streams considering main influencing factors
- Derive the inputs needed for the investigation of erosion control mechanisms in hydrodynamic models
- Systematically applying these erosion control methods in hydrodynamical models (2 case studies and benchmark test)
- Comparison of erosion potential before and after the mitigation measures have been applied
- Summarize the results and generate internal standards
- Deliver technical drawings to communicate the selected solutions to our Engineering and Construction Team

### About you:

- Strong background in Hydrological Processes
- Proficiency in processing GIS data
- Experience with Hydrodynamic Modelling Software (HEC-RAS, Telemac, Hydro-AS, or similar) and knowledge of CFD fundamentals are desired

We offer you exciting challenges as part of a team of professionals. Furthermore, the international focus of our company will open up excellent future prospects for you. As an expanding supplier in the renewables sector, we create opportunities for personal and professional development. It goes without saying that a friendly and cooperative working environment is part of our company culture. As part of the **BayWa r.e.** renewable energy network, you will benefit from flat hierarchies with short, fast decision-making channels. Our integration into BayWa AG provides security and opportunities for further development as you would expect from a company of this size.

**Advisors:** Dr. Karl Broich (TUM), Diego Aguirre (BayWa r.e. Solar Projects GmbH)

**Application:** We will be happy to receive your CV, a short introduction about yourself and a list of your coursework that you consider relevant for the topic ([diego.aguirre@baywa-re.com](mailto:diego.aguirre@baywa-re.com)).

### Is This Role The Right Fit For You?

#### Diversity and Equal Opportunity

At BayWa r.e. we are committed to providing an environment of mutual respect where equal employment opportunities are available to all applicants and teammates. All employment is decided based on qualifications, potential, merit, and business need. We do not discriminate on the basis of origin, religion, color, sex, gender identity, sexual orientation, age, non-disqualifying physical or mental disability, national origin, pregnancy, veteran status or any other basis covered by appropriate law.

#### We look forward to your application!

If you have any questions about the job offer, please get in contact with us.