

## Job offer

# Student assistant/thesis project (B./M.)

## Off-Grid Systems

Reiner Lemoine Institute is an independent non-profit research institution that contributes to a transformation towards a sustainable energy supply based on 100 % renewable energy. Our three research fields are *Transformation of Energy Systems*, *Mobility with Renewable Energy*, and *Off-Grid Systems*. We conduct applied research to scientifically support the long-term transition of the energy supply system towards renewable energy.

We are offering a position as **internship** in the Research Unit **Off-Grid Systems** to be filled by May 1<sup>st</sup> 2019 (flexible) in the following project

## Developing data acquisition and evaluation schemes to assess climate vulnerability and adaptation measures of island communities in Southeast Asia

The position is to be filled for a period of **6 months**. There is the option to write a **bachelor's or master's thesis** based on the research conducted in context of this position.

### Description:

In the Research Unit Off-Grid Systems, we develop renewable-energy-based electrification strategies for developing regions and optimize hybrid mini-grids by applying energy system simulations and geo-information software (GIS).

We are offering an internship position in context of the PhD research project "Climate resilience for island communities in Southeast Asia". Working with the hypothesis that sustainable electrification has the potential to support Southeast Asian island communities in improving their climate resilience, the research firstly elaborates the island landscape in terms of energy access, socio-economic development as well as current and future climatic impacts. The identification of correlating dimensions of sustainable electrification and improved climate resilience will follow in a second step. Once the hypothesis is verified, the technical resilience of proposed electrification options plays a crucial role and will be analyzed as the third step of the PhD project.

The intern will support the PhD project by developing appropriate data acquisition and evaluation schemes for climate resilience of island communities, including political and socio-economic aspects. The findings of the internship are direct input into the first step of the project and lay the foundation for elaborating the second step.

The intern will work on the following tasks:

- 1) Conduct a baseline analysis of climate impacts for island communities in Southeast Asia (socio-economic analysis).
  - ▶ Aim: Understand the status quo and define specific areas of climatic impacts on local livelihoods
  - ▶ Methods: E.g. literature review
- 2) Establish an evaluation scheme for climate vulnerability/resilience considering different climatic effects, geographic and administrative levels (regional, national, local) as well as the different and correlating impacts on local livelihood.
  - ▶ Aim: Enable evaluation of multi-dimensional climatic impacts on island communities based on the findings (1)
  - ▶ Methods: Systematic multi-dimensional and multi-level evaluation methods and approaches (up to expertise of intern)

### Kontakt:

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- 3) Develop a survey for data gathering in the field including evaluation methodology to feed into the developed evaluation scheme.
  - ▶ Aim: Quantify, verify and rate climatic impacts on island communities
  - ▶ Methods: Systematic survey tools (up to expertise of intern)

**Requirements:**

- Candidates must be enrolled in a bachelor's or master's degree program, ideally Climate Science, Geography, Environmental Politics/Science/Engineering, or Sociology
- Fluent English language skills are required
- GIS modeling skills and basic R coding skills are preferred
- The candidate is expected to work independently, systematically, and thoroughly with minimal supervision. He/she should be able to communicate and document research results on his/her own.

**What we offer:**

- A friendly and open work environment with a young team (currently about 70 employees, with appr. 25 students)
- Academic support and supervision
- Flexible working hours
- Office on the Science Campus Adlershof, excellent public transport access

**Contact:**

Kindly send your application as soon as possible (cover letter, CV, transcript of records) via e-mail only, in one PDF file to the contact above. Please indicate the reference number „**OffGrid\_59\_110319**“ in the subject line.

Questions regarding tasks and scope of the work are answered by [Katrin Lammers](#).

All genders welcome!