

Project Fact Sheet

Project Title Pathway to Renewable Off-Grid Community Energy for Development (PROCEED)

Keywords Mini-Grid, Hybrid Energy Systems, Renewable Energy, Namibia, Off-Grid, Rural Area

Project Details

Project Start	2019	Duration	3 years
Grant Scheme	Client II – International Partnerships for Sustainable Innovations	Project ID	03SF0570A-D
Funding Authority	Federal Ministry for Education and Research (BMBF) Project Management Jülich (PtJ)		
Sponsor Program	---		
Project Budget	1.246.892 €		
Contact Person	Prof. Dr.-Ing. Wilfried Zörner (Project Leader) Stefan Schneider		
Project Partners	Neu-Ulm University of Applied Sciences (HNU), University of Bayreuth (UBT), IBC Solar AG		

Description

PROCEED combines the socio-economic, financial and technological analysis of the potential and challenges using renewable energy (RE)-based off-grid systems for sustainable energy supply of populations in remote areas. Using the example of two divergent regions in Namibia, the project consortium will conduct case studies at three exemplary existing remote off-grid hybrid energy systems (HES), investigating social and community structures, societal perceptions, legal, regulatory and economic conditions as well as the technology applied.

Based on the research activities in these three areas of expertise, recommendations for action to effectively link evolving social practices with the adaptation to mini-grid electrification will be developed. This includes guidelines for the dimensioning, design and monitoring of RE-based mini-grids as well as recommendations for action on community-, regional and national level. Moreover, to ensure the sustainability of the project and the involvement of the local population on a long-term, training schemes for the technical operation and maintenance as well as the financial management of mini-grids will be developed, which can then be used for capacity building on local level.

Objective:

The overarching objective of this project is to address the situation of the population in remote areas without access to electricity and adequate energy infrastructure and services. The aim is to identify suitable models for RE-based mini-grids in remote areas that are appropriate for the respective local societal context, technically up-to-date, economically viable, easily maintainable and sustainable in the long term.