

Project Fact Sheet

Project Title **Renewable Energy-based E-Mobility in Higher Education (REMO)**

Keywords Academic mobility, higher education, innovative renewable energy technologies, e-mobility, research projects, Northern Africa

Project Details

Project Start	2020	Duration	3,5 Years
Grant Scheme	University-Business-Partnerships between Higher Education Institutions and Business Partners in Germany and in Developing Countries	Project ID	57545562
Funding Authority	DAAD – German Academic Exchange Service		
Project Budget	588.686 €		
Project Leader	Prof. Dr.-Ing. Wilfried Zörner		
Contact Person	Stefan Schneider		

Project Partners

Partner Universities:

Al Akhawayn University (Morocco), University of Carthage - the National School of Sciences and Advanced Technologies in Borj Cedria (Tunisia)

Industry Partners:

Asantys Systems GmbH (Germany), IBC Solar AG (Germany), Global Evolution Lighting (Tunisia), SHAMS Technology (Tunisia), Solar Power Company (Tunisia), SuperViz (Tunisia), Special World Invest (Morocco)

Description

The REMO project is dedicated to higher education in Tunisia and Morocco in the fields of renewable energy technologies (RET) and e-mobility. The project consortium aims to make higher education practice-oriented so that it meets the specific requirements of the local labor markets and contributes to the economic development of these countries.

In close collaboration amongst all three project partners - the National School of Sciences and Advanced Technologies in Borj Cedria (ENSTAB) in Tunisia, the Al Akhawayn University (AUI) in Morocco and the Technische Hochschule Ingolstadt (THI) in Germany will jointly develop labour market-relevant tailor-made courses, and enrich existing teaching modules, for an undergraduate study programme in RET and e-mobility that corresponds to the state of science. To accomplish this project goal educational requirements and framework conditions will be identified in cooperation with industry partners. For a practice-oriented labour market-

relevant study programme, practice-oriented course contents have to be integrated and laboratories planned. Finally, the undergraduate study programme will be rolled out at the partner universities.

As a second component of the project, the consortium will design an international Master's programme in RET and e-mobility that reflects the current state of science. The consortium will thus define the framework of the international programme which will include practice-oriented course contents as well as laboratories as a key part.

To promote the integration of RET and e-mobility not only in the higher education but also in the future energy and transport sector, two practice-related research projects in the rural area of Fès/Meknès in Morocco and Greater Tunis in Tunisia are initiated and related technical concepts will be jointly developed. AUI and ENSTAB will be the key actors in these applied research projects and will, supported by THI, work closely with the REMO industry partners on a concept for e-mobility systems in combination with RET to present a sustainable and low-emission transport solution for both countries. The developed concepts will be simulated and optimized to the specific requirements of the rural and urban model regions. Furthermore, knowledge transfer in applied research structures based on vital researchers' exchange will help to accomplish future research projects in cooperation with local and German industry and academic partners. Based on short-term scholarships, lecturers from Morocco and Tunisia gain experience in THI's practice-oriented teaching approach.

The involved industry partners are located in Germany, Morocco and Tunisia and will contribute to the development of the labour market-relevant tailor-made study programmes and the concepts for the two research topics in manifold ways. During joint elaboration on projects and activities described above, existing individual contacts between REMO partner universities and in particular industry partners will be extended and consolidated. A higher education network, including industrial stakeholders, in RET and e-mobility linking Tunisia, Morocco and Germany will be established, not only between the project partners but also including further academic and industry parties beyond the project consortium.