

# Resuscitation and Internationalisation of the Renewable Energy Master's Programme at University of Zimbabwe

## Project Overview

### Background

Zimbabwe's energy sector is characterised by low access to electricity in rural areas, often unsustainable use of energy sources, unreliability of power generation and financial constraints to importing electricity. The country however has a huge potential for renewable energy sources, especially solar PV and water heating, biogas, and hydro power. Thus only about 60% of the country's installed capacity is available. In October 2013, the Zimbabwe Energy Regulatory Authority (ZERA) was commissioned by the government to develop a feed-in tariff policy for the country, in order to boost greater private sector power generation from renewable energy sources.

With a tradition of almost 20 years, the Renewable Energy Master's Programme (REP) at the University of Zimbabwe had been amongst the first academic programmes focussing on renewables on the African continent. The programme started in 1996, but came to a halt in 2012 due to a lack of human and financial resources. Industry representatives have however expressed a strong need for renewable energy graduates, while substantial interest by prospective students in a re-established programme has been identified by the university. In 2014, EUEI PDF received a request by University of Zimbabwe to support the resuscitation and internationalisation of the Master's Programme.

In a joint scoping mission with experts from Makerere University and from University of Dar es Salaam in August 2014, the EUEI PDF analysed support needs and required steps to revitalise the REP at the University of Zimbabwe. Current challenges for the REP at the University of Zimbabwe include lack of qualified staff, outdated curriculum and laboratory equipment, and a missing link to academic institutions outside the country

### Objectives

Taking into account the above-mentioned challenges, the overall goal of the project is to establish a Renewable Energy Master's Programme at the University of Zimbabwe, enabling highly-qualified graduates to enter the Renewable Energy job market, meeting private sector's needs for further development of the renewable energy market.

### Activities

The project implementation will comprise the following activities:

- ▶ **Resuscitation and long-term vision development** for the Renewable Master Programme at University of Zimbabwe; including a strategy for long-term sustainability of the programme, staffing concept, business model development and strategy for cooperation with regional universities, as well as international partners.
- ▶ **Curriculum revision**; adapted to local market needs and state of technologies, specialisation of the programme complementary to potential partner universities, broadening to more interdisciplinary subjects and entrepreneurial skills.

- ▶ **Facilitation of private sector cooperation;** establishment of an advisory board; systematically observing the Master programme and cooperation development, and establishing a continuous link to the job market and academic community; promoting industrial attachments and guest lectures.
- ▶ **Laboratory and computer equipment;** limited replenishment of the existing equipment; development of a long-term concept for laboratory and computer equipment; support to the setup of a Renewable Energy demonstration plant on the university campus, with special attention given to long term sustainability.
- ▶ Facilitation of **international cooperation** of the Master Programme with existing academic networks, African and European universities. Establish a formal cooperation between University of Zimbabwe and potential partner universities on mutual recognition of regulations, modules and specialisations, staff and students' mobility, etc. as well as facilitation of collaboration with European Universities.
- ▶ Cross-cutting issues to be addressed during the support activity are improved **gender equality** (e.g. stronger involvement of female students and staff), **quality assurance** (linking up with international accreditation standards), and **improved communication** efforts of the REP.

## Project Partners

The project is implemented in collaboration with the University of Zimbabwe with support from EUEI PDF under the Africa-EU Renewable Energy Cooperation Programme (RECP). Project partners include WaterNet, the Technical University of Munich (TUM), University of Dar es Salaam and Makerere University.



University of Zimbabwe

<http://www.uz.ac.zw/>



Building Capacity for Water Resources Management in Southern Africa

WaterNet

<http://www.waternetonline.ihe.nl/>



Technische Universität München

<https://www.tum.de/en/homepage/>



University of Dar es Salaam

<https://www.udsm.ac.tz/>



Makerere University

<http://mak.ac.ug/>



Africa-EU Renewable Energy Cooperation Programme (RECP)

<http://africa-eu-renewables.org/>



European Union Energy Initiative – Partnership Dialogue Facility (EUEI PDF)

<http://www.euei-pdf.org/>