

Africa-EU Renewable Energy Cooperation Programme

Creating opportunities for renewable energy



Fact File

HIGHER EDUCATION FOR RENEWABLE ENERGY IN AFRICA

Background

Africa's abundant renewable energy resources have the potential to significantly increase energy access and energy security. Yet, to access these resources and to develop strong African renewable energy markets, local skills and capacities are crucial. Tertiary education in the field of renewable energy has recently received increased interest, given the numerous positive impacts on sustainable development.

Higher education provides a broad range of measurable benefits to graduates and in addition it contributes to the strengthening of institutions, a key issue for sustainable development.

It is evident that renewable energy markets and their benefits to energy access, a more sustainable energy supply, as well as increased generation capacities, will only develop, if the required human capacities exist. Higher education plays a key role in training the next generation of renewable energy professionals in Africa's public and private sectors and in civil society.

Objectives

Appreciating the need for skills development, the Africa-EU Renewable Energy Cooperation Programme (RECP) has developed a component addressing on both higher education and technical and vocational education and training for renewable energy in Africa.

With regards to higher education, the RECP supports the training of future African energy engineers, economists, entrepreneurs, as well as policy experts. It fosters exchange and cooperation between universities in Africa and the EU.

RECP thereby contributes to:

- » supporting academic cooperation between Africa and the EU
- » increasing capacities to develop and implement renewable energy projects
- » creating job opportunities for women and men
- » strengthening research and innovation capacities
- » promoting a local green economy.

Activities

RECP's activities in higher education focus on developing new - or strengthening existing - masters programmes for renewable energy in Africa. Key areas addressed are:

- » development of concepts and curricula for renewable energy masters programmes
- » establishment of quality assurance measures
- » development of business models to ensure sustainable financing
- » strengthening cooperation with the private sector
- » facilitation of regional, pan-African and Africa-EU partnerships at university level.

Results

The RECP held a workshop on Higher Education for the Renewable Energy Sector in Africa in July 2014 in Kigali, Rwanda. The workshop brought together experts from national ministries, higher education institutions and the private sector from several African countries. The successful event facilitated the exchange of experiences and the analysis of higher education activities, common trends and frameworks in Africa.





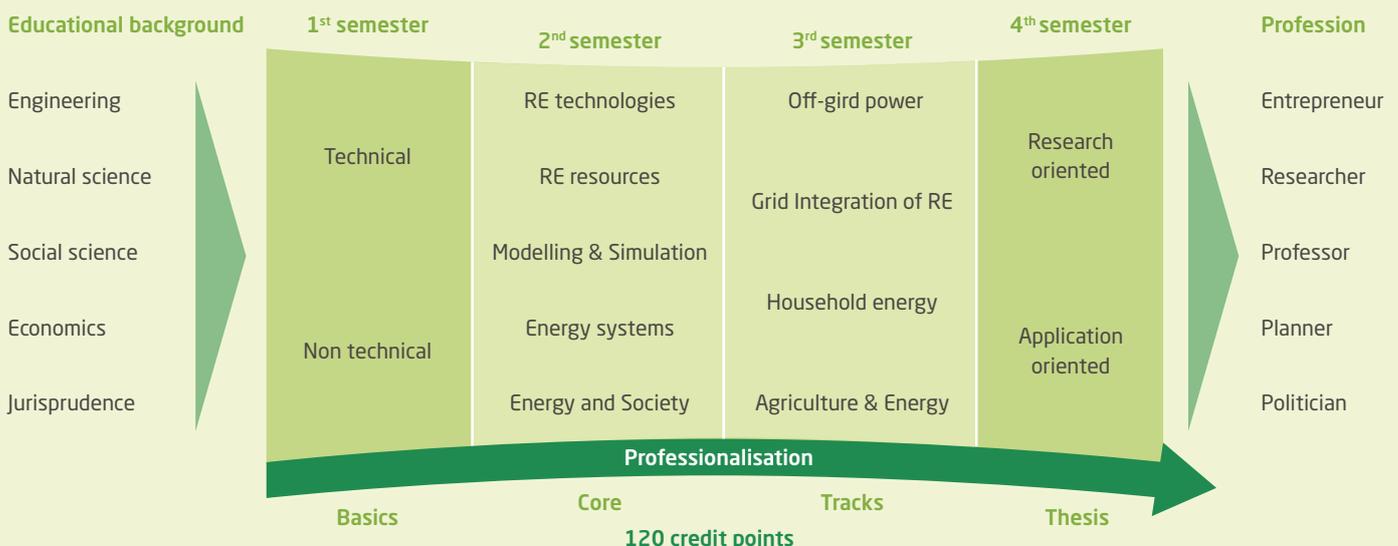
Following the workshop, the RECP published a study summarising the status of higher education for renewable energy in Africa and identifying areas for potential RECP intervention. In addition, the study presents a **Renewable Energy Curriculum Model**. The model conceptualises a renewable energy master's programme, outlining its structure and defining key features of a master's programme, such as:

- » comparability and modularity
- » competence-oriented teaching, learning and examination
- » close relation between research and teaching
- » internationalisation, interdisciplinarity and transdisciplinarity
- » quality assurance.

The way forward

Starting early in 2015, the RECP will provide direct support to African universities in developing or enhancing renewable energy master's programmes. In addition, the RECP will facilitate continuous exchange and dialogue between African and EU universities, as well as other stakeholders, to promote cooperation and identify research needs in renewable energy higher education and beyond.

Renewable energy curriculum model



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