



LEAP-RE

Long-Term Joint EU-AU Research
and Innovation Partnership on Renewable Energy

EU-Africa LEAP-RE programme to fund 13 new cutting-edge research and innovation projects in the field of renewable energy

Leading funding agencies team up to develop renewable energy sources in Africa

For Immediate Release

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Paris, France & Pretoria, South Africa – While already developing 8 ground-breaking renewable energy research and innovation projects in Africa, LEAP-RE has selected 13 new EU-Africa research proposals for funding, thanks to the evaluation done by an International review Panel and a coalition of funding agencies within its consortium. By doing so, LEAP-RE strengthens its support to the development of renewable energy sources in order to address both climate change and the need for electrification, two of the biggest challenges Africa faces today.

The LEAP-RE programme started in 2020 with the **ambition to develop innovation in the field of renewable energy** and to **strengthen research cooperation between the European Union (EU) and the African Union (AU)**. It aims to increase the use of renewable energy via a well-balanced set of research, demonstration, and technology transfer projects in both continents.

LEAP-RE comes in a context where climate action and the development of renewable energy sources are top priorities for the European Union and the African Union. Alongside other European Union policies and directives, the European Green Deal propels EU Member States **towards a 55% cut in emissions by 2030 and climate neutrality by 2050**. In Africa, the **AU “Agenda 2063: The Africa We Want” envisions a climate resilient Africa** with reduced emission levels arising from agriculture, biodiversity loss, land use, deforestations, as well as reductions in loss of life and property due to natural and anthropogenic disasters and weather and climate extreme events.

The **Partnership on Climate Change and Sustainable Energy (CCSE)** implemented as part of the AU-EU high-level policy dialogue on Science Technology and Innovation enables cooperation between the two continents to develop the sustainable and clean sources of energy that are needed to reduce climate change. To that end, **LEAP-RE works to create a long-term partnership of African and European stakeholders in government, research and academia, the private sector and civil society.**

To achieve its goals, LEAP-RE implements **transnational proposals for research, innovation, and capacity building**, on top of building a long-term EU-AU partnership and conducting in-house research and innovation projects. The proposals are co-funded by **16 African and European national funding organisations** members of the LEAP-RE consortium and the European Commission.

The stakes are high. With more than 16% of the world **population in 2017, Africa accounted only for 5% of the world's global primary energy use**. Furthermore 70 to 80% of used energy is generated from traditional biomass in most AU countries though **Africa has abundant energy resources - fossil and renewable energy. However, energy access remains the main issue**, with an average electrification rate of 35% in sub-Saharan Africa¹.

In January 2021, LEAP-RE launched a **Call for proposals** which resulted in **124 applications** being received from candidates including companies, non-profit associations, research labs, foundations and more from 38 African and European countries. **36 pre-proposals were pre-selected**, 32 were submitted, resulting in **13 proposals selected for funding** along **6 thematic lines**:

¹ Figures from: https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/europe-world/international-cooperation/eu-africa-cooperation/partnership-climate-change-and-sustainable-energy-ccse_en



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The projects listed below are recommended for funding to the national/regional research funding organisations of LEAP-RE by the Pillar 1 Call 2021 Steering Committee. **IMPORTANT:** The actual funding of the projects depends on the successful completion of the contract negotiations at the national/regional level. The country of each project coordinator is indicated in bold.

1. Renewable energy resources, mapping and modelling

- **OASES:** Development and Demonstration of a Sustainable Open Access AU-EU Ecosystem for Energy System Modelling. Coordination: Fraunhofer Institute for Energy Economics and Energy System Technology, **Germany**.

2. End-of-life and second-life management of RE components

- **RESTART:** REcycling of spent Li-ion batteries and end-life photovoltaic panels: From the development of metal recovery processes to the implementation of a START-up. Coordination: University UCA of Morocco, **Morocco**.
- **SIREVIVAL:** Si-based devices for renewable energy: From end of life recycling to revival of photovoltaic modules. Coordination: Université catholique de Louvain, **Belgium**.

3. Clean cooking and biomass transformation

- **SoCoNexGen:** Solar Indoor Cooking Systems of the Next Generation. Coordination: Aachen University of Applied Sciences, **Germany**.
- **SOLAR INDUCE:** SOLAR INDUCEed domestic clean efficient cooking and refrigeration for off-grid applications in Africa. Coordination: COPRECI S Coop, **Spain**.
- **PyroBioFuel:** Sustainable biomass conversion into bioenergy through pyrolysis. Coordination: Cairo University, **Egypt**.
- **SunGari:** A modern solar cooking solution for African staples. Coordination: University of Greenwich, **UK**.

4. New renewable energy resources for Africa

- **HyAfrica:** Towards a next generation renewable energy source – a natural hydrogen solution for power supply in Africa. Coordination: CONVERGE, Lda, **Portugal**.

5. New, more efficient PV cells and components

- **QDSOC:** Environmentally friendly colloidal quantum dots for high performance solar cells. Coordination: Université de Lorraine, **France**.
- **NANOSOLARCELL:** Integration of photonic conversion layers based on photoemissive nanostructured materials for improving sunlight harvesting ability of solar cells. Coordination: CNRS-CEMHTI, **France**.

6. Productive uses and new applications of solar energy

- **MG-FARM:** Smart stand-alone micro-grids as a solution for agriculture farms electrification. Coordination: Université de Lorraine, **France**.
- **LEDSOL:** Enabling clean and sustainable water through smart UV/LED disinfection and SOLar energy utilization. Coordination: Centrul IT pentru Stiinta si Tehnologie, **Romania**.
- **SolChargeE:** Decentralized Solar Charging System for Sustainable Mobility in rural Africa. Coordination: Technical University of Munich, **Germany**.

Selected projects will receive a **global funding of €10.35 million** (7.809 million € from funding agencies, and 2.549 million € from the European Commission). They include a total of **83 partners** from **8 European countries** (Belgium, France, Finland, Germany, Portugal, Romania, Spain, UK) and **9 African countries** (Algeria, Egypt, Ethiopia, Morocco, Mozambique, Nigeria, South Africa, Togo, Tunisia).





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About LEAP-RE

LEAP-RE stands for “**Long-Term Joint European Union - African Union Research and Innovation Partnership on Renewable Energy**”. It is a 5-year programme coordinated by French SME LGI and by Department of Science and Innovation (DSI) of South Africa. LEAP-RE gathers more than 80 partners in Africa and Europe dedicated to research and innovation in the field of renewable energy. The programme has received funding from the European Union’s Horizon 2020 Research and Innovation Program under Grant Agreement n°963530.

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