



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



Pre-announcement

Call for AU-EU Collaborative Research And Innovation projects on Renewable Energy

***Disclaimer** : the effective implementation of this Call is subordinated to the LEAP RE Grant Agreement signature between the members of the Consortium and the European Commission before the end of 2020. Neither the European Commission nor the funding Institutions participating to the Call would be held accountable if the Grant Agreement fails to be signed and, as a consequence, the Call is not implemented.*

State of play and General Information : Renewable energies (RE) are of vital importance in tackling the global challenge posed by climate change and providing reliable energy access to millions of people in Europe, Africa and worldwide. More than 789 million people have no access to electricity and some 4 billion people worldwide still do not have sufficient access to modern energy for cooking. Africa is particularly affected. Therefore, there is a need to increase investment in renewable energy innovation, research, human and institutional capacity. In this regard, the Long term Europe-Africa Partnership on Renewable Energy (LEAP-RE) programme co-funded by the European Commission (EC) under Horizon 2020 aims to increase the use of renewable energy via a well-balanced set of research, demonstration, and technology transfer projects in both continents.

This programme is led by a consortium of 94 partners from European and African countries. The total budget of the programme is approximately € 35 Million, including € 15 Million from the EC. The LEAP RE is structured around three Pillars: Pillar1, the focus of this pre-announcement call, comprises the implementation of transnational proposals for research, innovation and capacity building, funded by national/regional funding agencies and by the EC; Pillar2, is a cluster of individual Research and Innovation (R&I) and capacity building projects implemented by members of the consortium, whilst Pillar3 focuses on programme management and the design of a long term AU - EU strategic partnership on renewable energy.

Presentation of Pillar1: Bringing together **16** African and European funding agency members of the LEAP RE consortium, this pillar is devoted to the preparation and implementation of transnational joint calls for proposals co-funded by European and African national research funding agencies, with an additional EC top up. The projects funded under the calls will focus on achieving goals of mutual benefit based on a balanced and cooperative approach. Particular attention will be given to strengthening the impact of R&I supported activities for the well-being of society in Europe and in Africa. The total indicative call budget is € **11,2** million provided by funding organizations +€ 6 million from the EC contribution.

Each project consortium that applies for funding under Pillar 1 must consist of research teams from a minimum of four countries from the two continents, with at least 2 from European countries and at least 2 from African countries.

The funding decisions made for the first joint transnational call in 2021 will determine whether a second call will be launched in 2022.

Scope of the Call and Priority Areas for Collaboration: The range of activities recommended for collaboration under LEAP-RE, will focus on 6 identified multi-annual roadmaps. The LEAP-RE Joint Call 2021 will fund basic research, applied research, co-development of technologies and experimental development projects that are 12-36 months long. However applicants should be aware that each funding agency participating to the Call will apply its own rules and regulations regarding eligibility and criteria (thematic, nature of project, [TRL](#), rate of subsidy...).

#1. Mapping joint research and innovation actions for the future: Renewable Energy Sources (RES) development – Consolidation of detailed map of R&I initiatives in Europe and Africa per technology, application etc. type with the aim to support the RE industry to prioritize and contextualize target areas of RES deployment.

Expected impact: A closer collaboration between researchers, innovators and funders of innovations through the systemic development of innovation hubs, RE are applied in different contexts.

#2. End-of-life and second-life management and environmental impact of RE components: - Map the component value chain, identification of key stakeholders & successful business models, promote replicability scenarios of operational models and standard operating procedures in concerned regions.

Expected impact: To promote environmental and ecological sustainability of renewable energy systems, to identify second life components with a benefit for African countries: lower cost; higher reliability, less environmental impact and to identify the most promising business models

#3. Smart stand-alone systems (SAS): - Promote the development of RE-SAS demonstrator(s) considering the diversity of potential local RE sources and the local effective environment.

Expected impact: To promote environmental and ecological sustainability of renewable energy systems, to increase the share of renewables, to give access to affordable energies to the largest number of beneficiaries and to identify the most promising business models.

#4. Smart grid (different scale) for off grid application: Development of new tools for optimizing capacity in planning and dispatching strategies based on people's needs with the aim to reduce the energy dependence on fossil fuel and increasing the share of RES use.

Expected impact: Improved socio-economic development of the off-grid communities, creation of jobs and improved energy access; Reduced GHGs, local pollution and deforestation.

#5. Processes and appliances for productive uses (PRODUSE): Improvement and Promotion of wider use of PRODUSE appliances for cold chain and thermal tools and equipment's (healthcare and agriculture - livestock, fisheries and farming).

Expected impact: Improved socio-economic development of the off-grid communities, creation of jobs and improved energy access; Reduced GHGs, local pollution and deforestation.

#6. Innovative solutions for priority domestic uses (modern energy for cooking and cold chain): - Improving, managing and maintaining solar photovoltaic systems, cooking appliances and cold chain components for clean cooking and food storage. Supporting interactions with policymaking to foster fast market uptake considering the macro socio-economic and gender impacts

Expected impact: Reducing GHGs, local pollution, land degradation and deforestation ; Improving health and social conditions of local stakeholders as well as job creation ; Reducing the drudgery for girls and women and increase their social power and health conditions (women empowerment) ; Reducing demand for unclean sources of energy ; Strengthening food and nutrition security ; Strengthening people's health and public healthcare

Indicative Call calendar:

15 October 2020	Call pre-announcement
15 January 2021	Publication of the Call
1st April 2021	Deadline for Pre-proposal submission (mandatory)
15 June 2021	Communication of pre-proposal assessment
15 September 2021	Deadline for Full Proposal submission
30 November 2021	Communication of full-proposal assessment
1st May 2022	Latest starting date of selected projects

General remarks: To ensure effective implementation, and rigorous monitoring and evaluation, LEAP-RE will be supported by different boards:

A Scientific Advisory Board (SAB): The SAB will be formed by a small number of international experts from non-partner organizations that shall be consulted to provide their independent and external view on the LEAP RE programme objectives and achievements.

An Ethical Advisory Board (EAB): The EAB will monitor the programme's compliance with several considerations such as: ensuring that the local population will benefit from the implemented projects (short and long term); ensuring data protection and consent procedure, general data protection regulation (compliance; research integrity and responsible research); and other ethical requirements which can be defined.

International Review Panel: In order to evaluate the projects submitted to the Call an International Review Panel gathering independent experts proposed by funding agencies will be created. These experts may come from countries not participating in this call.

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