LEAP-RE Cofund Call
2022

Europe-Africa Research and Innovation call on
Renewable Energy

CALL TEXT

Link to «LEAP-RE Call»
Link to the Electronic Proposal Submission System

For further information contact the Joint Call Secretariat:
pilier1@leap-re.eu

Warning: This Call document is subject to updating regarding the list of funding organisations participating to the Call.
Applicants should check potential updating on LEAP-RE website in coming weeks
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1. About LEAP-RE

The Long-term Europe Africa Partnership on Renewable Energy (LEAP-RE) is a 5 years program co-funded by the European Commission under Horizon 2020. It will aim at developing a long-term partnership between Europe and Africa on Research and Innovation (R&I) in renewable energy. The program is conducted by a consortium of 83 partners from European and African countries. The total budget of the program is around 32 Million Euros, including 15 Million Euros from the European Commission. The program is focused on research and innovation projects proposed by public and private stakeholders. Within the consortium 16 African and European funding agencies launched a first joint Call for Proposals in early 2021.

Activities of LEAP-RE are within the framework of the Climate Change and Sustainable Energy partnership of the AU-EU High Level Policy Dialogue on Science, Technology and Innovation.

LEAP-RE is structured in three Pillars, Pillar 1: implementation of transnational open calls for proposals for research, innovation and capacity building, funded by national/regional funding agencies and by the European Commission; Pillar 2: a cluster of individual R&I and capacity building projects implemented by members of the consortium; Pillar 3: program management and strategic issues to build the future AU – EU long term partnership on renewable energy.

The projects selected through Pillar 1 Calls will focus on achieving goals of mutual benefit for Member States, Associated Countries and African countries, based on a balanced and cooperative approach. Particular attention will be given to strengthening the impact of R&I supported activities for the benefit of the society, in Europe and in Africa.

A first Call was launched in 2021. 124 applicants submitted a pre-proposal of which 92 were eligible. A first step of preselection allowed to select 36 pre-submissions. 32 full-submissions were submitted and 13 projects were selected for funding¹ through this second step. The global funding budget for the first call was € 10.3 million, with € 7.8 provided by funding organizations + € 2.54 million from the EC contribution.

Taking into consideration the remaining available budget of funding agencies and European Commission grant and new budget committed LEAP-RE decided to launch a second Call in 2022. Several eligibility criteria and evaluation criteria have been adapted in order to take into account the results of the first Call (see below).

The LEAP-RE group of funding organisations participating to this second Call, gathered among the consortium members in Pillar 1, consists of several funding organisations from Africa (Ministère de l’Enseignement Supérieur et de la Recherche Scientifique - MESRS – Algeria; Ministère de l’Education Nationale, de la Formation Professionnelle, de l’Enseignement Supérieur et de la Recherche Scientifique -MENFPESRS – Morocco; Department of Science and Innovation – DSI – Republic of South Africa and several funding organisations from Europe : Österreichische Forschungsberufsgesellschaft Mbh - FFG – Austria; Fonds de la Recherche Scientifique-FRS-FNRS – Belgium; Agence Nationale de la Recherche - ANR – France; Forschungszentrum Jülich GmbH - FZJ-PtJ – Germany; Ministry of University and Research - MUR – Italy; Executive Agency for Higher Education. 

¹ 13 project proposals selected for funding via LEAP-RE Call for proposals
The call also reflects the European and African funders preferred approaches and their understanding that achieving energy solutions in African countries is a complex challenge crossing many sectors, disciplines and policy areas as well as being exposed to profound dynamics at national, regional and global level. 840 Million people in the world have no-access to energy of which 570 Million live in Sub Saharan countries. Furthermore 2.9 Billion people do not have access to sustainable non-polluting cooking devices. Systemic change and transformation are needed, which requires a more holistic and integrated approach.

The thematic priorities addressed by the call are in accordance with the 6 Multi-Annual Roadmaps developed during the preparation of LEAP-RE (see 4., below). These Multi-Annual Roadmaps are part of the Roadmap for a jointly funded AU-EU research & innovation partnership on Climate Change and Sustainable Energy (CCSE) established under the UE-AU High Level Policy Dialogue on Science, Technology and Innovation, which prioritizes:

- Development and integration of renewable energy in the energy system
- Planning and modeling future sustainable energy systems
- Including society as an important stakeholder
- Market, pricing and business models for future sustainable energy systems
- Strengthening basic research and technology development

The projects conducted under LEAP-RE are encouraged to develop collaboration with other projects funded by the European Commission such as the EU Call “Building a low-carbon, climate resilient future: Research and innovation in support of the European Green Deal (H2020-LC-GD-2020)” launched in September 2020.

2. Participating Funding Organisations and Budgets

9 Funding Organisations have agreed to allocate national/regional budgets for the LEAP-RE Call 2022, see table 1 below. The total indicative call budget is around € 4 million provided by funding organisations + 2 million € from the EC’s contribution.

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<tr>
<th>Country/Region</th>
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<td>Mokhtar SELLAMI</td>
<td><a href="mailto:sellami.leapre@gmail.com">sellami.leapre@gmail.com</a></td>
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<td></td>
<td></td>
<td>Merabet HAMZA</td>
<td><a href="mailto:h.merabet@mesrs.dz">h.merabet@mesrs.dz</a></td>
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<tr>
<td>Morocco</td>
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<td>Abdelouahid EZZARFI</td>
<td><a href="mailto:a.ezzarfi@yahoo.fr">a.ezzarfi@yahoo.fr</a></td>
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<td></td>
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<td><a href="mailto:chokairi.anas@gmail.com">chokairi.anas@gmail.com</a></td>
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</tr>
<tr>
<td>South Africa</td>
<td>DSI</td>
<td>Sigfried Tivana</td>
<td><a href="mailto:sigfried.tivana@dst.gov.za">sigfried.tivana@dst.gov.za</a></td>
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<tr>
<td></td>
<td></td>
<td>Thato Morokong</td>
<td><a href="mailto:Thato.Morokong@dst.gov.za">Thato.Morokong@dst.gov.za</a></td>
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2 The list of participating funding organisations may be updated in the coming weeks
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<td><a href="mailto:joel.groeneveld@frs-fnrs.be">joel.groeneveld@frs-fnrs.be</a>, <a href="mailto:florence.quist@frs-fnrs.be">florence.quist@frs-fnrs.be</a></td>
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<tr>
<td>Austria</td>
<td>FFG</td>
<td>Elli Stepanovic, Ursula Bodisch</td>
<td><a href="mailto:Elli.Stepanovic@ffg.at">Elli.Stepanovic@ffg.at</a>, <a href="mailto:Ursula.Bodisch@ffg.at">Ursula.Bodisch@ffg.at</a></td>
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<td>France</td>
<td>ANR</td>
<td>François MOISAN, Marie-Laure TAROT</td>
<td><a href="mailto:Francois.moisan@anr.fr">Francois.moisan@anr.fr</a>, <a href="mailto:Marie-Laure.tarot@anr.fr">Marie-Laure.tarot@anr.fr</a></td>
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<td>FZJ-PtJ</td>
<td>Johanna OHNESORG, Kerstin ANNASSI</td>
<td><a href="mailto:j.ohnesorg@fz-juelich.de">j.ohnesorg@fz-juelich.de</a>, <a href="mailto:k.annassi@fz-juelich.de">k.annassi@fz-juelich.de</a></td>
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<td>Rachele NOCERA, Aldo COVELLO</td>
<td><a href="mailto:MariaRachele.Nocera@mur.gov.it">MariaRachele.Nocera@mur.gov.it</a>, <a href="mailto:Aldo.Covello@mur.gov.it">Aldo.Covello@mur.gov.it</a></td>
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<tr>
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<td>Elena SIMION</td>
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<td>500 000</td>
</tr>
</tbody>
</table>

(*): subject to updating

During pre-proposal phase applicants from countries with funding agencies participating in the call should contact the National Contact Point (NCP) from each country.

3. Call calendar: Important dates

The following dates apply for this Call:

<table>
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<th>Event</th>
<th>Date</th>
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<tr>
<td>Call pre-announcement</td>
<td>Mid-May 2022</td>
</tr>
<tr>
<td>Publication of the Call</td>
<td>July 8th 2022</td>
</tr>
<tr>
<td>Deadline for Pre-proposal submission (mandatory)</td>
<td>September 23rd 2022 12:00 CEST</td>
</tr>
<tr>
<td>Communication of pre-proposal assessment</td>
<td>Mid-November 2022</td>
</tr>
<tr>
<td>Deadline for Full Proposal submission</td>
<td>January 12th 2023 17:00 CET</td>
</tr>
<tr>
<td>Communication of full-proposal assessment</td>
<td>End-March 2023</td>
</tr>
<tr>
<td>Latest starting date of selected projects</td>
<td>July 1st 2023</td>
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</table>

4. Scope and topics of the Call

The scope of the Joint Call is based on the ecosystem analysis highlighting that REs are of vital importance in tackling the global challenge posed by climate change and in providing reliable energy access to millions of people worldwide. The Call aims at responding to the following expectations:

1. Technological development needs to be deepened at all points along the energy supply chain, including conversion technologies and end use devices. Resource assessment is still crucial for some sources while distribution is an important area for research and innovation when dealing with integration of renewables via smart mini grids, either in their off-grid configuration, or
when considering their long-term integration within the national grid. This is one of the most attractive areas of research where leapfrogging can be done by leveraging innovation with the digital revolution that is currently taking place in Africa and allowing integration of sources and additional storage opportunities.

2. Technological development cannot stand alone. A comprehensive methodological approach is needed, able to address the different phases of the energy supply chain by taking into account societal needs, market evaluation, business models for long-term sustainability, and solution deployment as well as the long-term impact on society. As underlined by the roadmap of the AU-EU High Level Policy Dialogue on Science, Technology and Innovation (HLPD) on climate change and sustainable energies (CCSE) for R&I in the renewable sector, such an approach is essential for guaranteeing the long-term social, economic and environmental sustainability of technology.

3. Renewed attention to energy scenarios and policy is vital for understanding the contexts in which technologies and energy solutions will be developed. There is a clear need for supporting further research and capacity building on energy scenario analysis, including modelling approaches and tools that support policy and decision makers to build a long-term plan at country and regional level.

The multidisciplinary framework for R&I agenda derived from the ecosystem analysis, brought together with suggestions from the European Commission (EC), led to a list of 6 multiannual roadmaps (MAR), representing the main topics related to REs development.

The objectives of the main topics supported by the LEAP-RE Joint Call 2022 are listed below:

# 1: Assessment of Renewable Energy Sources and integration of RES in sustainable energy scenarios

Within the energy transition, African countries need to adopt low carbon energy sources to meet their international commitments. This is feasible since the continent has a lot of renewable energy potential which can serve different development needs. This transition will also require research and innovation actions to support the rethinking of energy infrastructure, energy access and energy uses, taking into consideration different political, cultural and social contexts on the continent. Deployments of renewable energy systems (RES) in Africa have been achieved for centralized and grid connected systems as in high income countries but recent development of renewable energy systems demonstrate they are the main sustainable option in decentralized and off grid contexts. Technological development must be included in a more general framework directly related to the capacity of policymakers understanding and related to energy scenarios at the local, country, and global levels. Medium and long-term sustainability of energy scenarios, as well as the assessment of needs and potential resources at country or regional levels is also needed in order to be able to understand the potential implication of technology or energy solutions for local conditions (economic, environmental and even cultural). There is a strong need for supporting further research and capacity building on Energy Scenario Analysis, which include all modelling approaches and tools aimed to support policy and decision makers to build a long-term plan for energy systems development at the national level.

This development of tools such as models and scenarios should be designed to meet the following criteria: (i) compliance with national policies for RE development; (ii) essential compliance with the needs of local population; (iii) focus on efficiency and reliability; (iv) compliance with decarbonization and a replacement of conventional energy solutions; and (v) a focus on achieving universal access for all.

References to results of (and learning from) existing research and innovation projects in this field will be positively valued in the selection process.
End-of-life (EoL) components (batteries, solar panels from large PV plants, etc.) used in renewable energy (RE) production or storage present a new environmental challenge, but also an unprecedented opportunity to create value and pursue new economic avenues. More energy systems will get decommissioned at the end of life, or when out of specification (OoS) for their initial purpose as RE technology is mainstreamed. To contextualize this, the volume of decommissioned solar PV panels will increase as the global solar PV market increases, thus large amounts of EoL PV components are anticipated. The International Renewable Energy Agency (IRENA) estimates that there will be a surge in solar panel disposal in the early 2030s, and that by 2050, there will be 60 to 78 million cumulative tons of photovoltaic panel waste globally. The rise of electric vehicles and the increase in adoption of storage systems will also lead to a large amount of EoL/OoS batteries. Accordingly, new energy paradigms are emerging in both Africa and Europe where ‘second life’ components are presented as appropriate solutions. In this regard, RE EoL/OoS components and their supply chains require research, development, innovation, and capacity support. Materials that enable RE should be recycled or reused to prevent a scenario where the envisaged clean energy future becomes anything but clean. In Africa, off-grid solar products are revolutionizing the quality of life. Current EoL component volumes from this sector are small in proportion to the quantity and environmental impact of the total e-waste stream. However, due to rapid sector growth, there is a need to develop the end-of-life management of off-grid solar and storage products without delay. In Africa, and in most developing countries, collection of EoL components is done by informal collectors with rudimentary methods. These rudimentary methods tend to be unsafe and environmentally unfriendly. There is need to regularize this sector, ensuring that the informal collection and re-purposing of EoL RE components becomes part of formal, regulated systems (including waste collection, disposal, reuse, and recycling processes such as extraction of reusable materials), whilst paying attention to the needs of the informal workers whose livelihoods will be lost. Moreover, where there are new products developed then innovation needs to take questions of lifecycle analysis into account right from the start.

Innovations for reuse, business models, testing procedures that are compatible with industrial standards should be developed and shared among business actors.

References to results of existing research and innovation projects in this field will be positively valued in the selection process.

## 3: Smart stand-alone systems

Integrating renewable energies into the global energy mix through versatile, stand-alone systems can help to address the energy needs of off-grid areas in Africa. Despite the fact that urban population is growing rapidly, over 45% of the African population live in isolated rural communities, which could benefit from the introduction of RE technologies fitting their unique environment and availability of RE sources. In addition, in the vast landscape of the Sahel, steppes and open areas, population rarely have access to electricity. Severe climate disasters and conflicts have resulted in increased migration and ‘climate refugees’ in many African regions. RE and technology can provide a unique opportunity to equip communities with new facilities without interfering with their way of life and preventing their being left behind. The utilization of renewable energies can also be a good opportunity to fight climate changes, such as desertification and dryness in the Sahel, and keep communities alive by encouraging young people to stay on their traditional lands.
Access to energy, especially electricity, is thus a fundamental component to address rural or isolated communities and support economic and social development. Specific needs include lighting, phones charging, domestic refrigeration. Beyond these essential needs some productive use of energy such as water pumping, grains milling, sewing machines, soldering iron, health devices such as vaccine storage...should drive developments and innovation in smart standalone systems in order to ensure power production for these uses.

Researchers and innovative engineers should be involved in improving the technology of standalone components and usability of the whole systems. New business models should also be developed in order to ensure affordable solutions for the poorest. The LEAP-RE programme focuses on innovations that relate to the whole Stand alone system including energy storage and uses rather than to the performance of PV cells alone.

References to results of existing research and innovation projects in this field will be positively valued in the selection process.

# 4: Smart grid (different scales) for off grid application
Currently, more than 600 Million people in Africa do not have access to electricity, 80% of which live in rural areas. In addition to small stand-alone systems for individual households and extensions of the national grid, there is a growing need for small- to medium-scale Distributed Generation (DG) solutions capable of integrating a diverse mix of Renewable Energy Sources (RES) for supply to small- and medium sized communities. Increasing the attention of governments to regulated penetration of REs into the national grid will help overcome the dichotomy between centralized and decentralized electrification. Hybrid and Smart RES Grids have a role in addressing the many technological challenges that may arise from the integration of different RE technologies, distribution, and storage systems.

Different energy storage systems options should be developed taking into account the analysis done by World Bank’s Energy Storage Partnership (such as batteries, Hydrogen, thermal storage...). These systems must be optimised and integrated to be able to respond to rapidly evolving energy needs. They can play a role addressing environmental challenges since they contribute to reducing local air pollution and GHGs emissions. If properly designed, they can also decrease energy-water-food competition by reducing reliance on traditional biomass and contributing to wise water management. New photovoltaic concepts such as Agri-photovoltaic (combining electricity production and agriculture on the same land) may also decrease the land competition between energy and food.

Furthermore, Smart and Hybrid Grids can respond to local socio-economic challenges. They can be scaled-up to meet growing demand, tailored to match productive uses in either agriculture or rural industries, collective cooking at the community level and support community service delivery in education and health. With the deployment of appropriate business models, improved energy affordability may be achieved for local people and job opportunities may be created associated with manufacturing, installation and maintenance.

References to results of existing research and innovation projects in this field will be positively valued in the selection process.

# 5: Processes and appliances for productive uses (agriculture and industry)
According to a 2017 State of Food and Agriculture report by the UN’s Food and Agriculture Organisation, the key to achieving the Sustainable Development Goals in Africa is transforming rural communities and promoting agriculture. This is because approximately 60% of Africans derive their income from agriculture and agricultural processes. It is therefore important to prioritize boosting small-scale farmers’ productivity and incomes in the agricultural production stage and creating off-
farm employment in expanding segments of the food supply and value chains. Food supply and value chain segments involve processes such as harvesting, grain milling, drying, cooking, cooling, transportation and retail. These processes require variations of cold chain technologies, food processing technologies, and electrical power. The demand is met differently by different industries and countries in Africa. An example of such is industries where thermal power demand is met through biomass while cold chain energy needs are met through grid supply supplemented by diesel generators in cases of blackouts.

Changing eating and food retail processes in Africa should also be noted. Across urban Africa there has been a significant transformation in how people consume food incorporating a growing trend towards commercial pre-cooking of foods which are then retailed to consumers either as hot food or food which can be quickly finished (e.g. part-cooked beans) or re-heated, thereby reducing the energy expended in the household. There is a considerable opportunity to develop food processing, part and full-cooking. Clean cooking beyond domestic context as productive use of energy should also be considered strongly.

In order to transform rural communities, access to lighting systems alone is not enough for economic empowerment.

Craft and small industrial activities at local level should also be addressed in programs supporting local economic development such as sewing workshops, welding works and craft manufacturing. The facilitation of productive use activities will increase the demand for energy from off-grid suppliers amongst poorer communities and in so doing contribute to a more commercially viable electric loading charge demand curve regarding solar electricity production, avoiding too expensive storage options and optimizing RE investments.

To do this, it is important to support technological innovations and solutions such as productive use (PRODUSE) appliances in agriculture and other activities as a way of improving rural livelihoods. These appliances can be used to increase productivity and/or efficiency in agriculture and other income-generating activities (IGAs), such as rural industrial processes, and to improve healthcare systems delivery.

References to results of existing research and innovation projects in this field will be positively valued in the selection process.

# 6: Innovative solutions for priority domestic uses (clean cooking and cold chain)

Specific Challenges

Today, there are 4 billion people worldwide who lack access to modern energy cooking services (SDG 7 definition) – more than half of the world’s population. Fifty percent of these people are living in developing countries. In Africa alone, 700 million people lack access to clean cooking. Currently, traditional devices use firewood, or charcoal, and have very low efficiency.

The utilization of traditional biomass poses numerous environmental challenges:

- Traditional biomass utilization is a recognized contributor to deforestation & land degradation;
- Biomass burning in traditional cook-stoves has been found to be responsible for about 20% of global black carbon emissions;
- Indoor cooking with traditional devices causes respiratory illness, which contribute to the premature death of millions of people from associated diseases. In addition, the utilization of traditional biomass also poses social challenges, including:
  - The time spent by women and children in gathering firewood;
  - Absenteeism from school caused by illness due to respiratory infections, common in some countries of sub-Saharan Africa.
Actions necessary to overcome the challenges associated with the use of traditional cooking systems represent technological, economical and social challenges:

- **Improving the design of existing stoves has been attempted** for the past twenty to thirty years and has made few in-roads into the total numbers lacking access to modern cooking or effectively addressing the health and environmental impacts of cooking with biomass. The LEAP-RE programme focuses on innovations that relate to the grasping of opportunities for the substantial deployment of highly efficient cooking appliances (eg the emerging potential for electric cooking), new or improved approaches to LPG retail, and delivery such as PAYG, new larger-scale approaches to biogas via municipal scale developments or the development of other innovative new fuels such as ethanol.

Complementary to clean cooking is food and drug preservation, a second common issue at the domestic and community levels in Africa. In sub-Saharan Africa nearly 40% of food perishes before it reaches the consumer, while the lack of effective refrigeration limits the possibilities for vaccine distribution in rural, and in remote areas: a factor taking on greater significance in the current covid era. Here the cold chain can play a crucial role in reducing food waste, improving public health, and enabling African communities, especially in rural areas, to participate in national and international trade as producers and consumers. The technological challenges are mainly based on the energy vector, with the use of heat in place of electricity to generate low temperatures in domestic and community systems, or the use of static and compact technologies with higher reliability compared to traditional systems, and the coupling of refrigeration units with off-grid electric power systems. The development of movable autonomous systems is another important element. Finally, the need for compact and fully reliable systems that avoid breaking the cold chain for medicine, and for food preservation with reasonable costs represents a significant socio-economic challenge.

References to results of existing research and innovation projects in this field will be positively valued in the selection process.

Please note that not all topics are supported by all Funding Organisations, see summary in Table 2.

⚠ means that there are some related restrictions. Always check with the corresponding national/regional Funding Organisation for restrictions. As informed in Appendix IV.

*Table 2: Summary of the main call topics supported by the Funding Organisations.*

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<th>Country/region</th>
<th>Funding Organisation</th>
<th>MAR 1</th>
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This project has received funding from the European Union’s Horizon 2020 Research and Innovation Program under Grant Agreement 963530. The content of this report reflects only the author’s view. The European Commission is not responsible for any use that may be made of the information it contains.
5. Who may apply

This call for proposals is aimed at all actors in the renewable energy value chain (including universities, research institutes, companies, private sector, NGOs and public authorities) that can contribute to the objectives of LEAP-RE and who meet the eligibility criteria in section 7, as well as national/regional regulations (see Appendix IV).

Participating countries/regions are those who have at least one funding institution participating in Pillar 1 (see table 1).

A consortium applying to the Call must consist of at least four project partners from - 4 different countries (at least 2 from Europe\(^3\) and 2 from Africa).

At least one partner of the Consortium should be from a European country participating to the Call and eligible to receive support from the relevant participating funder and one partner from an African country participating to the Call and eligible to receive support from the relevant participating funder.

In general, organisations from European countries/regions not participating in the Call can be partners of the consortium on the condition that they provide evidence of the availability of their own funds to cover their project activities.

Each Consortia must include at least one partner from the public sector (academic, public research centre...) and one partner from a commercial company coming from participating countries.

**African Public Organisations (Universities, public research centres...) from countries/regions not participating in the Call are eligible to apply for funding, although the resources available for this are limited.** Such organisations wishing to be a partner within a consortium can be funded through LGI but the potential for funding these African partners will be examined by the Joint Call Secretariat and LGI at the time of the pre-submission evaluation of all projects.

There is no limit to the maximum consortium size, but it should be suitable for the level and complexity of the project and each partner should have a significant contribution in order to demonstrate the transnational added value of collaboration.

\(^3\) EU Member States and associated countries
Consortia may gather different academic and sectoral backgrounds, e.g. physical scientists, engineers and technology developers, but also social scientists and policy advisors (in interdisciplinary consortia) working closely together and covering different parts of the renewable energy value chain.

Project consortia covering the entire innovation chain from idea to end-user/market are considered positive as well as consortia with actors traditionally working in other industries, so that more ground-breaking innovations can be created through new approaches.

LEAP-RE Joint Call 2022 supports gender equality, therefore applicants should consider gender equality and gender issues wherever possible, including in, for example:

- The conceptual and methodological design of their project
- The social and economic impacts of their project
- Selection of project manager
- Composition of project group
- Division of work, power and influence in the project
- Involvement of target groups

6. What do we fund

LEAP-RE Joint Call 2022 addresses all aspects of renewable energy value chain, covering energy production as well as transformation, storage and utilization. It is encouraged to include cross-cutting issues.

Overall, LEAP-RE Joint Call 2022 can fund basic research, industrial research, applied research and experimental development projects (covering all innovation steps) that are 12-24 months long. However, **not all funding agencies can fund all types of research (or TRL)**, see Table 3 and Appendix IV.

The maximum funding for each project is 700 k€ and the maximum funding per partner in one project is 300 k€. However not all funding agencies will apply these amounts (see Appendix IV). The funding maximum for one partner 300 k€ will apply for each project but does not accumulate for a partner present in several projects. **It should be noted that the budget requested regarding the work plan and the research objectives (value for money) will be part of the evaluation notation**

Table 3: Type of research and entities eligible for funding by the participating Funding Organisations.

<table>
<thead>
<tr>
<th>Country/region</th>
<th>Funding Organisation</th>
<th>Fundamental/Basic research</th>
<th>Industrial/Applied research</th>
<th>Experimental research</th>
<th>TRL</th>
<th>Type of entities eligible for funding</th>
<th>Project duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>MESRS</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>2-8</td>
<td>Universities, research centres, SMEs</td>
<td>12-24 months</td>
</tr>
</tbody>
</table>

This project has received funding from the European Union’s Horizon 2020 Research and Innovation Program under Grant Agreement 963530. The content of this report reflects only the author’s view. The European Commission is not responsible for any use that may be made of the information it contains.
<table>
<thead>
<tr>
<th>Country/region</th>
<th>Funding Organisation</th>
<th>Fundamental/ Basic research</th>
<th>Industrial/ Applied research</th>
<th>Experimental research</th>
<th>TRL Type of entities eligible for funding</th>
<th>Project duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morocco</td>
<td>MENFPESRS</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Any</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Public universities;</td>
<td>- Universities from the</td>
<td>- Non-university</td>
<td>- Public research institutions in</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Public-private partnership</td>
<td>institutions in</td>
<td>partnership with public universities;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>in collaboration with</td>
<td>partnership with</td>
<td>- Public research institutions in</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>public universities;</td>
<td>public universities;</td>
<td>partnership with public universities;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Public universities from the Public-private partnership in collaboration with public universities; - Non-university institutions in partnership with public universities; - Public research institutions in partnership with public universities;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>DSI</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>5 &amp; 6</td>
<td>South African higher education or research institutions such as a university (especially historically disadvantaged institutions), university of technology or science council. South Africa Private Sector companies and parastatal companies in the field of renewable energy, Small Medium Enterprises (SMEs) and NGOs in the field of renewable energy.</td>
</tr>
<tr>
<td>Belgium</td>
<td>FRS-FNRS</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>1-3</td>
<td>Public research organisations</td>
</tr>
<tr>
<td>Country/region</td>
<td>Funding Organisation</td>
<td>Fundamental/ Basic research</td>
<td>Industrial/ Applied research</td>
<td>Experimental research</td>
<td>TRL</td>
<td>Type of entities eligible for funding</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------------</td>
<td>-----------------------------</td>
<td>------------------------------</td>
<td>-----------------------</td>
<td>-----</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Austria</td>
<td>FFG</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>2-8</td>
<td>Companies, universities, research institutions, technology transfer institutions, innovation agents, non-profit legal entities (e.g. NGOs, stakeholder associations, societies)</td>
</tr>
<tr>
<td>France</td>
<td>ANR</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>2 - 6</td>
<td>All except public collectivities*</td>
</tr>
<tr>
<td>Germany</td>
<td>FZJ-PtJ</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>2-6*</td>
<td>All*</td>
</tr>
<tr>
<td>Italy</td>
<td>MUR</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes(**)</td>
<td>2-7(**)</td>
<td>All*</td>
</tr>
<tr>
<td>Romania</td>
<td>UEFISCDI</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Any</td>
<td>Research organisations, SMEs</td>
</tr>
</tbody>
</table>

Always check with the corresponding national/regional Funding Organisation for any restrictions and ‘State Aid Rules’.

(*) see national regulations for each funding agency (Appendix IV)

(**): MUR can fund research activities ranging from TRL 1 to 7, but with the caveat that the activities classified as basic research (approx. TRL 1 and 2) and industrial research (TRL 3 and 4) must predominate over to experimental development (TRL 5-7). Different funding rates apply.

**TRL – Technology Readiness Level (as defined in Appendix II).**

7. Eligibility criteria

The pre-proposals and full-proposals have to meet the following eligibility criteria, as detailed further below, as well as the national/regional funding regulations (see the respective document at the LEAP-RE -website):

<table>
<thead>
<tr>
<th>Eligibility Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-proposal submission deadline</td>
</tr>
</tbody>
</table>

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⁴ 12.00 CEST/Central European Summer Time
<table>
<thead>
<tr>
<th>Eligibility Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full proposal submission deadline</strong></td>
</tr>
<tr>
<td>➢ Upon invitation, the full-proposals must be submitted, only via electronic form through the LEAP-RE Electronic Submission System, by the coordinator of the consortium no later than <strong>January 12th 2023, at 17:00:00 CET</strong>.</td>
</tr>
<tr>
<td><strong>Consortium composition</strong></td>
</tr>
<tr>
<td>➢ A consortium applying to the Call must consist of at least four project partners from 4 different countries (2 from Europe and 2 from Africa).</td>
</tr>
<tr>
<td>➢ At least one partner of the Consortium of each continent (Europe and Africa) should be from a country participating in the Call and eligible to receive support from the relevant participating funder.</td>
</tr>
<tr>
<td>➢ At least half of the partners in a consortium must belong to countries participating in the Call and eligible to receive support from the relevant participating funder.</td>
</tr>
<tr>
<td>➢ Each consortium must include at least one partner from the public sector (academic, public research ...) and one partner from a commercial company located in participating (to this Call) countries.</td>
</tr>
<tr>
<td><strong>Applicant/Coordinator</strong></td>
</tr>
<tr>
<td>➢ The coordinator of the consortium must request and be eligible to receive support and be established in a country or region participating in the Call.</td>
</tr>
<tr>
<td><strong>Applicant/Lead researcher</strong></td>
</tr>
<tr>
<td>➢ A Lead Researcher can only represent the coordinator in <strong>one</strong> proposal (i.e. if a Lead Researcher coordinates one proposal, he/she can only participate in other proposals as a researcher/key personnel of a consortium partner).</td>
</tr>
<tr>
<td><strong>Applicant</strong></td>
</tr>
<tr>
<td>➢ Researchers members of the IRP (International Review Panel) or experts of proposals cannot be member of a consortium applying to this Call.</td>
</tr>
<tr>
<td>➢ Researchers employed or affiliated to a funding Organisation cannot apply to the Call except where explicitly authorized.</td>
</tr>
<tr>
<td><strong>Eligible consortium/applicant</strong></td>
</tr>
<tr>
<td>➢ Each partner requesting funding MUST comply with the national/regional funding rules and regulations of their respective Funding Organisation to ensure the eligibility of the consortium proposal (see Appendix IV). Please consult your National/Regional Contact Point. Public organisations from African countries/regions not participating in the Call have a limited possibility to be funded and become partner of funded consortia (see appendix IV).</td>
</tr>
</tbody>
</table>

---

5 17.00 CET/Central European Time
6 EU Member States and associated countries
7 As an exception, for example, Forschungszentrum Jülich GmbH (FZJ) is eligible to apply since measures were already established to avoid any possible conflict of interest with Project Management Jülich as a beneficiary which is a largely independent unit within the research centre Forschungszentrum Jülich GmbH (FZJ). These measures include that Project Management Jülich will be excluded from all decisions concerning the evaluation, selection and funding of proposals submitted by Forschungszentrum Jülich within funding programmes managed by Project Management Jülich. This role will be taken over by the Federal Ministry of Education and Research as the responsible programme owner. To assure the quality of services, Project Management Jülich introduced a quality management system that was certified according to DIN EN ISO 9001.
### Eligibility Criteria

<table>
<thead>
<tr>
<th></th>
<th>The project duration should be a minimum 12 months and should not exceed 24 months (national/regional regulations MUST be consulted in this respect. See APPENDIX IV).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project duration</strong></td>
<td>LEAP-RE Templates must be used, i.e. Forms A (Calibri, 11pt, single spaced for all text except references and footnotes; the pages’ margins 2.5 cm should be kept), Form B and C. Ethics issue and CV’s of lead researcher/key personnel, template for Budget (at the full-proposal stage, in a separate Excel file). All fields of the pre-proposal and full-proposal technical descriptions must be filled in. A Guide for Proposal Submission, including all templates, is available on the LEAP-RE website.</td>
</tr>
<tr>
<td><strong>Pre-proposal and Full proposal templates</strong></td>
<td>The total proposal length (Form A) cannot exceed 6 pages. Images and tables must be included in the maximum page length.</td>
</tr>
<tr>
<td><strong>Pre-proposal length</strong></td>
<td>The total proposal length (Form A) cannot exceed 30 pages, including the Gantt chart, the references, the Budget table, the transnational and international collaboration and the Ethics, Gender balance, and other issues section. All images and tables must be included in the maximum page length.</td>
</tr>
<tr>
<td><strong>Full Proposal length</strong></td>
<td>The detail budget is asked at the full-proposal stage using the Excel template “Budget and funding request”. The maximum funding for each project is 700 k€ and the maximum funding per partner in one project is 300 k€. However not all funding agencies will apply these amounts (see Appendix IV). The funding maximum for one partner 300 k€ will apply for each project but does not accumulate for a partner present in several projects. The total funding rate of partners from the same country in a proposal cannot exceed 50% of the full funding of the project.</td>
</tr>
<tr>
<td><strong>Budget and funding request</strong></td>
<td>At the pre-proposal step: online validation of the “Commitment of applicants” by each partner on the submission platform. At the full proposal step: All applicants requesting funding must provide a statement of commitment duly signed by the legal representative of the organisation, in coherence with national/regional regulation (see Appendix IV), Form B.</td>
</tr>
<tr>
<td><strong>Applicant requesting funding</strong></td>
<td>At the pre-proposal step: online validation of the “Commitment of applicants” by each partner on the submission platform. At the full proposal step: Applicants not requesting funding, can be partners of the consortium on the condition that they provide evidence of the availability of their own funds to cover their costs by providing a signed statement duly signed by the legal representative of the organisation, Form C.</td>
</tr>
</tbody>
</table>
A summary of some national/regional funding rules is provided in Table 2 and 3, as well as in the national/regional funding regulations (Appendix IV) but applicants should check with their national/regional contact point (Table 1) their eligibility conditions. Applicants from African countries not participating to the Call should contact the Call secretariat at pilier1@leap-re.eu (please read carefully pilier1 and not pillar1) and LGI in charge of contracting with these partners (leonard.leveque@lgi.earth).

All researchers involved in funded projects should follow fundamental ethical principles and adhere to the principles of good scientific practice and to The European Code of Conduct for Research Integrity by ALLEA.

8. Call procedures: submission, evaluation, selection, funding and reporting

There will be a two-stage submission procedure: pre-proposals and full proposals. All lawful steps will be taken to ensure confidentiality of information and documents obtained during the submission, evaluation and selection procedures of the Call.

8.1. How to apply

Registration

1. The coordinator (Partner 1), who will represent the consortium, will have to register at the LEAP-RE Electronic Submission System (coordinator registration link) before submitting a proposal.
2. Once registered, the coordinator will receive a registration email.
3. The coordinator will need to register the partners of the consortium (name and e-mail).
4. After registration, all the partners will receive an email to activate their account.
5. With his/her account, each partner can enter his/her own profile.

The procedure to use the electronic submission system is explain in this document: LEAP-RE_Cofunded_call_Submission_Guidlines_2022 available on LEAP-RE website.

Pre-proposal form

A joint transnational pre-proposal shall be prepared in English by the consortium and submitted in pdf form via the LEAP-RE Electronic Proposal Submission System by the lead researcher representing the coordinator. The pre-proposal submission is mandatory and must be submitted no later than September 23rd 2022 at 12:00:00 CEST.

If required by the national/regional regulations, submission forms or other documents must be submitted directly also to the participating Funding Organisations according to their deadlines. Please consult your regional/national contact point (Table 1) for further details.

The pre-proposal form must be filled in by the coordinator, except for the partner’s profiles and respective CVs. LEAP-RE templates for the technical description of the proposal (6 pages, Calibri, 11pt,
single spaced; the template’s margins of the page should be kept) and annexes are available at on the available on LEAP-RE website.

All partners requesting funding should Signed Statement of Commitments on the electronic submission system. Resubmitting the proposal before the submission deadline is possible.

**Full Proposal form**

Full proposals must be submitted by the coordinator in pdf format no later than **January 12th 2023, at 17:00:00 CET.** Full proposals will be accepted only from those coordinators explicitly invited after communication of pre-proposal assessment.

LEAP-RE templates for the technical description of the full proposal (30 pages, Calibri, 11pt, single spaced; the template’s margins of the page should be kept) and annexes are available on the LEAP-RE website.

After the pre-proposal selection no major changes are possible (main objective, consortium, and budget) after the first selection step unless suggestions from the Call Steering Committee. Only under certain conditions after the pre-proposal selection a revision of the overall application may be allowed, for example in case of withdrawal of a member of the consortium. In any case, all changes from pre-to full-proposal have to be coordinated with all involved Funding Organisations by the coordinator. As some Funding Organisations do not allow changes, partners should be advised to make sure that the major information given in the pre-proposal doesn’t need any revision before submitting the full proposal.

**8.2 Evaluation procedures**

The evaluation procedures are designed to identify the best proposals in terms of scientific excellence, impact, quality and efficiency on the implementation, as thoroughly and accurately as possible; and to undertake the assessment in a fair, transparent and homogeneous way for all proposals submitted to the transnational Call.

The quality assessment of the submitted proposals will be performed by the International Review Panel (IRP) composed of international independent expert reviewers that sign Declarations of Confidentiality and Conflict of Interest.

The evaluation process will be monitored by an independent observer who will prepare a report on the assessment process for the European Commission.

**Evaluation stage 1: Pre-Proposals**

The submitted pre-proposals will be subject to an eligibility check performed at a call level by the Joint Call Secretariat (JCS) and at a national/regional level by the Call Steering Committee (CSC) members to confirm compliance with national/regional priorities, rules and regulations.

Each eligible pre-proposals will be allocated to at least two International Review Panel (IRP) experts but most of the time three IRP experts designated according to their expertise relevant for the topic of the pre-proposal.

Pre-proposals will be assessed based on the three main Evaluation Criteria: 1) Scientific Excellence; 2) Impact and 3) Quality and Efficiency of the Implementation (see paragraph 9 below).

A ranked list of pre-proposals will be produced by the IRP based on the final scores.
The selection of pre-proposals for the stage 2 will be decided at a CSC consensus meeting to finalise the stage 1 pre-proposal assessment. The Call Steering Committee may recommend to enlarge the Consortium composition of some selected projects. A list of eligible proposals of high quality will be invited to submit a full proposal for Stage 2.

**Evaluation stage 2: Full-Proposals**

The submitted full-proposals will be subject to an eligibility check performed by the JCS and by the CSC to confirm compliance with national/regional priorities, rules and regulations. Each Full Proposal will be evaluated based on three main evaluation criteria (see Paragraph 9 below) by at least, three independent experts preferably members of the IRP.

At the IRP meeting, a ranking list will be established for eligible full proposals with overall rating at, or above, 10 and with all the main evaluation criterion scores at, or above, 3. Proposals not meeting the thresholds will not be recommended for funding by the IRP.

**8.3. Selection procedures and feedback to applicants**

The CSC will strive to ensure that the top-ranked full-proposals are funded to the maximum extent possible. The selection of full-proposals will be based on the ranking list of eligible full-proposals provided by the IRP meeting as recommendation and the available national/regional budgets until exhaustion of public funds (EU contribution included). A CSC consensus meeting will be organised to finalise Stage 2 and to elaborate the “joint selection list” of projects recommended for funding.

All coordinators will receive feedback on the results of the evaluation process after both Stage 1 and Stage 2, including the Evaluation Summary Reports. The coordinators will be instructed to communicate the decisions to the consortium partners. The final decision of funding will be validated by each funding organisation.

**9. Evaluation criteria**

Pre-proposals and full-proposals will be evaluated based on three main evaluation criteria: 1) Scientific Excellence, 2) Impact and 3) Quality and Efficiency of the Implementation:

1. **SCIENTIFIC EXCELLENCE**
   - Clarity and pertinence of the objectives;
   - Soundness of the concept, and credibility of the proposed methodology;
   - Extent that the proposed work is beyond the state of the art, and demonstrates innovation potential (e.g. ground-breaking objectives, novel concepts and approaches, new products, services or business and organisational models);
   - Appropriate consideration of interdisciplinary approaches and, where relevant, use of stakeholder knowledge **(only for stage 2)**

2. **IMPACT**
   - Proposal should take into account societal needs, including one or more of the following aspects: market evaluation, business models for long-term sustainability, and solution deployment as well as the long-term impact on society.
   - The extent to which the outputs of the project would contribute at the European and African level to expected impacts in line with the integrated strategy proposed in the
Roadmap for a jointly funded AU-EU research & innovation partnership on climate change and sustainable energy (CCSE), especially the impact on renewable energy access in African countries and in Africa context (and not only the enhancement of renewable energy performances at global level);

➢ Any substantial impacts that would enhance innovation capacity, create new market opportunities, strengthen competitiveness and growth of companies, address issues related to barriers/obstacles, and any framework conditions such as regulation, standards, public acceptance, workforce considerations, financing of follow-up steps, cooperation of other links in the value chain, or bring other important benefits for society;

➢ Quality of the proposed measures to exploit and disseminate the project results (including management of IPR), and to manage research data where relevant (only for stage 2);

➢ Quality of the proposed measures to communicate the project activities to different target audiences (only for stage 2);

➢ Supporting the development of non-technological solutions to address environmental, social impact and health safety issues, within, if convenient, a life cycle analysis approach, or the development/deployment of tools, applications, and services enabling to respond population needs;

➢ When relevant, to what extent the project will contribute to a gender equal societal development.

3. QUALITY AND EFFICIENCY OF THE IMPLEMENTATION

➢ The effective collaboration and IP co-ownership between the partners in the consortium beyond sharing different tasks or working packages (only for stage 2);

➢ Quality and effectiveness of the work plan, including extent to which the resources assigned to work packages are in line with their objectives and deliverables (only for stage 2);

➢ Appropriateness of the management structures and procedures, including risk and innovation management (only for stage 2);

➢ Quality and complementarity of transnational activities by the participants and extent to which the consortium as whole brings together the necessary expertise;

➢ Gender perspective of research and development content; the participation of females as main researchers in consortium will be part of the note.

➢ Appropriateness of the allocation of tasks, ensuring that all participants have a valid role and adequate resources in the project to fulfil that role (only for stage 2).

➢ Value for money: the budget requested regarding the work plan and the research objectives will be part of the evaluation notation

Evaluation scores will be awarded to the three main evaluation criteria and not for the different sub-criteria. Each main evaluation criterion is rated using the 0-5 scale (half-points are not allowed):

0 — The proposal fails to address the criterion or cannot be assessed due to missing or incomplete information (unless the result of an ‘obvious clerical error’).

1 — Poor: the criterion is inadequately addressed or there are serious inherent weaknesses.

2 — Fair: the proposal broadly addresses the criterion but there are significant weaknesses.
3—**Good**: the proposal addresses the criterion well but with a number of shortcomings.

4—**Very good**: the proposal addresses the criterion very well but with a small number of shortcomings.

5—**Excellent**: the proposal successfully addresses all relevant aspects of the criterion; any shortcomings are minor.

The threshold for individual criterion is 3. The overall rating is the sum of the individual criterion scores (0-15).

For the evaluation of pre-proposals, the three main evaluation criteria will apply but with fewer sub-criteria (those indicated as “only for stage 2” will NOT be considered).

The overall threshold for pre-proposals will be 9.

The coordinators will receive the results of the pre-proposal assessment including the peer-review reports and will be able to address the evaluators’ questions in the full-proposals.

For the evaluation of full proposals, the overall threshold for full-proposals, applying to the sum of the three individual scores, will be 10. Proposals not meeting the thresholds will not be recommended for funding by the IRP.

**10. Terms and conditions for grant agreement**

**10.1 Funding decisions**

For proposals recommended for funding, the partners will be asked to contact the respective Funding Organisation for further instructions regarding national/regional internal procedures. The grant preparation phase is carried out following the usual rules of each Funding Organisation. The final funding decision is formally taken by each Funding Organisation, according to its own procedure.

The final list of funded projects will be published on the LEAP-RE website.

Each beneficiary will have a separate funding contract/grant agreement according to national/regional regulations with the appropriate national/regional Funding Organisation. Changes to the composition of research consortia or to the budget cannot occur during the contract/letter of grant. The beneficiaries shall inform the JCS and the Funding Organisations of that project of any event that might affect the implementation of the project.

The partners of the projects selected for funding must fix a common project start date, which will be the reference date for annual and final project reports. It is expected that grant preparation may take up to 3-4 months after the notification of results. The latest starting date is **1st July 2023** (some funding bodies may require earlier start times or a reduced project duration: see APPENDIX IV). All funded projects must be completed and reported back at least 6 months before the end of LEAP-RE (31st December 2025, unless a later date is notified to funding recipients during the projects implementation phase).

**10.2 Consortium Agreement**

The beneficiaries of a project selected for funding must sign a **Consortium Agreement** (CA) for cooperation, preferably before the official project start date but no later than six months after the official project start date, considering that some Funding Organisations cannot conclude the grant.
agreements without a signed CA. Each Funding Organisation will indicate when they expect the CA and how to submit it. A copy of the duly signed CA should be sent to the JCS and the Funding Organisations if required by national/regional regulations (see Appendix IV).

The purpose of the CA is to ensure a well-functioning research collaboration and protection of partners’ rights and obligations. Moreover, the CA should provide for a decision-making process to deal with all relevant issues during the project lifetime. Models of CA are available (http://www.desca-2020.eu/). Nevertheless, the consortium is free to define its own CA subject to applicable legal and regulatory provisions. For guidance. The CA must address (as a minimum), the following points:

- Common start date and duration of the research project;
- Organisation and management of the project;
- Role, tasks, and responsibilities of each partner;
- The resources and funding;
- Confidentiality and publishing;
- Intellectual Property Rights (if applicable);
- How the ten principles of Socially Responsible Licensing will be addressed (if applicable);
- Decision making within the consortium;
- Handling of internal disputes;
- The liabilities of the research partners towards one another (including the handling of default of contract)

The national/regional Funding Organisations shall have the right to use documents, information and results submitted by the research partners and/or to use the information and results according to their national/regional rules on IPR.

10.3 Monitoring and reporting procedures

Beneficiaries must ensure that all project publications etc. include a proper acknowledgement to LEAP-RE co-funded by the Horizon2020 programme of the European Union, and the respective Funding Organisation.

On behalf of the consortium, the coordinators of the funded projects will submit annual and final reports in English to the JCS that contain information on scientific and administrative aspects. In addition, each beneficiary in a selected funded project must report to their respective national/regional Funding Organisation, according to their administrative funding rules. The beneficiaries are instructed to immediately contact the coordinator, the Funding Organisations involved and the JCS with any contingency that may arise.

This data base respects appropriate and secure use of material and data according to the application of common standards, following the guidelines on data management in Horizon 2020. The collected data will require a prior informed consent, will be protected and secured, in order to avoid a malevolent use of it.

The mid-term scientific evaluation exercise of funded projects will be based on the annual project reports and presentations made by the coordinators at the mid-term Seminar with the participation of the CSC members and invited stakeholders. As a result, the CSC may propose the continuation, the re-organisation or the suspension of the research project activities. Accordingly, travel expenses to attend this Seminar and the final Seminar should be included in the proposal budget plans, if eligible.
for the Funding Organisations. The representative of the coordinator should also attend to the kick-off meeting.

The final scientific evaluation of funded projects will be organised under the LEAP-RE Final Conference based on the final project reports and presentations made by the coordinators.

The final assessment of results will be made available on the LEAP-RE website and a wider dissemination through other relevant means will be carried out.

The representative of the coordinator should attend a minimum of three meetings organised by LEAP-RE (kick-off meeting, mid-term and final seminars). In addition, the beneficiaries are expected to participate and contribute to any communication activity initiated by LEAP-RE in the funding period and beyond.

11. Open Access and Open Data

The optimisation of the impact of publicly-funded scientific research is of fundamental importance to improve conditions to i) minimise the time spent searching for information and accessing it, ii) be able to speed up scientific progress, and iii) make it easier to cooperate across and beyond the European Union.

Open Access recommendations for all scientific publications produced by the funded projects will support Green Open Access (immediate or delayed open access provided through self-archiving), and/or Gold Open Access (immediate open access provided by a publisher) only depending on cost eligibility. In the case of Green Open Access, partners will (as soon as possible and at the latest on publication) deposit a machine-readable electronic copy of the published version or final peer-reviewed manuscript accepted for publication in a repository for scientific publications. In addition, partners will ensure open access to the deposited publication and bibliographic metadata.

In relation to Open Data we encourage the researchers to register online at “The Green Best Practice Community” of JRC and propose case studies and best practices. Metadata and additional information will be made publicly available via the LEAP-RE website. LEAP-RE will comply with the Protection of Personal Data Requirements by following the ethical standards and guidelines of Horizon 2020 and applicable EU and national law.
APPENDIX I Areas for research

Multiannual Roadmaps (MARs) Summary

1. **Assessment of Renewable Energy Sources and integration of RES in sustainable energy scenarios** – Scenarios describing the potential role of renewable energy in Europe and Africa per technology, application type with the aim to support the RE industry to prioritize and contextualize target areas of RES deployment

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

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

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 including electricity storage solutions such as batteries, hydrogen...

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)

6. **Innovative solutions for priority domestic uses (clean cooking and cold chain)** - Improving, managing and maintaining solar photovoltaic systems, cookstoves and cold chain components for clean cooking and food storage. Supporting interactions with policymakers to foster fast market uptake considering the macro socio-economic and gender impacts
APPENDIX II Technology Readiness Level (H2020 definition)

TRL 1 – basic principles observed
TRL 2 – technology concept formulated
TRL 3 – experimental proof of concept
TRL 4 – technology validated in lab
TRL 5 – technology validated in relevant environment
TRL 6 – technology demonstrated in relevant environment
TRL 7 – system prototype demonstration in operational environment
TRL 8 – system complete and qualified
TRL 9 – actual system proven in operational environment
APPENDIX III Definitions

**Applicant:** is a legal entity, represented by a Lead Researcher that forms a consortium at the stage of proposal submission.

**Beneficiary:** is a legal entity, represented by a Lead Researcher, member of a consortium selected for funding that receive financial support from the respective national/regional Funding Organisation.

**Call:** Refers to the LEAP-RE Joint Call 2022 opening on June, 2022.

**Call Steering Committee (CSC):** Comprises representatives of the Funding Organisations that have committed national/regional funds to support the selected R&I projects. It supervises the whole Call procedure and agrees on the final list of proposals recommended for funding. It supervises the activities of the Joint Call Secretariat.

**Consortium:** Group of legal entities, each represented by a Lead Researcher, that are part of a joint collaborative transnational R&I project proposal submitted to the Call or a project selected for funding.

**Coordinator:** One partner of the consortium represented by a Lead Researcher, who will be responsible for the internal scientific management of the project, intellectual property rights management, project reporting towards the JCS and CSC and will represent the consortium externally.

**Evaluation Criteria:** criteria used by the expert members of the International Review Panel to evaluate the projects and note them. Evaluation criteria are those of H2020 EC Programme.

**Funding Organisations:** are responsible for providing funding under relevant rules and regulations to the beneficiaries from the respective country/region.

**International Review Panel (IRP):** Panel of internationally independent recognised scientific experts responsible for the quality assessment of the submitted proposals. IRP members will not submit or participate in proposals within this Call and must sign declarations of confidentiality and of conflict of interest.

**Joint Call Secretariat (JCS):** Is responsible for the implementation of the Call and the follow-up phase until the funded projects and all reporting requirements have ended. All submitted proposals are collected by the JCS, which makes them available to the CSC and the reviewers of the International Review Panel. The JCS handles the communication with the applicants, reviewers, CSC and beneficiaries. ANR, MESRS, FFG and UEFISCDI are JCS members,

**Key personnel:** is a team member person of an applicant or a beneficiary.

**Lead researcher:** is the main responsible person of a legal entity and is the contact point with the corresponding national/regional Funding Organisation and the JCS.

**Partners:** legal entities, each represented by a Lead Researcher within a department or institute from universities, research organisations, companies etc., forming a consortium.
### APPENDIX IV National/regional funding regulations

#### Algeria

**MESRS :**

- **a) National/Regional eligibility criteria**

| Contact Point | Dr MERABET Hamza  
| E‐mail: h.merabet@mesrs.dz  
| Tel: 0770 87 95 13  
| Pr SELAMI Mokhtar  
| Sellami.leapre@gmail.com  
| Tel: 0661 58 00 24 |

<table>
<thead>
<tr>
<th>Eligible entities</th>
<th>Specifications: Research entities (Research team, Research division, Research Centre, Research Unit, Research laboratory, Universities, socio-economic entities with R and D entities).</th>
</tr>
</thead>
</table>

| Eligible topics | Type of research (fundamental, basic research, industrial research, applied research, experimental development...)  
|-----------------|--------------------------------------------------------------------------------------------------|

<table>
<thead>
<tr>
<th>Eligible type of research and TRL</th>
<th>TRL- 2 to 8</th>
</tr>
</thead>
</table>

| Additional eligibility criteria | REIMBURSEMENT OF EXPENSES  
|---------------------------------|--------------------------------------------------------------------------------------------------|

- Travel costs of Algerian researchers in Algeria and abroad.  
- Scientific events: organizational expenses, accommodation, catering and transport.  
- Investigators fees.  
- Guide fees.  
- Experts and consultants fees.  
- Study, work and services costs done for the research entity.  
- Registration and participation fees for conferences

**EQUIPMENT AND FURNITURE**

- Scientific equipments, laboratory and office furniture and audio visual instruments.  
- Acquisition of computer equipment, accessories and software  
- Maintenance and repair.  

**SUPPLIES**

- Chemicals.  
- Consumables.  
- Electronic, mechanical and audio-visual components.  
- Stationery and office furniture.  
- Periodicals.  
- Documentation and research books.  
- Laboratory furniture (animals, plants, etc...).  
- Materials, instruments and small scientific tools

**ADDITIONAL CHARGES**

- Printing and publishing. - Postage charges. - Telephone, Fax and Internet.  
- Other costs (taxes, custom duty, financial costs, insurance, storage costs, etc.).
- Data bank (acquisition and subscribing).
- Website design, production and maintenance.
- Advertising and publication costs
- Translation costs of scientific documents.

**CAR PARK**
- Car rent for research in the field.

**COSTS OF VALORIZATION AND TECHNOLOGICAL DEVELOPMENT**
- Costs of training and support of project holders.
- Costs of intellectual property:
  - Anteriority research.
  - Patent, brand and template deposit request.
  - Software deposit.
  - Protection of vegetable, animal obtentions and other.
  - Costs of representatives.
- Costs of design and definition of the project to be developed.
- Incubation costs.
- Costs of valorization services.
- Costs of design and developing prototypes, mock-ups, test series, pilot facilities and demonstrations.

**NB:** It should be noted that according to the provisions of the regulations in force, other costs under the international projects are subject to a request for the DGRSDT

<table>
<thead>
<tr>
<th>Maximum amount of requested funding</th>
<th>50 000 € / project</th>
</tr>
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**b) Funding rates**

Maximum funding percentages:

<table>
<thead>
<tr>
<th>Type of research</th>
<th>Large Enterprises</th>
<th>Medium Enterprises</th>
<th>Small Enterprises</th>
<th>Academia, associations without economic activities, public authorities *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamental research</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic research</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Industrial/Applied Research</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Experimental development</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

This project has received funding from the European Union’s Horizon 2020 Research and Innovation Program under Grant Agreement 963530. The content of this report reflects only the author’s view. The European Commission is not responsible for any use that may be made of the information it contains.
Morocco – MENFESRS
National eligibility criteria

| Contact Point | Abdelouahid EZZARFI  
|               | E-mail: a.ezzarfi@yahoo.fr  
|               | Tel: +212 6 72 21 03 27  
|               | Anas CHOKAIRI  
|               | E-mail: chokairi.anas@gmail.com  
|               | Tel: +212 5 37 21 76 53 / 212 6 72 21 03 57  
|               | Hajar SAADI  
|               | E-mail: saadihajar95enssup@gmail.com  
|               | Tel: +212 7 67 39 39 01 |

| Eligible entities | ✓ Public universities;  
|                   | ✓ Universities from the Public-private partnership in collaboration with public universities;  
|                   | ✓ Non-university institutions in partnership with public universities;  
|                   | ✓ Public research institutions in partnership with public universities. |

| Eligible topics | MAR: 1, 2, 3, 4, 5 and 6 |

| Eligible type of research and TRL | Type of research: Fundamental / Basic research, Industrial /Applied research, Experimental research.  
|                                  | TRL- |

| Additional eligibility criteria | ✓ The maximum budget granted for each Moroccan partner is 50.000 € with a ceiling of 100.000 € per project with an extension of 20.000 € for project coordination.  
|                                | ✓ No levy by research institutions is allowed from the budget allocated to the research projects;  
|                                | ✓ Permanent staff can not receive research allowances. The remuneration of the non-statutory staff (PhD students, post-docs and CDD) participating in the project can be financed (Comply with the joint decision of 14 January 2016 concerning the management of the own resources of public institutions of higher education and scientific research);  
|                                | ✓ Costs requested for Research allowances, travel and mission expenses can not exceed 60% of the total budget allocated to the Moroccan team;  
|                                | ✓ The budget requested for the first payment can not exceed 60% of the total budget allocated to the Moroccan team;  
|                                | ✓ The second payment will be made only after validation of the mid-term report. |

| Eligible costs | (See below the eligible expenses table in French) |

| Maximum amount of requested funding | ✓ The maximum budget granted for each Moroccan partner is 50.000 € with a ceiling of 100.000 € per project with an extension of 20.000 € for project coordination. |

| Additional information |

This project has received funding from the European Union’s Horizon 2020 Research and Innovation Program under Grant Agreement 963530. The content of this report reflects only the author’s view. The European Commission is not responsible for any use that may be made of the information it contains.
## Eligible expenses:

<table>
<thead>
<tr>
<th>Rubriques</th>
<th>Budget demandé (DH)</th>
<th>Premier versement (DH)</th>
<th>Deuxième versement (DH)</th>
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<tr>
<td><strong>Dépenses du personnel</strong></td>
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</tr>
<tr>
<td>Indemnités liées aux travaux de recherche et de prestation de service (Bourses des doctorants, CDD, …)</td>
<td></td>
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<tr>
<td><strong>Taxes postales et frais d’affranchissement</strong></td>
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<tr>
<td>Taxes et redevances pour l’utilisation des lignes de réseaux spécifiques</td>
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<tr>
<td>Taxes et redevances de télécommunications</td>
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<tr>
<td><strong>Matériel, Mobilier de bureau et fournitures</strong></td>
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<tr>
<td>Achat de fournitures de bureau, de papeterie et d’imprimés</td>
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<tr>
<td>Achat de fournitures informatiques</td>
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<td>Achat de matériels informatiques</td>
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<td>Achat de matériels scientifiques</td>
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<td>Achat de matériels et mobilier de bureau</td>
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<tr>
<td>Achat de réactifs, kits et produits chimiques</td>
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<td><strong>Entretien et réparation</strong></td>
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<tr>
<td>Entretien et réparation de matériels scientifiques et informatiques</td>
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<tr>
<td><strong>Transport et Déplacement</strong></td>
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<td>Indemnités de déplacement à l’intérieur du Royaume</td>
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<tr>
<td>Indemnités Kilométriques</td>
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<tr>
<td>Frais de transport au Maroc et à l’étranger</td>
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<tr>
<td>Frais de transport des missionnaires et chercheurs étrangers</td>
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<tr>
<td>Frais de mission à l’étranger</td>
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<tr>
<td>Frais de séjour des missionnaires étrangers au Maroc</td>
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<tr>
<td><strong>Autres Dépenses</strong></td>
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<tr>
<td>Frais de documentation, d’impression et de publication</td>
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<tr>
<td>Achat de matières premières et de petit outillage</td>
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<tr>
<td>Frais de réalisation de maquettes et de prototype</td>
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<tr>
<td>Frais de démonstration et de publicité</td>
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<tr>
<td>Frais d’étude, d’analyse et de sous-traitance</td>
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<tr>
<td>Frais de participation aux séminaires</td>
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<tr>
<td>Frais d’organisation de séminaires</td>
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<tr>
<td>Frais de dépôt et de gestion des brevets, de licence et/ou de droit auteur</td>
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<tr>
<td><strong>Total</strong></td>
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</tbody>
</table>
South Africa

Department of Science and Innovation (DSI)
a) National/Regional eligibility criteria

| Contact Point | Mr Sigfried Tivana  
|               | E-mail: sigfried.tivana@dst.gov.za  
|               | Ms Thato Morokong  
|               | Thato.Morokong@dst.gov.za |

| Eligible entities | South African higher education or research institutions such as a university (especially historically disadvantaged institutions), university of technology or science council. South Africa Private Sector companies and parastatal companies in the field of renewable energy, Small Medium Enterprises (SMEs) in the field of renewable energy. A multiinstitutional and multisectoral approach is encouraged. Therefore, applicants are allowed to collaborate with other partners such as NGOs, SMEs and other industry players such as the private sector which are also eligible for funding.  
|                  | In terms of South Africa’s transformation agenda, South African Principal Investigators based at historically disadvantaged institutions will be prioritised. Principal Investigator based at historically advantaged institutions should include, as part of the research team, a research partner from any of the historically disadvantaged institutions in South Africa.  
|                  | Proposals submitted by an applicant based at a historically advantaged institution without a research partner from a historically disadvantaged institution will be ineligible (and will not be submitted for review). Applicants based at historically disadvantaged institutions can function as PIs and submit proposals without the involvement of and or partnering with researchers based at historically advantaged institutions if they so wish.  
|                  | Note that the following universities will be recognised as historically disadvantaged  
|                  | 1. University of Limpopo (UL),  
|                  | 2. University of Fort Hare (UFH),  
|                  | 3. University of Venda (Univen),  
|                  | 4. Walter Sisulu University (WSU),  
|                  | 5. University of the Western Cape (UWC),  
|                  | 6. University of Zululand (UniZulu),  
|                  | 7. Mangosuthu University of Technology (MUT),  
|                  | 8. Sefako Makgatho Health Sciences University (SMU),  
|                  | 9. Cape Peninsular University of Technology (CPUT),  
|                  | 10. Durban University of Technology (DUT),  
<p>|                  | 11. Tshwane University of Technology (TUT) |</p>
<table>
<thead>
<tr>
<th>Eligible topics</th>
<th>MAR 2,3,4, 5 and 6 – all sub-topics but with a focus on TRLs 5 and 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible type of research and TRL</td>
<td>Industrial/ Applied Research, Experimental Development, TRLs 5 and 6 will be given preference.</td>
</tr>
</tbody>
</table>
| Additional eligibility criteria | The following criteria will be used to review projects nationally:  
  ▪ The South African applicant (i.e., the main Principal Investigator) must be in possession of a PhD if representing an academic institution however this is not applicable to a consortium led by a coordinator who represents an SMME or private sector company.  
  ▪ The involvement of a South African private sector company (including SMEs) is required.  
  ▪ The project proposal should explicitly demonstrate the project’s capacity building model. This includes the involvement of young, emerging and/or early-career researchers and a balanced involvement of female and black researchers.  
  ▪ South African researchers are not allowed to submit more than 1 application. |
| Eligible costs                  | The following costs will be permissible:  
  o Personnel costs  
  o Operational costs  
  o Investment costs  
  o Indirect costs (10% of personnel + operational costs)  
  o Subcontracting |
Maximum amount of requested funding

The total amount requested from the DSI should be between R1 000 000 and R1 800 000 per project. Funding will be made available for a maximum of 2 years, to be paid in annual instalments and exclusively for research activities commencing in 2023.

Additional information

Intellectual Property (IP)

Projects that will exploit South Africa’s publicly funded Intellectual Property (IP) and projects that aim to general IP that will be fully or partly registered in South Africa will receive first preference.

Ethical Clearance

It is the responsibility of the grant holder, in conjunction with the institution, to ensure that all research activities conducted in or outside South Africa comply with the laws and regulations of South Africa and/or the foreign country in which the research activities are conducted. These include all human and animal subjects, copyright and intellectual property protection, and other regulations or laws, as appropriate. A research ethics committee must review and approve the ethical and academic rigor of all research prior to the commencement of the research and acceptance of the grant. The awarded amount will not be released for payment if a copy of the required ethical clearance certificate, as indicated in the application, is not attached to the Conditions of Grant. Please also refer to the “Statement on Ethical Research and Scholarly Publishing Practices” on the South African Journal of Science website at https://www.sajs.co.za/article/view/7675/9536.

b) Funding rates

Maximum funding percentages:

<table>
<thead>
<tr>
<th>Type of research</th>
<th>Large Enterprises</th>
<th>Medium Enterprises</th>
<th>Small Enterprises</th>
<th>Academia, associations without economic activities, public authorities *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamental research</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Basic research</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Industrial/Applied Research</td>
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<td>50%</td>
<td>70%</td>
<td>100%</td>
</tr>
<tr>
<td>Experimental Development</td>
<td>20%</td>
<td>50%</td>
<td>70%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Austria:

FFG - Austrian Research Promotion Agency

| Contact Points | Elli Stepanovic, E-mail: elli.stepanovic@ffg.at  
|                | Ursula Bodisch, E-mail ursula.bodisch@ffg.at  
|                | Tel: |

| Eligible entities | In general: |
|                   | -Companies of any legal form (e.g. SMEs, large enterprises)  
|                   | -Institutions of research and knowledge dissemination, such as universities, universities of applied sciences, non-university research institutions, technology transfer institutions, innovation agents and other research oriented organisations, such as associations with a relevant purpose  
|                   | -Other non-profit legal entities (e.g. NGOs, stakeholder associations, societies)  
| Specifications:   | At least one enterprise that receives funding is mandatory as a partner in any transnational consortium involving Austrian partners. It is not mandatory for this enterprise to be located in Austria. The complete eligibility criteria and definitions may be found in the national guidelines available at: www.ffg.at/leap-re  

| Eligible topics | MARS Numbers: 3 and 4 |

| Eligible type of research and TRL | Type of research: |
|                                   | industrial research, applied research, experimental development TRL 2-8  
| Specifications:                   | All Austrian partners in one project must select the same research type (industrial research/applied research TRL 2-4 or experimental development TRL 5-8).  

| Additional eligibility criteria | Further information on conditions and restrictions can be found in the documents at the national call website: www.ffg.at/leap-re.  
|                                | Applicants are strongly encouraged to contact FFG before submitting a preproposal.  
|                                | In parallel to the submission of the joint proposal by the coordinator, a simplified national application is to be submitted via the FFG electronic submission system eCall by participants requesting funding by FFG (both in the pre-proposal and in the full proposal stage).  
|                                | National application via eCall in addition to the central submission is mandatory:  
|                                | National submission deadline pre-proposals:  
|                                | September 30th 2022 at 12.00 (CET)  
|                                | National submission deadline full proposals:  
|                                | January 19th 2023 at 12.00 (CET)  

This project has received funding from the European Union’s Horizon 2020 Research and Innovation Program under Grant Agreement 963530. The content of this report reflects only the author’s view. The European Commission is not responsible for any use that may be made of the information it contains.
### Eligible costs

- Personnel costs
- Indirect costs (25% as surcharge on all cost categories besides third-party costs)
- Use of R&D infrastructure
- Cost of materials
- Travel Costs
- Third Party Costs

The national rules on eligible costs for Austrian participants are available at the FFG website: [www.ffg.at/kostenleitfaden](http://www.ffg.at/kostenleitfaden)

<table>
<thead>
<tr>
<th>Maximum amount of requested funding</th>
<th>300.000 EUR</th>
</tr>
</thead>
</table>

**Additional information**

Please consult the FFG Call Website for detailed information: [www.ffg.at/leap-re](http://www.ffg.at/leap-re)

---

**b) Funding rates**

**Maximum funding percentages:**

<table>
<thead>
<tr>
<th>Type of research</th>
<th>Large Enterprises</th>
<th>Medium Enterprises</th>
<th>Small Enterprises</th>
<th>Research institutions (non-commercial activities)</th>
<th>Other non-profit legal entities (non-commercial activities)</th>
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</thead>
<tbody>
<tr>
<td>Fundamental research</td>
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<td>not eligible</td>
<td>not eligible</td>
<td>not eligible</td>
<td>not eligible</td>
</tr>
<tr>
<td>Basic research</td>
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<td>not eligible</td>
<td>not eligible</td>
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<td>Industrial/Applied Research</td>
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<td>85%</td>
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<tr>
<td>Experimental development</td>
<td>35%</td>
<td>50%</td>
<td>60%</td>
<td>60%</td>
<td>60%</td>
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</tbody>
</table>
Belgium/Fédération Wallonie – Bruxelles

Fonds de la Recherche Scientifique – FNRS (F.R.S.-FNRS)

a) National/Regional eligibility criteria

<table>
<thead>
<tr>
<th>Contact Point</th>
<th>Joël Groeneveld</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E-mail: <a href="mailto:joel.groeneveld@frs-fnrs.be">joel.groeneveld@frs-fnrs.be</a></td>
</tr>
<tr>
<td></td>
<td>Tel: +32 2504 9270</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eligible entities</th>
<th>All eligibility rules and criteria can be found in the PINT-MULTI regulations. This call is co-funded by the European Commission (see article III.6).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible topics</td>
<td>The F.R.S.-FNRS will only finance basic (fundamental) research performed in MAR’s 1, 2, 3 and 4.</td>
</tr>
<tr>
<td>Eligible type of research and TRL</td>
<td>Please note that the F.R.S.-FNRS only funds Basic research (low Technology Readiness Level) carried out in a research institution from the “Fédération Wallonie-Bruxelles”. The F.R.S.-FNRS will not fund industrial partners or any activity related to the private sector. Nevertheless, partners funded by the F.R.S.-FNRS can be in a consortium where there are also partners from the private sector.-</td>
</tr>
<tr>
<td>Additional eligibility criteria</td>
<td>Applicants to F.R.S.-FNRS funding must provide basic administrative data by submitting an administrative application on E-SPACE within 5 working days after the general deadline of the LEAP RE call to be eligible. Please select the “PINT-MULTI” funding instrument when creating the administrative application. Proposals invited to the second stage will be able to complete the pre-proposal form and provide information for the full proposal upon validation by the F.R.S.-FNRS.</td>
</tr>
<tr>
<td>Eligible costs</td>
<td>All eligibility rules and criteria can be found in the PINT-MULTI regulations. This call is co-funded by the European Commission (see article III.6). “Overhead” is not an eligible cost. If the project is selected for funding, these costs will be subject to a separate agreement between the institution of the beneficiary and the F.R.S.-FNRS.</td>
</tr>
<tr>
<td>Maximum amount of requested funding</td>
<td>The maximum amount of requested funding per project is 120,000 EUR for a total period of two years.</td>
</tr>
<tr>
<td>Additional information</td>
<td><a href="https://www.ncp.frs-fnrs.be/appels/era-nets">https://www.ncp.frs-fnrs.be/appels/era-nets</a></td>
</tr>
</tbody>
</table>
b) Funding rates
Maximun funding percentages:

<table>
<thead>
<tr>
<th>Type of research</th>
<th>Large Enterprises</th>
<th>Medium Enterprises</th>
<th>Small Enterprises</th>
<th>Academia, associations without economic activities, public authorities *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamental research</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>100 %</td>
</tr>
<tr>
<td>Basic research</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>100 %</td>
</tr>
<tr>
<td>Industrial/Applied Research</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Experimental development</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
France

**ANR**

a) National eligibility criteria

| National Contact Point | Marie-Laure Tarot  
Chargée de mission scientifique ANR  
Tel : +33 (0) 1 80 48 83 74  
E-mail: marie-laure.tarot@anr.fr |
|---|---|
| Eligible entities | -French* entities as following, are eligible:  
- French Public research organization,  
- French commercial companies,  
- NGO and French private entities (except French commercial companies) only if they collaborate with a French public research organization  
- Ineligible: territorial collectivities  
*Whose real registered office is in France |
| Eligible topics | Projects concerning the following MARs:  
MAR 1, 2, 3, 4, 5, 6: all sub-topics |
| Eligible type of research and TRL | Fundamental/Basic Research, Industrial/Applied Research/experimental development  
TRL 2-6 |
| Additional eligibility criteria | Please consult the ANR Funding regulations for detailed information (“Règlement relatif aux attributions des aides de l’ANR” [https://anr.fr/fr/rf/](https://anr.fr/fr/rf/)) and the document entitled *Modalités de participation pour les partenaires sollicitant une aide de l’ANR* available on the webpage of the call on the ANR website. |
| Eligible costs | ANR funds basic research, industrial research and experimental development. The eligibility of costs and rates of funding depend on types of partners, consortia composition and types of research. See ANR funding regulations for more details: [https://anr.fr/fr/rf/](https://anr.fr/fr/rf/) |
| Maximum amount of requested funding | The maximum amount of requested funding per project is 200.000 EUR and ANR expect funding requests to range between 100 and 150 k€ per partner. |
b) Funding rates
Maximum funding percentages:

<table>
<thead>
<tr>
<th>Type of research</th>
<th>Large Enterprises</th>
<th>Medium Enterprises</th>
<th>Small Enterprises</th>
<th>Academia, associations without economic activities, public authorities *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamental research</td>
<td>30%</td>
<td>30%</td>
<td>45%</td>
<td>See <a href="#">ANR funding regulations</a></td>
</tr>
<tr>
<td>Basic research</td>
<td>30%</td>
<td>30%</td>
<td>45%</td>
<td>See <a href="#">ANR funding regulations</a></td>
</tr>
<tr>
<td>Industrial/Applied Research</td>
<td>30%</td>
<td>30%</td>
<td>45%</td>
<td>See <a href="#">ANR funding regulations</a></td>
</tr>
</tbody>
</table>

Please note that the above information are summarized and translated from official relevant documents and regulations ("Modalités de participation pour les partenaires sollicitant une aide de l’ANR" and the ANR Funding regulations). In case of inconsistencies, the terms of the latter shall prevail.
Germany

FZJ-PtJ

a) National/Regional eligibility criteria

| Contact Point          | Johanna Ohnesorg  
|                       | E-mail: j.ohnesorg@fz-juelich.de  
|                       | Tel: +49 2461 61-85871  
| Eligible entities     | Universities, research institutes, SME’s and Large companies as well as NGOs.  
|                       | Specifications: none  
| Eligible topics       | We support MARs number 1 to 6 and regarding MAR 4 we concentrate on a technical focus on open-access tools.  
| Eligible type of research and TRL | Types of research: basic research and applied research  
|                       | TRL: 2 to 6  
| Additional eligibility criteria | 7. Energieforschungsprogramm der Bundesregierung (7. EFP)  
|                       | The regulations of the BMBF Call within the 7.EFP apply:  
|                       | Bekanntmachung zur Förderung  
|                       | The FZJ-PtJ is committed to avoid double funding. We take into account all projects (finished and running) funded by German Ministries.  
|                       | The German partners of the emerging consortia are required to obtain information from the funding institution in advance.  
|                       | Professional Focus:  
|                       | - Multilateral joint projects between African, European and German research institutions and companies to develop successful business cases for energy supply services as well as (where applicable) green hydrogen value chains.  
| Eligible costs         | o Personnel costs  
|                       | o Operational costs  
|                       | o Investment costs  
|                       | o Indirect costs (10% of personnel +operational costs)  
|                       | o Subcontracting  
|                       | o Travel costs  

This project has received funding from the European Union’s Horizon 2020 Research and Innovation Program under Grant Agreement 963530. The content of this report reflects only the author’s view. The European Commission is not responsible for any use that may be made of the information it contains.
Maximum amount of requested funding: Maximum of 300,000 € per German consortium. (Included within the funding amount is an overhead of 20% for universities and overhead costs for small and medium-sized enterprises of up to 100% on the personnel costs. The German participants need to include these overheads into their proposed budget.)

Additional information:
- With regard to the emerging consortia, we strongly welcome the involvement of partners from sub-Saharan Africa.
- Please refer to this website for further details on the application process. This information is provided in German. [Leap-re-long term Europe Africa partnership on renewable energy](#).
- For the preparation of the full proposals, please refer to this website. This information is provided in German. [Formularschrank für Fördervordrucke des Bundes](#).

b) Funding rates

Maximum funding percentages:

<table>
<thead>
<tr>
<th>Type of research</th>
<th>Large Enterprises</th>
<th>Medium Enterprises</th>
<th>Small Enterprises</th>
<th>Academia, associations without economic activities, public authorities *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamental research</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Basic research</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>100</td>
</tr>
<tr>
<td>Industrial/Applied Research</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>100</td>
</tr>
<tr>
<td>Experimental development</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
a) National/Regional eligibility criteria

| Contact Point | Rachele Nocera  
E-mail: Rachele.Nocera@mur.gov.it  
Aldo Covello  
E-mail: Aldo.Covello@mur.gov.it  
Tel: +39 06 9772 7705 |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible entities</td>
<td>The following entities are eligible, providing that they have stable organization in Italy: enterprises including foundations and non-economic entities, universities, research institutions, research organizations in accordance with EU Reg. n. 651/2014 of the European Commission - June 17, 2014</td>
</tr>
<tr>
<td>Specifications</td>
<td>The participant must be registers into the “Anagrafe Nazionale delle Ricerche”. The participant must not be defaulting with regard to other funding received by the Ministry. The participant must not have requested/got any other funding for the same project. The participant must respect the Italian law &quot;D.Lgs. n 159 del 6/09/2011 e successive modificazioni ed integrazioni&quot;. The participant must not be subject to bankruptcy proceedings as of art. 5, comma 4, letter b) of DM 1314/2021 or must not be a company in difficulty according to the definition under number 18) of article 2 &quot;Definitions&quot; of Regulation (EU) no. 651/2014. The participant must be in compliance with the obligations laid down in the contributory and social security regulations (DURC). The judicial and pending records of the legal representative of the participant are negative. For any private entity, the following financial criteria, calculated using the data reported in the last approved balance sheet, must be fulfilled:</td>
</tr>
</tbody>
</table>
| | a. $CN > \frac{(CP - I)}{2}$  
Where:  
$CN = \text{net assets (Capitale netto)}$  
$CP = \text{sum of the costs of all the projects for which public funding has been requested by the participant during the year}$  
$I = \text{sum of the contributions received, approved or requested for the same projects}$  
b. $\frac{OF}{F} < 8\%$  
Where:  
$OF = \text{financial charges (Oneri finanziari)}$  
$F = \text{turnover (Fatturato)}$ |
| Eligible topics | # 1: Assessment of Renewable Energy Sources and integration of RES in sustainable energy scenarios  
# 2: End-of-life and second-life management and environmental impact of RE components  
# 3: Smart stand-alone systems  
# 4: Smart grid (different scales) for off grid application  
# 5: Processes and appliances for productive uses (agriculture and industry)  
# 6: Innovative solutions for priority domestic uses (clean cooking and cold chain) |
| --- | --- |
| Eligible type of research and TRL | **Type of research:**  
All R&D activities classifiable as Basic research, Industrial research and Experimental development are eligible for funding. However, Basic Research and Industrial research activities must be predominant with respect to Experimental development activities (in terms of budget share).  
TRL can range from 2 to 7 |
| Additional eligibility criteria | **National additional application:**  
In addition to the project proposal, which shall be submitted at European level, the Italian participants are requested to submit a national additional application to MUR, through the national web platform, available at the following link: https://banditransnazionali-miur.cineca.it  
This national additional application must be submitted by the same deadline established in the international joint call. Participant who does not submit national documentation by the deadline are considered not eligible for funding.  
More information on the national documentation to be submitted to MUR is available at the [web page dedicated to the LEAP-RE 2022 Call](https://www.ricercainternazionale.miur.it/evidenza/normativa-prog-internazionali.aspx):  
It is strongly recommended to contact the National Contact Persons already in early stage of project preparation.  
The admission for funding is subject to the adoption of the necessary accounting and administrative measures for the allocation of the resources.  
Funded participants will be requested to submit financial and scientific reports to MUR.  
Applicable laws and rules:  
- Decreto legge n. 83/2012  
- Decreto Ministeriale n. 1314 del 14 dicembre 2021  
- Decreto Ministeriale n. 1368 del 24 dicembre 2021 |
Eligible costs

All costs incurred during the lifetime of the project under the following categories are eligible:

- Personnel,
- Equipment
- Consulting and equivalent services
- Consumables
- Indirect Costs/Overheads (“Spese generali”): shall be calculated as a percentage of the personnel costs and shall not be higher than 50% of them. Travel expenses, dissemination and coordination costs are to be included in the overheads.

Maximum amount of requested funding

Within a single project proposal, the maximum contribution to the Italian partners can be up to 200 k€.

Additional information

Payments

On request of applicants a pre-payment may be done immediately after the signature of the national Grant agreement, equal to 50% of the total contribution.

Halfway through the project, on request of the beneficiaries, a second pre-payment may be done up to 40% of the total contribution, depending on the achievement of the deliverables and milestones planned for the first half of the project.

The remaining part of the contribution will be paid at the end of the project.

For those beneficiaries who does not request the pre-payments, the contribute will be paid in instalments after each reporting period.

b) Funding rates

Maximum funding percentages:

<table>
<thead>
<tr>
<th>Type of research</th>
<th>Funding level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic research</td>
<td>70%</td>
</tr>
<tr>
<td>Industrial/Applied Research</td>
<td>50%</td>
</tr>
<tr>
<td>Experimental development</td>
<td>25%</td>
</tr>
</tbody>
</table>
Romania

Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI)

a) National/Regional eligibility criteria

<table>
<thead>
<tr>
<th>Contact Point</th>
<th>Elena Simion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E-mail: <a href="mailto:elena.simion@uefiscdi.ro">elena.simion@uefiscdi.ro</a></td>
</tr>
<tr>
<td></td>
<td>Tel: +4021.307.19.93</td>
</tr>
</tbody>
</table>

| Eligible entities | Legal entities established in Romania are eligible to get funding – public and private accredited universities, national R&D institutes, other research organisations, SMEs, large industrial enterprises. |

| Eligible topics | MARS Numbers - all |

| Eligible type of research and TRL | UEFISCDI will fund research projects implemented by research organisations and/or SMEs, according to the European State Aid legislation and the national requirements: Information package Suprogram 3.2 Horizon 2020 |

| Additional eligibility criteria | For the Romanian partners, more information about the eligibility criteria is available at: Information package Suprogram 3.2 Horizon 2020 |

| Eligible costs | o Personnel costs  
o Operational costs  
o Investment costs  
o Indirect costs  
o Subcontracting |

| Maximum amount of requested funding | 200.000 EUR maximum total budget for a Romanian consortium participating as partners in a transnational project; 250.000 EUR maximum total budget for a Romanian consortium participating as a coordinator of a transnational project. |

| Additional information | It is strongly advised to contact UEFISCDI before submission, in order to verify the eligibility of the researchers and avoid ineligible projects / research consortia. |
b) Funding rates

b) Maximum funding percentages:

<table>
<thead>
<tr>
<th>Type of research</th>
<th>Large Enterprises</th>
<th>Medium Enterprises</th>
<th>Small Enterprises</th>
<th>Academia, associations without economic activities, public authorities *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamental research</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic research</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial/Applied Research</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Funding regulation for African partners from non-participating countries

Organization Name: LGI Sustainable Innovation

### a) Eligibility criteria

| **Contact Point** | Name: Léonard Lévêque  
| E-mail: leonard.leveque@lgi.earth  
| Tel: +33(0)622982764 |

| **Eligible entities** | • African public research organizations  
| • African Universities  
| • African research institutes |

| **Eligible topics** | MARS Numbers: MAR 1, 2, 3, 4, 5, 6  
| # 1: Assessment of Renewable Energy Sources and integration of RES in sustainable energy scenarios  
| # 2: End-of-life and second-life management and environmental impact of RE components  
| # 3: Smart stand-alone systems  
| # 4: Smart grid (different scales) for off grid application  
| # 5: Processes and appliances for productive uses (agriculture and industry)  
| # 6: Innovative solutions for priority domestic uses (clean cooking and cold chain) |

| **Eligible type of research and TRL** | Type of research (fundamental, basic research, applied research)  
| TRL: 2 to 6 |

| **Additional eligibility criteria** | Each organisation will be required to complete the full due diligence process requested by LGI Sustainable Innovation |

| **Eligible costs** | o Personnel costs  
| o Operational costs  
| o Investment costs  
| o Indirect costs (10% of personnel + operational costs) |

| **Maximum amount of requested funding** | 150 000 € per project  
| Payment will be made upon presentation of the work done and obtaining technical and financial reports |

| **Additional information** | Applicants should contact LGI and Call secretariat before applying:  
| leonard.leveque@lgi.earth  
| Mathilde.videlo@lgi.earth  
| pilier1@leap-re.eu |