



# LEAP-RE

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

Research & Innovation Action

December 2021

## **Ranking list from the full- proposal evaluation of the first co-funded call**

Version N°1.0



This project has received funding from the European Union's Horizon 2020 Research and Innovation Program under Grant Agreement 963530.

Ranking list from the full-proposal evaluation of the first co-funded



**LEAP-RE**

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## Document information

<b>Grant Agreement</b>	963530
<b>Project Title</b>	Long-Term Joint EU-AU Research and Innovation Partnership on Renewable Energy
<b>Project Acronym</b>	LEAP-RE
<b>Project Coordinator</b>	Vincent Chauvet ( <a href="mailto:Vincent.chauvet@lqi-consulting.com">Vincent.chauvet@lqi-consulting.com</a> ) – LGI
<b>Project Duration</b>	1 <sup>st</sup> October 2020 – 31 <sup>st</sup> December 2025 (63 Months)
<b>Related Work Package</b>	WP7
<b>Related Task(s)</b>	Task 7.7
<b>Lead Organisation</b>	ANR
<b>Contributing Partner(s)</b>	MESRS
<b>Due Date</b>	November 30 <sup>th</sup> 2021
<b>Submission Date</b>	
<b>Dissemination level</b>	

## History

Date	Version	Submitted by	Reviewed by	Comments
December 1 <sup>st</sup> 2021	1.0	Marie-Laure TAROT	François MOISAN Mokhtar SELLAMI	





December 15 <sup>th</sup> 2021	2.0	Marie-Laure TAROT	François MOISAN Mokhtar SELAMI Léonard LEVEQUE	





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## Abbreviations and Acronyms

Acronym	Description
WP	Work Package
Independent Review Panel	IRP
Joint Call Secretariat	JCS

## Summary

The selection process of the LEAP-RE proposals is in two steps. 36 pre-proposals were selected to be evaluated in the second step (see deliverable D7.4).

This deliverable presents the evaluation of the full-proposals of the first-call of pillar 1. 32 projects were evaluated, 4 projects were not submitted. After the submission of the projects, the national and transnational eligibility check was done and the scientific evaluation was realized by the Independent Review Panel (IRP).

## Keywords

Full-proposal ranking; International Review Panel





## 1. Eligibility check

The eligibility checks (national and transnational) was done at the pre-proposal step. In order to ensure that the projects still comply with the national and transnational rules, the eligibility check was done at the full-proposal step.

The transnational eligibility check of each project (compliance with the rules of the Call) was done by the Joint Call Secretariat. The transnational rules are indicated in the appendix 1.

National eligibility checks were done by the funding organisations.

All the full-proposals were eligible after the eligibility check.

## 2. Evaluation of the full-proposals

### 2.1 International Review Panel composition

During the first step, 27 experts evaluated the pre-proposals. For the IRP composition of the second step, the Joint Call Secretariat proceed to the revision of the composition of the International Review Panel considering the feed-back of the funding organisations. The JCS proposed to keep the same evaluators except two of them. Furthermore two South African experts deceased in August 2021 and a new expert from South Africa was named (Kubeshnie Bhugwandin). An expert from Namibia, Kudakwashe Ndhulukula and an expert from Tunisia, Rafik Missaoui, were also named in IRP for the second step.

The International Review Panel (IRP) was chaired by Mrs Semida SILVEIRA from the Royal Institute of Technology (Sweden). Mrs SILVIERA was chosen as a chair woman because:

- She is from a country not participating to the call;
- She does not have conflict of interest in any of the projects evaluated in the second step;
- She has good knowledge for the 6 Multi-Annual roadmaps of the call.

She is also member of the Climate Change and Sustainable Energy (CCSE) working group set up by the European Commission and the African Union. Her gender was also taken into consideration.

**Table 1: International Review Panel composition**

Gender	Last name	Fisrt name	Country	Employer
M.	ANVARI-MOGHADDAM	Amjad	Denmark	Aalborg University
M.	BAWAKYILLENUO	Simon	Ghana	University Ghana
M.	BENYOUSSEF	El-Hadi	Algeria	CNRST
M.	BERTSCH	Valentin	Germany	Ruhr-University Bochum
M.	BOUABID	Khalid	Morocco	University Ibn Zohr
Mrs	BHUGWANDIN	Kubeshnie	South Africa	ESKOM
M.	COLLARES PEREIRA	Manuel	Portugal	Retired from the university of Evora
M.	DE GROMARD	Christian	France	AFD
M.	EL BACHTIRI	Rachid	Morocco	USMBA University
Mrs	GEISSLER	Susanne	Austria	SERA Global Gmbh.





<b>M.</b>	KHELLAF	Abdallah	Algeria	CDER, department of Renewable hydrogen
<b>Mrs</b>	LAAROUSSI	Najma	Morocco	Higher School of Technology of Salé, University Mohammed V of Rabat
<b>M.</b>	LEACH	Matthew	UK	University of Surrey
<b>M.</b>	LEARY	Jon	UK	Loughborough University
<b>Mrs</b>	MAILULA	Faith Bridget Tumi	South Africa	Dpt. of Science and Innovation, South Africa
<b>Mrs</b>	MÉNDEZ	Beatriz	Spain	CENER
<b>M.</b>	MISSAOUI	Rafik	Tunisia	ALCOR
<b>M.</b>	MONTEIRO ALVES	Luís Manuel	Portugal	ULHT (University Lusophone of Humanities and Technologies)
<b>M.</b>	NDHULUKULA	Kudakwashe	Namibia	SACREE
<b>Mrs</b>	NICOMEDI	Iris	France	ADEME
<b>Mrs</b>	REKIOUA	Djamila	Algeria	University of Bejaia, LTII Laboratory
<b>M.</b>	RICHARD	Dominique	France	AFD
<b>M.</b>	RODRIGUEZ	Pedro	Spain	Technical University of Catalonia
<b>Mrs</b>	SHANKER	Anjali	France	IED Group
<b>M.</b>	STRAUSS	Philipp	Germany	Fraunhofer IEE
<b>Mrs</b>	TO	Long Seng	UK	Loughborough University
<b>Mrs</b>	WEBER	Gundula	Austria	AIT / Omnisolar e.U

The IRP includes 11 women (including the chair-woman) and 17 men. 11 members are working in Africa and 17 in Europe.

## 2.2 Training of the IRP

The IRP members had to sign a declaration of involvement and a non-disclosure agreement before they had access to any evaluation document or full-proposal. A Code of Conduct regarding Conflict of Interests was also sent

As training information, the IRP members received:

- An explanation of the ANR website used to do the evaluation of the full-proposals;
- Guidelines for the evaluation of full-proposals;
- A training session was done on September 20<sup>th</sup> to recall the objectives of LEAP-RE, the selection process of proposals and the evaluation criteria.

Moreover, during the introduction of the IRP meeting, the evaluation criteria were also recalled.

## 2.3 Allocation of full-proposals

In order to avoid conflict of interest, if an IRP member was from the same country as one consortium partner of a project, he did not have to evaluate the project. Then, the evaluation was done by expert who had knowledge and expertise in the main multiannual roadmap/topic of the full-proposal.

All the full-proposals were evaluated by at least 3 experts, sometimes 4. Each full-proposal was evaluated by at least one expert working in Africa and one expert working in Europe.



## 3. IRP meeting

The LEAP-RE Expert panel meeting chaired by Prof. Semida SILVEIRA has been held online between 08 and 09 November 2021 in a hybrid format with the chair and 6 experts in Paris and the other experts through a Cisco WebEx Meetings session.

The Panel schedule was the following:

- ▶ Introductory plenary session (08 November 9am – 9:30am CET)
- ▶ Evaluation of the projects (08 November 9:30am CET – 09 November 16:00 CET)
- ▶ Validation of the ranking list and explanations regarding the consensus reports (09 November 16:00pm – 17:00pm CET)

### 3.1 Roles assigned to the panel meeting

1/Panel members

During the panel meeting, the panel member appointed as «Rapporteur» starts the discussion by briefly summarizing the full-proposal and, then gives an opinion of his evaluation.

The panel member appointed as co-evaluator is one of the reviewers/co-evaluators of the full-proposal. During the panel meeting he listens first to the Rapporteur of the proposal and presents his own review of the proposal, strengthening the points where he disagrees with the other reviewers.

2/Chair

The Chair leads the Introductory, the discussions among reviewers and the final plenary sessions.

The chair:

- Kept the conversation going during the Panel, ensuring that both rapporteur and co-evaluators received appropriate amount of time to put forward their opinion on the full-proposal
- Kept in time during session (15 min for each proposal)
- Ensured a decision is made that member can agree upon
- Ensured a final ranking is made at the end of the session

### 3.2 Documents delivery for the meeting

A booklet of the projects was provided before the meeting.

At the beginning of the session, the panel members had access to the others pre-assessments of the proposal they had evaluated.

### 3.3 Introduction

The Chair of the panel started the meeting with a short speech, then Léonard Lévêque (LGI) presented LEAP-RE and the joint call secretariat made an introductory presentation indicating the panel meeting agenda and objectives:





- ▶ discuss the results of the pre-assessments phase and reach a joint position of the Expert Panel when there are discrepancies between the individual pre-assessments
- ▶ providing a ranking list to the Steering Committee.

The ranking of the full-proposals is based on the evaluation criteria reminded during the introductory presentation (see appendix 2). Some statistics made from the pre-meeting assessments were also presented. With the lights of these statistics, discrepancies between evaluators in the scores for a same proposal and the use of the evaluation scale for each panel member has been identified. An average time of 15 minutes was allocated for the discussion of each proposal.

### 3.4 Conflicts of Interest

The Conflicts of Interest has been identified prior to the assessment work of the experts. When it came to handle a conflict of interest for a proposal to discuss during the panel sessions, the access to the discussions of the panel were blocked for the person(s) involved by this conflict of interest with the online "lobby" functionality of Cisco WebEx Meetings or leave the room for the persons attending the meeting onsite. Once the proposal(s) had been discussed, the person(s) was/were integrated again into the meeting. During the IRP meeting the fact that an expert was from the same country as a member of the consortium of a project was not considered as a situation of Conflict of interest (he was not evaluator of the project).

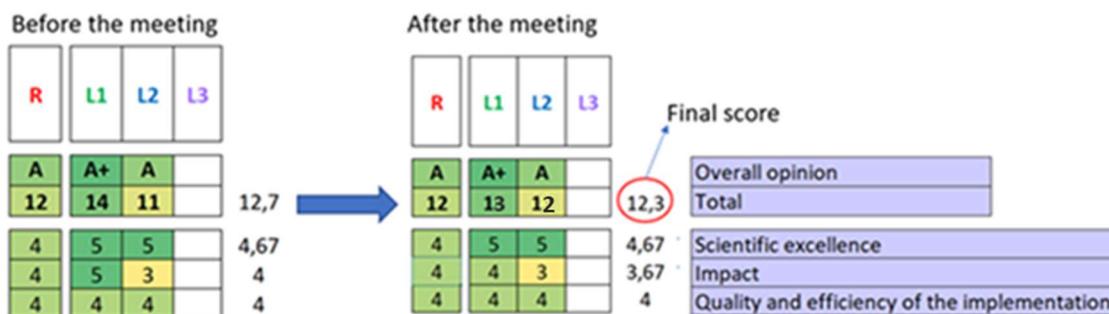
The chair declared no conflict of interest prior to the meeting and during the meeting.

Funding organisations were invited to attend the IRP meeting as observer (not taking part to the discussions).

### 3.5 Results

The rapporteur started by summarizing the content of the proposal and the other assessments of the proposals. The co-evaluators replied to the rapporteur then, the IRP members were invited to participate to the discussion.

After the discussion, the Chair asked the evaluators to confirm if they want to modify or not the scores.



**Figure 1: Scoring of proposals. R: scores of the rapporteur, L1/2/3, scores of the co-evaluators**

The final score was obtained by adding the average score of the 3 sub-criterias.

The full-proposals were addressed according to the average score of the pre-assessment.



Ranking list from the full-proposal evaluation of the first co-funded



**LEAP-RE**

After the first discussion, 8 projects had the same final score (12/15). In order to rank these 8 full-proposals the following methodology was adopted:

A first group was made with the projects containing only A+ and A:  
4 projects (SunGari, AfricaInMotion, NANOSOLARCELL, IRES-RE).

In order to rank those projects, the IRP panel decided to highlight the projects with good score for Impact (C2) and Quality and efficiency of the implementation (C3). Then the following order was obtained: 1/SunGari, 2/AfricaInMotion, / 3 (equals): NANOSOLARCELL & IRES-RE

For the second group the following ranking was obtained:

- 1/ MG-FARM 1 → containing no B and C as Overall scores
- 2/ gLPG → one B but 2 A+ as Overall scores
- 3 /Per-Fact - SOLAR INDUCE: equals



**Table 2: Ranking list of the full-proposals**

Acronym	English title	Final score after the first round	Final score after the second round	Rank
<b>PyroBioFuel</b>	Sustainable biomass conversion into bioenergy through pyrolysis	13,33		<b>1</b>
<b>OASES</b>	Development and Demonstration of a Sustainable Open Access AU-EU Ecosystem for Energy System Modelling	13,33		<b>1</b>
<b>RESTART</b>	REcycling of spent Li-ion batteries and end-life photovoltaic panels: From the development of metal recovery processes to the implementation of a START-up	13,25		<b>3</b>
<b>SolChargeE</b>	Decentralized Solar Charging System for Sustainable Mobility in rural Africa	13,25		<b>3</b>
<b>SIREVIVAL</b>	Si-based devices for renewable energy: From end of life recycling to revival of photovoltaic modules	12,75		<b>5</b>
<b>QDSOC</b>	Environmentally friendly colloidal quantum dots for high performance solar cells	12,66		<b>6</b>
<b>HyAfrica</b>	Towards a next generation renewable energy source – a natural hydrogen solution for power supply in Africa.	12,66		<b>6</b>
<b>LEDSOL</b>	Enabling clean and sustainable water through smart UV/LED disinfection and SOLar energy utilization	12,33		<b>8</b>
<b>SoCoNexGen</b>	Solar Indoor Cooking Systems of the Next Generation	12,33		<b>8</b>
<b>HyRECA</b>	Hybrid Renewable Energy Conversion Approaches: Sustainable solutions for rural energy supply and employment	12,25		<b>10</b>
<b>SunGari</b>	SunGari: A modern solar cooking solution for African staples	12	12,15	<b>11</b>
<b>AfricaInMotion</b>	Productive Use of Solar-powered Mobile Energy for Africa	12	12,12	<b>12</b>
<b>NANOSOLARCELL</b>	Integration of photonic conversion layers based on photoemissive nanostructured materials for improving sunlight harvesting ability of solar cells	12	12,1	<b>13</b>
<b>IRES-RE</b>	Integrated Renewable Energy System providing Refrigeration by the use of metal hydrides	12	12,1	<b>13</b>
<b>MG-FARM</b>	Smart stand-alone micro-grids as a solution for agriculture farms electrification	12	12,05	<b>15</b>
<b>gLPG</b>	Green cooking gas for off-grid communities	12	12,03	<b>16</b>





<b>Per-Fact</b>	PV-Energy and Food for African Transition Research	12	12	<b>17</b>
<b>SOLAR INDUCE</b>	SOLAR INDUCE domestic clean efficient cooking and refrigeration for off-grid applications in Africa	12	12	<b>17</b>
<b>InterAct</b>	Intelligent NETwoRk with locAl ConsumpTion	11,75		<b>19</b>
<b>PPPack</b>	The Personal Power Pack (PPP) as the building block towards sustainable economic growth, mobility and education	11,33		<b>20</b>
<b>BEAT Green</b>	Boosting the European-African Transition towards green energy supply	11,25		<b>21</b>
<b>TerraCooltech</b>	TERrestrial passive daytime RAdiative COOLing based on a renewable and sustainable TEChnology without energy consumption for urban and rural applications	10,66		<b>22</b>
<b>EDICE</b>	Improving energy efficiency in buildings with printed perovskite solar cells on the ceramic tiles	10,66		<b>23</b>
<b>RE-Net Africa</b>	Networking with Renewables: A community approach towards sustainable and reliable stand alone energy systems in Africa	10,5		<b>24</b>
<b>REVISE</b>	REMOTE SENSING FOR BETTER EVALUATION AND VIABILITY OF RURAL SOLUTIONS LEADING TO BETTER ELECTRIFICATION DEPLOYMENT	10,5		<b>25</b>
<b>MYRE</b>	Magezi Ya Gambo – Renewable Energy for rural communities	10		<b>26</b>
<b>PVSYSTEM</b>	Smart Scalable Off-Grid PV System	9,67		<b>27</b>
<b>HydrICE</b>	Hydrogen-rich SYNGAS production using Innovative gasification system towards a Circular Economy in a rural area	9,33		<b>28</b>
<b>AWa Sun</b>	Autonomous standalone Wastewater treatment system based on photocatalytic semi-conductors driven by the Sun	9,33		<b>28</b>
<b>HOPE</b>	Hybrid Microgrid Open Platform for decentralized Electrification of African communities	9		<b>30</b>
<b>HYLOS GRID</b>	Hybrid Local Smart Grid at the University of Sidi Bel-Abbes	8,01		<b>31</b>
<b>H2-OMG</b>	Hydrogen use in sector-coupled optimized mini-grids for productive use	8		<b>32</b>



## Conclusion

Driven by a good will to conduct its mission in a rigorous, transparent manner and in compliance with evaluation standards, the CSC has clearly defined the various stages and mechanisms leading to classification and funding selected projects. The prerequisites for this success were as follows:

- Updating the list of IRP members, replacing in particular the experts who did not give complete satisfaction during the first phase (two members).
- Organization of an explanatory and training session for IRP members, in particular on the resolution of conflicts of interest but also on the need to put forward the arguments that led to the final score and the confidentiality.
- Allocation of full-proposals regarding the issue of COI and competencies.
- Appointment of an IRP chair who is responsible for coordinating the discussions on the evaluation of each project by hearing a rapporteur and the co-evaluators on the weak points and the strong points of the full-proposal studied.
- Collegial study of proposals for the management of candidates with the same score and on the conduct to be followed.

The projects selection process succeeded to rank the 32 projects submitted at the second step. All the members of the International Review panel provided an evaluation of the projects they were assigned to.

Since several projects (8) were noted ex-aequo in the ranking list established by IRP experts the Chairwoman of IRP organised a deeper discussion among IRP members in order to have a final ranking list allowing to rank these 8 projects. This discussion among IRP members reached a consensual conclusion.

The final ranked list has been sent to the funding organisations the day following IRP meeting (10<sup>th</sup> November) in order for them to prepare the Call Steering Committee scheduled on 23<sup>rd</sup> November.

The whole evaluation process was supervised by an independent observer who produced a report. The independent observer was named by the CSC.





## **Appendix 1: transnational eligibility**

→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). 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;

→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;

→The coordinator of the consortium must be eligible to receive support and be established in a country or region participating in the Call. An exception was made for UK partners because of the withdraw of Loughborough University as funding organization;

→The total efforts of partners from one country in a proposal cannot exceed 50% of the total project efforts (measured in person-months (PM));

→All applicants requesting funding must provide a statement of commitment duly signed by the legal representative of the organisation or the Lead Researcher at the full-proposal step, in coherence with national/regional regulation (see Appendix IV), Form B.

→Applicants not requesting funding, or not eligible for national/regional 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 or the Lead Researcher, Form C.

→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 is allowed to a certain extent, 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.



## **Appendix 2: evaluation criteria**

### **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**

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);

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;

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

### **3. QUALITY AND EFFICIENCY OF THE IMPLEMENTATION**

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;

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).

