



## **2019 OPEN CALL FOR RESEARCH PROPOSALS ON RENEWABLE ENERGY SYSTEMS AND INTEGRATION; RELIABILITY IN ENERGY PRODUCTION AND/OR DELIVERY; AND ENERGY EFFICIENCY**

### **1 Background**

The Research Council of Zimbabwe (RCZ) in collaboration with Zimbabwe Energy Regulatory Authority (ZERA) invites research proposals aimed at addressing issues on Renewable Energy Systems and Integration, Reliability in Energy Production and Delivery, and Energy Efficiency. The proposals should seek solutions to integrating renewable energy into existing systems and improve renewable energy systems and equipment; improve reliability in the generation, transmission, distribution and supply of modern energy; investigate and elicit energy efficiency capacity in Zimbabwe while developing expertise in the research area.

### **2 Objectives of the Call**

This Call is aimed at supporting research that contributes to:

- i. Producing knowledge on practical and realistic solutions or technologies that are domestically and industrially implementable and with potential for commercialization in the area of Renewable Energy Systems and Integration;
- ii. Improving Reliability in the production and delivery of modern energy;
- iii. Providing technologies to improve, measure and verify Energy Efficiency;
- iv. Improving socio-economic circumstances through prudent energy use; and
- v. Supporting human resources development in research in the area of energy for sustainability.

### **3 Research Areas**

Proposals should address issues in energy as espoused in key thematic areas of the Transitional Stabilization Program (TSP), National Energy Policy, Vision 2030 and the National Research Priorities. Proposals may cover the following but not limited to the under-listed:

#### **Renewable Energy Systems and Integration**

- i. Greater and better integration of renewable energies into the national electricity grid.
- ii. Utilization of Solar thermal heating as an alternative to electricity for producing heat required for industrial purposes.
- iii. Renewable energy storage for solar, wind and biogas.
- iv. Sustainable renewable energy application in agriculture and industry.
- v. Energy initiative projects targeting smaller communities and specific industries with potential for contribution to the national grid.
- vi. Micro grid integration of renewable energy and storage technologies



### Reliability in Energy Production and Delivery

- i. Addressing the deficit in supply of modern power and energy in Zimbabwe;
- ii. Optimization and reliability improvement in electrical power generation;
- iii. Improving transmission and distribution networks reliability;
- iv. Reducing and/or negating vandalism of electrical distribution infrastructure;
- v. Assessing and designing solutions to mitigate effects of Zimbabwe's climatic and environmental condition on reliability in electrical systems
- vi. Reducing electricity leakages through the application of software and hardware on the National, Regional and Community grids to improve reliability

### Development and promotion of energy efficiency:

- i. Energy efficiency at both utility and consumer levels.
- ii. Energy efficient technology for homes, industry, commerce and agriculture.
- iii. Industrial systems efficiency improvement.
- iv. Domestic energy management systems.

### 4 Eligibility

- i. Funding is open, on a competitive basis, to Zimbabwean researchers in Engineering, Physical and Social Sciences and any other academic disciplines, at local Academic Institutions, Research Institutions or Government Research Departments.
- ii. Researchers from the Private Sector and Non-profit organizations affiliated to a Zimbabwean approved public institute are also encouraged to apply.
- iii. Consortia of the above, with one institution as lead applicant assuming responsibility and accountability can also apply and may have a competitive advantage.
- iv. Female researchers are encouraged to apply.

### 5 Budget Limitation

Funding is provided to the level indicated in the proposal budget, subject to clear and justified value for funds in research formulation, project execution and research outputs.

### 6 Processing of Proposals

- i. The evaluation and selection of proposals will comprise verification of the proposal eligibility.
- ii. Confidential peer review of the proposals by experts.
- iii. Short listing of reviewed research proposals.
- iv. Communicating results and funding decisions to applicants by 17 July 2019 (**projects should commence by 1 September 2019**).
- v. RCZ and ZERA decision will be final.



## 7 Submission

- i. All documents (application form, full research proposal, annexes, etc.) have to be submitted as PDF and MS Word files to [rccc@rcz.ac.zw](mailto:rccc@rcz.ac.zw) and copied to [research@zera.co.zw](mailto:research@zera.co.zw) with subject “Renewable Energy Systems Integration, Reliability in Energy Production/Delivery and Energy Efficiency”.
- ii. Approval from the host institution of affiliation is a prerequisite. Proposals without institutional approval will not be considered.

## 8 Submission Deadline

The deadline for submission of applications is 15 May 2019 by 1000hrs.

## 9 Contact Information

- For additional information on the call visit [www.rcz.ac.zw](http://www.rcz.ac.zw)
- For any queries or additional information, contact RCZ: Tel. 263-24-2304733, 2304787 cell 0712 954 330/2

### Contact Persons

- Mrs P. Chikowore, - ext. 107 Email: [pchikowore@rcz.ac.zw](mailto:pchikowore@rcz.ac.zw)
- Mr C Mpofu, - ext. 117 Email: [cmpofu@rcz.ac.zw](mailto:cmpofu@rcz.ac.zw)