Waste Research Development and Innovation Roadmap

Research, development and innovation (RDI) to advance the South African waste sector

2020 CALL FOR PROPOSALS
WASTE RDI MICRO-GRANTS

The Department of Science and Innovation (DSI) is pleased to announce a **Call for Proposals** for waste research, development and innovation projects commencing in January 2021. The Call provides for 'micro-grants' of fixed amount, open to eligible universities. The intention of the call is to strengthen waste R&D and innovation, and build student and academic capability in South Africa's emerging universities.

Applicants are requested to familiarise themselves with the information provided in this Call as well as in the Waste Research, Development and Innovation (RDI) Roadmap for South Africa (2015-2025), before preparing an application.

The Waste RDI Roadmap is available online at https://wasteroadmap.co.za/waste-rdi-roadmap/

1   Background

The Waste RDI Roadmap is an initiative of the DSI, managed by the CSIR, aimed at strengthening –

- human capital development (HCD)
- research and development (R&D), and
- innovation in the field of solid waste management

Through the strategic investment in science, technology and innovation, the Department aims to support the prevention of waste and the optimised extraction of value from waste reuse, recycling and recovery, in order to create significant social, economic, and environmental benefit for the country. The objective of the Waste RDI Roadmap Call for Proposals is to directly support –

- More effective decision-making
- Faster insertion of context-appropriate technology
- Export of know-how and technology
- Strengthened RDI capability and capacity

2   Research themes

Research proposals <u>must</u> be aligned with one of the following thematic areas of the Waste RDI Roadmap –

   i. Technology Solutions
      Design, development, evaluation, demonstration, localisation and deployment of technologies (both local and inbound) for customer-driven performance improvement

   ii. Modelling and analytics
      Develop and use methods, tools, techniques, platforms, systems and frameworks for the analysis, monitoring and evaluation of technical, economic, social and environmental opportunities and impacts associated with secondary resources

   iii. Waste logistics performance
      Optimisation of strategic, tactical and operational decision-making in respect of logistics objectives, assets and resources

   iv. Strategic planning
      Build and strengthen the basis and application of strategic analysis and advice for the purposes of evidence-based decision-making to inform strategy formulation, planning and its execution and management

   v. Waste and environment
      Strengthen the ability to identify, monitor, evaluate and report on environmental impacts of waste and its management, in order to inform better targeted and more effective responses

   vi. Waste and society
      Deepen understanding of waste-related opportunities and threats, to increase the success of influencing perception and practice positively

Proposals <u>must</u> also address one of the following priority waste streams of the Waste RDI Roadmap (*listed alphabetically and not in any order or priority*) –

- Plastic waste
- Municipal waste
- Organic waste
- Electronic waste
- Waste tyres

3   Grant award amount and duration

The Waste RDI Roadmap will make funding available through 'micro-grants', to be awarded for a maximum amount of R600,000 (excl. VAT) for a two (2) year grant period, i.e. R300,000 per annum. The total funding available for 2020/21 is limited and so the process is expected to be highly competitive.

4   Eligibility criteria

4.1   Eligible institutions

The 'micro-grant' facility expressly targets universities that have not previously participated in Waste RDI Roadmap grant projects. As such, historically disadvantaged institutions, universities of technology, and universities who have not previously been awarded research / grant projects under the Waste RDI Roadmap, are encouraged to apply.

A list of previously awarded grant projects (current and completed) can be found at https://wasteroadmap.co.za/current-projects/ and https://wasteroadmap.co.za/completed-projects/

4.2   Experience

Lead Researchers must be qualified to do the proposed research and should have some experience and expertise in the subject matter referenced in the proposal. Typically this would include full-time faculty at academic and research institutions.

4.3   Capacity development

The following requirements in terms of human capital development apply –

- Only proposals that include capacity development through the training of post-graduate students (honours or masters) will be considered.
- The grant holder is expected to support at least one honours or one masters student on the grant project, through either Full Cost of Study (FCS) or Partial Cost of Study (PCS) depending on the needs, and academic performance, of the student (*See DSI/NRF Post-graduate Funding Policy*). The grant holder will need to reflect whether the student(s) is supported on FCS or PCS in the quarterly reporting to the DSI.
- Students supported on the grant projects must be South African citizens or permanent residents.
- Students should be placed on the grant project on the basis of academic merit, and may not hold salaried employment that exceeds 12 hours of work per week, while pursuing the degree.

5   Evaluation criteria

All proposals will undergo evaluation by an independent review panel, to assess the suitability of the proposal in terms of the Waste RDI Roadmap's objectives. All proposals will be evaluated against the following criteria:

- i.   **Alignment:** the research proposal must address the priorities and research themes of the Waste RDI Roadmap (Section 2 above)
- ii. **Relevance:** the research must have the potential to directly, and positively, influence the management of solid waste in South Africa, by moving waste up the hierarchy away from landfilling towards waste prevention, reuse, recycling or recovery, in a manner that will provide maximum environmental, social and economic benefit for the country. Preference will be given to proposals which are impact driven and solution orientated.
- iii. **Scientific/technical soundness and credibility**: the research proposal has a sound scientific and/or technical base, reflects a sound grasp of the issues requiring investigation, the proposed methodologies are appropriate for achieving the objectives; and the deliverables and associated time frames for delivery are realistic.

iv. **Innovation:** the project is original and contributes to the body of knowledge or develops practical solutions to move waste away from landfilling towards waste prevention, reuse, recycling or recovery

v. **Research Outputs/Deliverables:** the project must result in a significant research output, such as s research report, post-graduate dissertation(s), technologies, journal papers, etc.

vi. **Capacity development:** Only proposals that include capacity development through the training of post-graduate students will be considered. The proposal must also reflect how the project will advance the development of the Lead Researcher (in terms of research, qualifications, teaching and learning, or other professional competencies).

vii. **Institutional capacity:** the applicant should demonstrate sufficient institutional capacity to implement the project

viii. **Value for money:** the benefits of the proposed research are measurable and the value of the benefits exceed the value of the investment

6   Equity and redress

In line with the national imperative of equity and redress, the research call prioritises support for designated groups viz. black, female and persons with disabilities.

7   Submission of proposals

Only proposals submitted on the research proposal template, issued together with this Call, will be considered. Proposals should be submitted in MSWord or PDF format.

Research proposals (Part III: Detailed description of the project) **must not exceed 10 pages** (at font Arial 10, line spacing 1.15). **Proposals may be rejected prior to evaluation if they exceed the set length and if they do not make use of the template provided.**

A concise 1-2 page curriculum vitae (CV) of the Lead Researcher must be submitted together with the proposal.

8   Reservations

The DSI expressly reserves the following rights:

- To reject all or any proposals
- To waive any or all irregularities in the proposals submitted
- To retain the right not to select any application/s even if meeting all the requirements

9   Contract negotiations

The successful applicant/s will be required to enter into a written Agreement with the CSIR, who manages the Waste RDI Roadmap on behalf of the DSI.

10   Closing date

Proposals must be submitted electronically via email to LGodfrey@csir.co.za on the Waste RDI Roadmap Grant Proposal template. (issued with this call).

The deadline for the submission of proposals is **Friday, 24 July 2020 at 17:00**.

All applicants will be notified about the outcome of their applications by early September 2020 (or sooner) to allow sufficient time for students to be recruited for the 2021 academic year.

11   Confirmation of receipt

All applicants will receive a confirmation of 'receipt of proposal' email. If you do not receive such a confirmation within one week of application, please follow up with the Waste RDI Roadmap office to ensure that your proposal has been received. Proof of submission before the closing date will be required.

12   Validity

All applications will be regarded as valid for 120 days from the 24 July 2020 whereafter the CSIR may request an updated application, should this become necessary.

For any queries relating to the call for proposals, contact:

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