



## **Invitation to tender for REAL's Research Hub Project:**

*Plastic contamination method assessment: Evaluating current mass-based method and possible alternative methods of assessment for plastics in compost and digestate*

**Tender Invitation Document**

## **EXECUTIVE SUMMARY**

Renewable Energy Assurance Limited (REAL) invites contractors to tender for the work outlined below. Following a competitive tender process, REAL will appoint the successful contractor to deliver the project.

### **Purpose of the tender**

The purpose of the tender opportunity is to appoint a contractor to develop and deliver REAL's Research Hub project titled '*Plastic contamination method assessment: Evaluating current mass-based method and possible alternative methods of assessment for plastics in compost and digestate.*'

### **Tender timeframe**

Deadline for receipt of tender submissions: **17<sup>th</sup> February 2023**

Deadline for questions in relation to this tender: **27<sup>th</sup> January 2023**

Tenderers receive written notification of REAL's decision: **March 2023**

### **Work programme**

Contract start date: **April 2023**

Contract duration: **Six to nine months**

*\*REAL reserve the right to change this timetable*

<b>1</b>	<b>INTRODUCTION .....</b>	<b>3</b>
<b>2</b>	<b>PROJECT BACKGROUND AND SCOPE .....</b>	<b>4</b>
<b>3</b>	<b>SERVICES REQUIRED .....</b>	<b>5</b>
<b>4</b>	<b>TENDER REQUIREMENTS.....</b>	<b>6</b>
<b>5</b>	<b>EVALUATION CRITERIA.....</b>	<b>8</b>
<b>6</b>	<b>SUBMISSION INSTRUCTIONS .....</b>	<b>9</b>
<b>7</b>	<b>TENDER PROCESS &amp; TIMETABLE .....</b>	<b>10</b>

## 1 INTRODUCTION

*This Section introduces Renewable Energy Assurance Ltd. and explains its work in administering the Organics Schemes and the Research Hub.*

Renewable Energy Assurance Ltd (REAL) is a wholly owned subsidiary of The Association for Renewable Energy and Clean Technology (The REA). REAL carries out a range of certification and consumer protection activities, all of which promote sustainable energy and circular resource use (organics recycling). REAL's activities fall under two headings; certification schemes and consumer codes.

Among other codes and schemes, REAL owns and administers the following quality certification schemes related to the organics recycling sector: the Compost Certification Scheme (CCS), the Biofertiliser Certification Scheme (BCS) and the Compostable Materials Certification Scheme (CMCS). The CCS and BCS enforce high quality standards for compost and biofertiliser (i.e., quality-certified anaerobic digestate), respectively. Together, these schemes provide assurance to consumers, farmers, food producers and retailers that quality-certified compost and digestate is safe for human, animal, and plant health.

In 2019, through collaboration with the CCS/BCS Technical Advisory Committee (TAC), REAL established the Research Hub. The Research Hub functions as a tool to source research funding from the composting and anaerobic digestion industries. With these funds, the Research Hub commissions projects aimed at developing the technical and regulatory aspects of certified compost and digestate production, improving testing and usage of certified compost and digestate, and reinforcing certified compost and digestate markets.

REAL wishes to appoint a contractor to develop and deliver project commissioned by the Research Hub titled '*Plastic contamination method assessment: Evaluating current mass-based method and possible alternative methods of assessment for plastics in compost and digestate*'

The appointed contractor will be required to work with the REAL-appointed Project Management Team, the Research Hub's Research Panel and REAL staff.

This document sets out the scope and parameters of the work which REAL wishes to commission and describes how contractors may tender to undertake this work for REAL.

## 2 PROJECT BACKGROUND AND SCOPE

*This Section explains project's relevance to REAL's work and the wider organics recycling industry and outlines the project's intended contributions.*

### 2.1 Project Background

There has been a long-standing concern about the level of physical contaminants in certified composts and digestates. The level of plastic contamination has been a particular focus of regulators, end users, and the public. PAS100 and PAS110 set limits for general levels of physical contaminants, particularly plastic contamination. Following their own research evidence and discussions with a key stakeholder in the market, SEPA refined the plastic contamination limits for composts and digestates in Scotland as 50% of the PAS100 limit and 8% of the PAS110 limits.

A [2016 WRAP report](#) investigating plastics in compost and digestate identified a potential problem in the sensitivity of the test methodology (% mass of plastic/mass of compost or digestate) and the efficacy of using a 2mm separation criterion. The study suggested that these issues may result in inaccurate presentation of results for plastic contamination levels currently reported for composts and digestates in the UK. This is caused by the ability of fragments of thin film to pass through the 2mm barrier. Although these often have low mass, they may have high visibility when spread to land.

To ensure the robustness of the Schemes and Standards and maintain end-user confidence in certified compost and digestate (uncompromised by the appearance of plastic contamination), future revision of the Standards (PAS100 and PAS110) could consider the addition of area-based methods for plastic film detection. Further, a growing body of research into the presence of [microplastics](#) in water and agricultural systems have begun to spark interest in the potential for analysing microplastics within compost and digestate. This project endeavours to investigate the efficacy of various methods for measuring and reporting plastic contamination in certified compost and digestate.

### 2.2 Project Scope

This project aims to investigate whether the current methods for determining physical contaminants are fit for purpose and to explore the efficacy of alternative plastic assessment methods for potential adoption and to inform future limits under PAS100 and PAS110.

To fulfil this aim, the project's key objectives are as follows:

1. To assess the robustness (sensitivity and efficacy) of the current mass-based method for assessing plastic (physical contaminants) under PAS100 and PAS110.
2. To consider whether an area-based method for quantifying film plastics is operationally feasible and robust and whether it would be feasible to implement for PAS100 and PAS110 materials.
3. To investigate the feasibility of implementing microplastic analysis for compost and digestate on a research and development basis.

### 3 SERVICES REQUIRED

*This Section describes the work which will be required of the contractor to deliver the project.*

- 3.1** The appointed contractor will develop and deliver REAL's Research Hub Project titled '*Plastic contamination method assessment: Evaluating current mass-based method and possible alternative methods of assessment for plastics in compost and digestate.*'

The appointed contractor will be responsible for fulfilling the project objectives outlined in Section 2.2 of this Tender Invitation Document. In addition to these objectives, the project should include the following key elements:

#### 3.1.1 Key Elements

- Objective 1:
  - Evaluate the current mass-based method's sensitivity and efficacy (e.g., investigate the lower limit of detection for physical contaminants) and explore any possible developments or improvements to the current method.
- Objective 2:
  - Investigate whether area-based methods for quantifying plastic film provide robust evidence for future adoption when developing Standards (PAS100 and PAS110) and setting limits.
  - Ideally<sup>1</sup>, compare mass-based and area-based methods in terms of applicability, reliability, and accuracy and/or assess how area-based methods could improve the level of detection and plastic quantification
  - Ideally<sup>2</sup>, identify any discernible relationship between the surface area and mass of PCs within a single sample set.
- Objective 3:
  - Investigate microplastic detection and analysis methods relevant to compost and digestate.

#### 3.1.2 Project Deliverables

- Regular meetings with the REAL Project Management Team to provide project updates and agree project milestones.
- A final report investigating elements outlined in Section 3.1 of this document.
- A final meeting with REAL to discuss the project in its entirety, during which the appointed contractor shall present the findings enclosed in the final report.

### 3.2 Competence requirements

REAL will appoint a contractor (an individual, organisation or consortium) with experience and/or expertise of the following:

- Knowledge of current PAS100 and PAS110 physical contaminants test methods
- Experience undertaking research and analysis.

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These elements would be useful, but their ultimate inclusion in the project may be contingent on the expense required to complete this analysis. If possible, please price these separately from the remainder of the project work in your tender submission.

## 4 TENDER REQUIREMENTS

*This Section provides instructions for preparing tenders.*

**4.1** Your tender should be submitted by email and should be limited to no more than 10 x A4 sides at minimum 10pt font (excluding appendices).

**4.2** Your tender must include the following information in the order indicated:

**I. An executive summary**

This should be no longer than one side of A4 paper, outlining the proposed work and including the total cost of the proposed work, inclusive of Value Added Tax (“VAT”) and anticipated expenses.

**II. Company/Organisation details**

Please include the following information:

- The name of the Company submitting the tender;
- The registered office name, address, VAT number (if applicable) and company or charity registration number;
- The name of the nominated contact person within the tenderer’s organisation;
- Contact details including address, telephone number and e-mail address

REAL will accept tenders from both individual companies and from consortia. Should you decide to tender as part of a consortium, you will need to identify one member of the consortium (the “Lead Contractor”) to act as the contracting party. All other consortium members will be sub-contractors to the Lead Contractor.

**III. A description of your working methods**

You will need to make clear how you intend to deliver the work and provide estimated timescales for delivery.

**IV. A description of the project team who will manage and deliver the work**

This should include a list of individuals, their respective roles within the organisation and, for the purposes of this work, their relevant skills and experience including any relevant professional qualifications.

**V. An identification of any sub-contractors to be used**

You should include a list of any sub-contractors you intend to use to deliver the work.

**VI. Evidence of a track record in undertaking work similar to that described in this document**

**VII. Breakdown costs (exclusive of VAT) including;**

- Individual day rates and number of days of each staff member involved in delivering work
- Expenses

**VIII. Identification of any conflicts of interest**

Please disclose any conflicts of interest which might arise if you were selected to undertake the work. Please also include a contingency plan for addressing any identified conflict(s) of interest, should conflict(s) arise. Where you tender as part of a consortium, all members of the consortium should be considered.

- IX. A copy of your Environmental Policy and evidence of any accredited Environmental Management System.**
- X. Written confirmation that you have the necessary permits, licences or exemptions required for the services.**
- XI. Appendices**

Tenderers should include the following documents as appendices:

- Audited or management accounts for the last 2 financial years;  
REAL reserves the right to reject bids from Contractors where the accounts show that the Contractor might be at risk of insolvency.
- A statement of any material litigation, pending or threatened, or other legal proceedings;  
REAL reserves the right to reject bids from Contractors subject to legal proceedings where in REAL's reasonable opinion such proceedings could impact upon the Contractor's ability to deliver the services required.
- Evidence of the level of professional indemnity, public liability and property damage insurance cover held.  
REAL will require minimum cover levels of:
  - £1 million professional indemnity;
  - £2 million public liability;
  - £2 million property damage.To be considered for evaluation, Contractors must have this cover in place at the time of bidding or must include (as part of the tender submission) a commitment to take out such cover in the event of being appointed.

- 4.3** Should you have any questions in relation to the type of information required by REAL, please contact the person identified in Section 6 of this Tender Invitation Document to discuss.
- 4.4** All tender submissions will be treated on a confidential basis by REAL and its advisers, subject to the provisions of the Freedom of Information Act 2000.



**5 EVALUATION CRITERIA**

*This Section specifies the criteria REAL will use to evaluate the tender submissions and appoint a contractor.*

- 5.1** REAL must be satisfied that each potential contractor has the appropriate capabilities and resources available to undertake the work to REAL’s requirements and provide the necessary services.
- 5.2** REAL will select its Research Hub contractors through a competitive process. Your tender submission should be written to address the key requirements and scope of the work and demonstrate how it meets the evaluation criteria below:

<b>Evaluation criteria</b>	<b>Weighting</b>
Cost of work	20%
Methodology proposed to deliver required services	40%
Authority of allocated personnel, their skills and technical capability	20%
Corporate environmental commitment – submission of credible environmental policy and/or environmental management system details	5%
Relevant experience	15%

## 6 SUBMISSION INSTRUCTIONS

*This Section provides instructions for submitting tenders.*

Please send one electronic copy (via email) of your tender submission to Megan Muller-Girard, Research Hub Manager at Renewable Energy Assurance Limited at **megan@realschemes.org.uk**.

Emails containing Tender submissions should clearly state the following in the subject field: 'Plastic Method Assessment – Tender Submission Document'

The deadline to submit a tender for this project is: **17<sup>th</sup> February 2023**

If you wish to ask any questions relating to this tender, please contact the Research Hub Manager in writing only.\*

*\*NOTE: All questions submitted to REAL about this Tender Invitation Document will be anonymised and uploaded to the Research Hub website as a Q&A at least one week prior to the deadline for tender submissions.*

## 7 TENDER PROCESS & TIMETABLE

*This Section explains the tender process and outlines the expected timeline.*

- 7.1 All tender submissions must remain valid for a minimum period of 90 days following the deadline for receipt of tender submissions.
- 7.2 All tender submissions will be competitively assessed against the evaluation criteria, outlined in Section 5 of this document.
- 7.3 The target timetable for this process is as follows:
- Deadline for tender submissions: **17<sup>th</sup> February 2023**
  - Deadline for questions in relation to this tender: **27<sup>th</sup> January 2023**
  - Tenderers receive written notification of REAL's decision: **March 2023**
- 7.4 All tenderers will receive written notification of REAL's decision and will have the opportunity to discuss feedback on their tender submission.
- 7.5 This information is offered in good faith for the guidance of interested parties, but no warranty or representation is given as to the accuracy or completeness of any of it. REAL and its advisers shall not be liable for any error, misstatement, or omission. No aspect of this procedure shall constitute a contract or part of a contract. Tenderers participate in the process on the strict understanding that the procedure may be altered or that REAL may not proceed for any reason. REAL reserves the right not to follow up this Tender Invitation Document in any way and in particular not to enter into any contractual arrangement with any of the tenderers. REAL does not bind itself to enter into negotiations or proceed with or accept any tender. Any decision to tender is at the sole discretion of the tenderer and REAL excludes all liability in respect of any tendering costs incurred.
- 7.6 Any contract entered into as a result of this tender process shall be in accordance with REAL's terms and conditions of contract.
- 7.7 Tenderers taking part in this process acknowledge and accept that REAL may publish details about the winning bid (such as the contract value and the name of the winning bidder) on appropriate webpages under its control.