



About the Research Hub

Background

REAL established the Research Hub in 2018 to fund research to support technical and regulatory developments related to the production, testing, and use of quality-certified compost and digestate. Research Hub-funded research is intended to contribute to the continued improvement of the Schemes (i.e., CCS and BCS) and associated Standards (i.e., BSI PAS100 and BSI PAS110, respectively).

Governance

The Research Hub is managed by REAL. To ensure that the work of the Research Hub is transparent and in line with its objectives, REAL have established the Governance Committee, Research Panel, and Project Management Team(s). These groups are responsible for different parts of the Research Hub's governance and operation:

- The Governance Committee oversees the operation of the Research Hub.
- The Research Panel decides which research projects will be funded and is comprised of independent stakeholders, including CCS/BCS Participants, Environmental Regulators, Government Representatives, and Trade Bodies.
- The Project Management Team provides management support for a specified project.

About the Hub

Scope and Objectives:

The Research Hub funds research in support of the following objectives:

- Maintain and improve the robustness of the Schemes and related Standards
- Reinforce confidence in the compost and anaerobic digestion markets; and
- Contribute to development of new markets, including identifying barriers

How it Works

How Projects are Selected

Each January, the Hub issues a Call for Proposals to source research ideas from any party who wishes to submit a proposal. In May, CCS and BCS participants are invited to provide feedback on the submitted research proposals via an online survey.

The Research Panel then meets to evaluate and shortlist the research proposals according to the Phase One Evaluation Criteria. In June, REAL's advisor further develops each shortlisted proposal. In July, the Research Panel meets for a second time to evaluate the shortlisted and further developed proposals according to the Phase Two Evaluation Criteria. Following this evaluation, the Panel recommends the project(s) to be selected for funding.

How Contractors are Appointed

A unique Project Management Team (PMT) is appointed for each newly selected research project. On most occasions, each project will undergo a competitive tender process to source potential delivery contractors. The PMT will evaluate all bids received and make recommendations. REAL will appoint a contractor considering the PMT's recommendations. Upon completion of the tender process, the PMT and REAL provide feedback to all tenderers.

Funding

Funding for the Hub is generated through the Research Fee paid annually by CCS and BCS participants. The Research Fee is calculated on a case-by-case basis according to the annual input tonnage (tpa) of each plant. The Research Fees are ring-fenced. The effective amount for future projects at the end of 2022 is approximately £269,000.

More information about the Hub's operations, objectives and funding can be found at www.realresearchhub.org.uk/about

Research Projects

Two new projects were selected for funding in 2022:

How the benefits of applying compost and digestate to soils can be accounted for under the Greenhouse Gas (GHG) Protocol

The project aims to evaluate the carbon accounting benefits associated with producing and applying compost and digestate to land. Further, the project endeavours to develop guidance to account for these benefits under the Greenhouse Gas Protocol.

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

1. To demonstrate to compost producers and AD operators the benefits of engaging with the GHG Protocol as a key step towards understanding their commercial activities within the global imperative to minimise climate-warming emissions.
2. To provide guidance to operators on how to account for the production and application of compost and digestate under the GHG Protocol.

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

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 assess the robustness and sensitivity of the current mass-based method for assessing plastic (physical contaminants) under PAS100 and PAS110.
3. To investigate the feasibility of implementing microplastic analysis for compost and digestate on a research and development basis.

Completed and Current Project Updates

To develop a Research Library for the Organics Recycling industry

Contractor NNFCC and subcontractor Vital continued maintaining the virtual Organics Recycling Research Library throughout 2022. The Research Library collates research conducted across the composting and anaerobic digestion industries and highlights 'research gaps' – areas where research is currently limited or absent. The Research Library can be found at www.realresearchlibrary.org.uk

To develop a 'data pack' on the properties, characteristics, and content of digestate that will provide context for the development of new uses of outputs from Anaerobic Digesters

Upon completion of the project in December 2021, the Solidsense Ltd Consortium produced two reports: a standalone Digestate Data Pack and an associated Digestate Valorisation Report.

In 2022, the Digestate Data Pack and Valorisation report were requested for use by key stakeholders across the sector including representatives from government, industry, and trade bodies.

To request access to the Research Hub's projects, including the Research Library and Digestate Data Pack and Valorisation Report, please email info@realschemes.org.uk

Evaluation of the potential for the improvement of the Residual Biogas Potential test and investigation of alternative test procedures for PAS110 biofertilisers

In 2021, REAL selected a project to explore improvements to the Residual Biogas Potential (RBP) test, the only digestate stability testing regime currently recognised under PAS110. In February 2022, REAL appointed Aqua Enviro to conduct the project. Work began on the project in May 2022 and is expected to be completed in June 2023.

Plant Response Test Failures: Investigation of contaminants and phytotoxins in 'End of Waste' composting feedstocks and finished composts

In September 2021 the Research Panel commissioned a project to explore improvements and alternatives to the Plant Response Test (PRT), a test method specified in PAS100.

After the project received no bids in 2021, feedback was collected in Spring 2022 and put back out to tender in October 2022. The project again received no bids and currently under internal review.

To learn more about the Research Hub's work, please visit our website at www.realresearchlibrary.org.uk. Please send any queries to info@realschemes.org.uk



In 2019 REAL achieved certification of its Quality Management System to the ISO 9001:2015 standard.

The ISO 9001:2015 standard is based on a number of quality management principles including a strong customer focus, the motivation and implication of top management, the process approach and continual improvement. Using ISO 9001 helps ensure that customers get consistent, good-quality products and services, which in turn brings many business benefits.

The seven quality management principles are:

- customer focus
- leadership
- engagement of people
- process approach
- improvement
- evidence-based decision making
- relationship management.



Compost Certification Scheme (CCS) is part of Renewable Energy Assurance Limited.

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