

## SBRI Delivering a Sustainable Utilisation of Livestock Slurry (SULS) solution for Northern Ireland



- SBRI
- **Opening date:** 9 January 2023
- **Closing date:** 15:00 on 31 January 2023

**Total Fund Available:** £500k

The Department of Agriculture, Environment and Rural Affairs (DAERA) is seeking practical and self-sufficient models applicable to Northern Ireland (NI), which must address the core aim of nutrient separation / processing of livestock slurry (particularly from cattle and pigs) to reduce surplus phosphorus within NI agriculture and ensure efficient recycling of organic nutrients.

Potential issues which may arise as part of the processing of slurry, such as fugitive ammonia and Greenhouse Gas (GHG) release and biosecurity risks must also be addressed.

A successful solution for DAERA will provide a practical and economically viable solution where livestock slurry could be separated with minimal nitrogen and methane losses, ideally to produce feedstock, in a biosecure manner, for energy production. Nutrients remaining post energy production should also be suitably processed to provide a replacement for artificial fertiliser for use in NI or for export.

Applications will be considered for proposals that do not involve renewable energy production, provided they demonstrate an alternative sustainable use of slurry and delivery on the nutrient management aim of reducing surplus phosphorus in NI agriculture.

The desired outcome is primarily to remove excess phosphorus from the NI agricultural nutrient cycle, while also helping NI to become less reliant on increasingly expensive fossil fuel and artificial fertiliser imports with associated high GHGs. Opportunities for a circular bioeconomy may entail the export of bio fertilisers / nutrients / fibres / materials for their reuse in GB / Ireland and beyond.

### **Proposed solutions are expected to provide:**

- A practical solution to address the core aim of nutrient processing of cattle and/or pig slurry to reduce surplus phosphorus within NI agriculture, ensure efficient recycling of organic nutrients and produce renewable energy.
- A mechanism whereby farmers will be willing to provide a reliable long-term supply of slurry for processing;
- A solution to address potential issues which may arise as part of the processing of slurry, such as fugitive ammonia, GHG release and biosecurity risks;
- Produce a low carbon or carbon neutral fuel as part of the process;
- A practical solution to manage any post energy production nutrient rich material whereby it is separated into main constituents, particularly nitrogen and phosphorus, for use as artificial fertiliser replacement either in NI or for export; and
- An environmentally and economically sustainable solution.

### **Funding**

This SBRI competition is funded by the Department for Economy. DAERA are the contracting body in this procurement. The competition process is being managed on behalf of DAERA by the Strategic Investment Board (SIB).

This competition has a total budget of £500,000 ex VAT for SBRI Phase 1 work. It is anticipated that at least the **5 highest scoring bidders will be selected**; each of the successful bidders will receive an amount in accordance with their bid, but subject to a maximum amount per bidder of **£100,000** (exclusive of VAT, if chargeable).

Phase 1 is intended to demonstrate the technical feasibility of a proposed concept and its viability as a solution for DAERA. DAERA reserves the right, at its sole discretion, to extend from Phase 1 with successful bidders as part of this pre-commercial procurement.

### **Information Event**

🕒 Tuesday, 17 January 2023 from 10:00 to 12:00 (GMT)

