Expression of Interest

Introduction

This is an exciting opportunity to help drive systemic change to secure the restoration and ongoing maintenance of nature-rich, lower carbon green infrastructure.

Plantlife is taking a systems level approach to understanding and influencing the current management of the 'soft estate' of our transport networks and wider green space land. We envisage more environmentally sustainable, bio-circular models for the vegetation management of this soft estate and green space, and opportunities for vegetation cuttings or 'waste' to generate revenue within green energy and green product markets. Cost savings, or profit raised with this management system could offset maintenance costs and enable the delivery of further benefits for biodiversity and climate.

Plantlife is seeking a contractor to produce a report that:

- Investigates, evaluates and recommends changes to the statutory and regulatory frameworks that controls the process of green waste management generated from green infrastructure (soft estate) and green space management;
- details other logistical and strategic barriers to collecting, transporting and using green waste in this setting;
- assesses the current opportunities and status of productive green waste use.

We're seeking organisations or individuals to express an interest in tendering for this work.

Project context

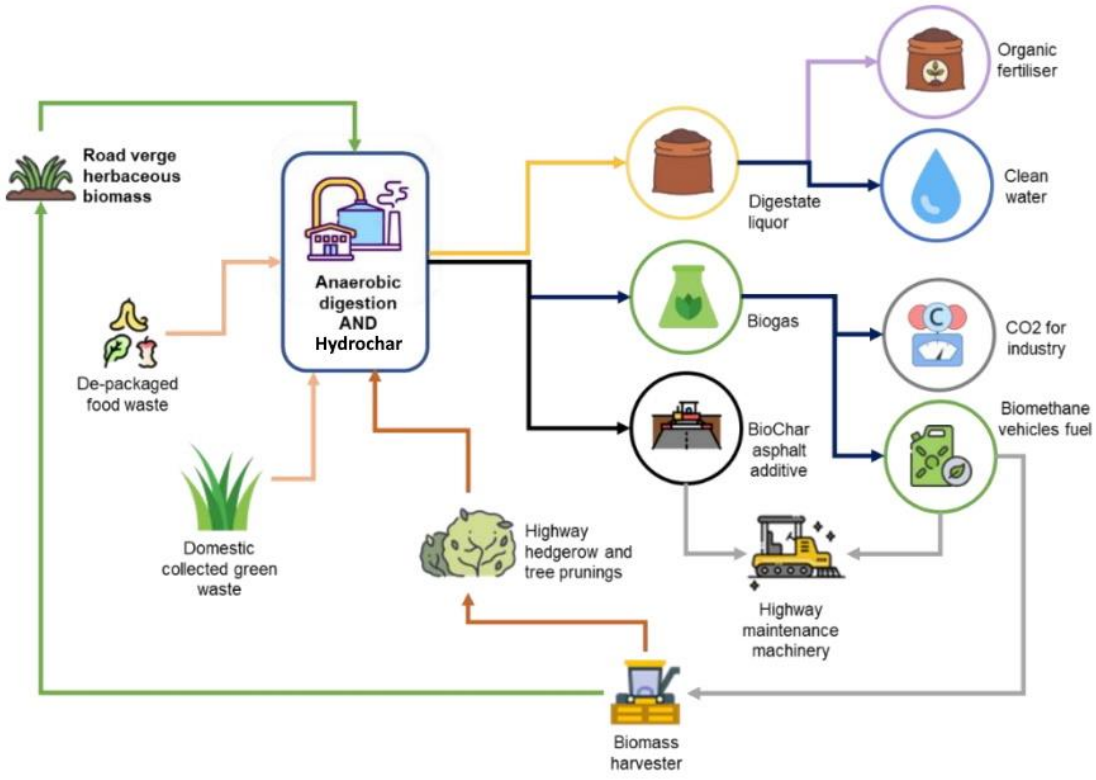
Plantlife sees the soft estate associated with the transport network, and wider green space land, as a huge potential asset for nature's recovery. The reason for this is twofold due to:

1) the scale of sanctuary it could offer wildlife if it were managed to support better habitat, and;

2) the vital landscape connectivity it would provide for wildlife if it could be maintained as a more ecologically functional network of green infrastructure.

Generally, the biodiversity of the grass and wildflowers of our road verges has been found to benefit most from two cuts per year with collection of the cuttings. Road verges designated for nature conservation deserve optimal management as much as safety considerations allow. However, an approach that enables biomass harvesting twice per year could offer a largely self-funding way to deliver biodiversity net gain, as well as save carbon emissions from excessive mowing, if cuttings could be valorised. A current project (2023-2026) in West Sussex and South Gloucestershire funded by the Department for Transport's LiveLabs2 Programme (£3.9M), called 'Greenprint', is investigating the feasibility of roadside biomass harvesting, in conjunction with food waste and woody waste. It's considering its use in anaerobic digestion (AD) and hydrothermal carbonisation (HTC) to produce biogas, hydrochar, and digestate for spreading fertility to land. It will also investigate the ability for municipal AD facilities to sort roadside litter from grass, as well as other aspects of the process to understand the potential uses of roadside biomass.

Conceptualised mass flow envisaged for the Greenprint project:



Current waste regulations do not appear compatible with the use of roadside biomass in AD. Greenprint has to seek waste exemptions to process roadside cuttings through either on-farm or municipal facilities. Roadside cuttings appear to meet the legal definition of waste: "an unwanted by-product of a process": i.e. the maintenance of road verges for public safety and amenity (gov.uk legal definition of waste guidance). The European Waste Catalogue code 20-02-01: Municipal Garden and Park Biodegradable Waste appears to be the closest description. The only apparent legal difference is that

this roadside land does not possess a Rural Payments Agency registration number, as it is not a crop, and therefore the cutting and collecting of vegetation is not considered a harvest.

About us

Plantlife is the global charity working to enhance, protect, restore and celebrate the wild plants and fungi that are essential to all life on earth. With two in five plant species at risk of extinction, biodiversity loss is now the fastest it's ever been – which means our work has never been more vital. We champion and accelerate conservation action, working at the heart of a global network of individuals and organisations, to influence and inspire landowners and land managers, public and private bodies, governments and local communities. As time begins to run out, we are using our position as the global voice for wild plants and fungi to bring lasting and positive change to our natural world – for everyone's sake

Specification

We are seeking a contractor who can write an evidence summary and analysis report, with evidence drawn from England, Scotland, and Wales, though different policy context should be reflected where relevant. This report will be used by Plantlife internally to develop our advocacy strategy, however we may wish to share or make public parts of the report, which would be credited appropriately. Length of report to be discussed.

The report should investigate and evaluate the statutory and regulatory frameworks across Great Britain, and other relevant logistical and strategic barriers, that pertain to waste management. We want to understand the opportunities for collecting, transporting and using the 'soft estate' herbaceous and woody vegetation, as well as the disposal of its derivatives. For example, using the green waste to generate bio-energy, bio-fuels, and bio-based building materials i.e. spreading digestate as a source of fertility on food-producing land; development of peat-replacement growing media; and utilisation of hydrochar / biochar in a range of applications including bio-based building materials such as bio-asphalt.

The report should cover:

a) **Investigate, evaluate and recommend changes to the statutory and regulatory frameworks that controls the process of green waste management generated from green infrastructure (soft estate) and green space management, for example (non-exhaustive):**
   - The potential to revise the framework for waste classification, regulation, permitting, compliance, enforcement of 'soft estate' waste, for example:
     - roadside biomass is included under Article 2 of the Waste Directive's "out of scope definition" which would allow it to be utilised in all the Standard Rules (SR) permits commonly used to permit rural AD plants

    - working with the Definition of Waste Panel could lead to the inclusion of verge biomass under the 20-02-01 code and obtain agreement that this code could also be included in the waste lists of all SR permits commonly used to permit rural AD plants.
  - Constraints associated with spreading to land and discharging process water.
  - Route to legal compliance with waste management regulations for roadside biomass, including (non-exhaustive):
    - Relevant aspects of the European Waste Catalogue, Standard Rules permits, other waste management standards (e.g. PAS100/110), policy and practice;
    - Potential waste management protocols to mitigate risk of exceedance of toxicity limits
- An outline of legal/industry methodologies of sampling and monitoring for contaminants to ensure compliance with standards

b) Logistical and strategic barriers to collecting, transporting and using green waste in this setting, including (non-exhaustive):

- Micro- versus large scale waste management
- A consideration of inputs/outputs for AD, composting, HTC, bio-asphalt production (among other potential products from hydrochar/biochar products)
- How to address real and perceived risks concerning roadside cuttings associated with:
  - Litter (metals, glass, paper-based, plastics)
  - Micro-plastics
  - Polycyclic Aromatic Hydrocarbons (PAHs)
  - Potentially Toxic Elements (PTEs)
  - Persistent Organic Pollutants (POPs)

c) An assessment of the current opportunities and status of productive green waste use, including (non-exhaustive):

  - the key decision-makers within the waste system, and for which aspects do they have jurisdiction
  - opportunities to influence relevant waste policy/law, including whether there are existing or future opportunities to combine food waste and vegetation streams;
  - Municipal and on-farm opportunities to utilise verge grass cuttings

Out of scope:

- Full business cases
- Yields and plant operations beyond considerations pertinent to emissions from organic material harvested and contaminants management
- Carbon foot printing

- Engineering of biomass harvesting and waste processing
- Ecological implications

Sources:
Plantlife has resources available for use, including project reports from feasibility desk studies and roadside biomass harvesting trials; real world case studies and relevant scientific literature.

Contract management, timeline and budget

Contract management

This project is led and managed by Mark Schofield, Road Verges Advisor at Plantlife. Plantlife will maintain frequent contact with the contractor to facilitate and monitor the contract delivery.

Timeline

We are inviting expressions of interest by **Monday 30 October 2023**

Budget

To be discussed as part of the EOI process.

Submission and supporting documentation

The deadline for an expression of interest is 9.00am on **Monday 30 October**. Your EOI should be returned to the following email address: mark.schofield@plantlife.org.uk.

If you are intending to submit an EOI and would like to discuss the project or receive any responses to questions and clarifications, please email mark.schofield@plantlife.org.uk. We will confirm receipt of EOIs within 2 working days. Plantlife is interested in discussing your EOI to understand what may be feasible, particularly if there are questions or concerns about specific aspects of the report specification.

Your EOI should be in letter format with a maximum of 2 pages, providing detail on the following elements:

- Your familiarity with the subject, suitability to conduct this work, including experience of reviewing evidence associated with waste legislation
- A brief overview of how you would approach this report
- CV(s) of personnel who would undertake this work

We will be in touch with to arrange a meeting to discuss your EOI within a week of the closing deadline,