

# What is Greenprint?

The Greenprint project is exploring new ways for local councils to manage green spaces and roadside verges. The goal is to make these areas more valuable and beneficial for the environment, community, and economy, while also reducing carbon emissions.

South Gloucestershire Council and West Sussex County Council, along with other partner organisations, are working together to collect grass cuttings from selected green spaces and grass verges. These cuttings will be turned into biofuels, used to generate heat and power, and added to asphalt to make road construction more cost effective and eco-friendly. We are testing new ways of managing highway verges to determine if these changes should be implemented long-term.

Greenprint is part of ADEPT Live Labs 2: Decarbonising Local Roads in the UK, a three-year, UK-wide £30 million programme funded by the Department for Transport that aims to decarbonise the local highway network.

## What has the project achieved in its second year?

- ✓ **Carbon measurement** – we developed better methods to measure carbon emissions for all test scenarios we undertook, therefore building robust data sets for comparison. It includes waste collection, transportation, biochar (a type of charcoal) production through pyrolysis, and anaerobic digestion. We also published baseline data.
- ✓ **Green space management** – we successfully expanded the cut and collect system of grass management into more areas, improving logistics and engaging with our local communities. Cutting over 85 hectares of grass, equivalent to just over 119 football pitches.
- ✓ **Biomass innovations** – we conducted successful trials to produce biochar from our collected grass cuttings. Biochar can be used to improve soil and reduce carbon emissions.
- ✓ **Process refinement** – we ruled out hydrothermal carbonisation (HTC) as a way of processing the collected grass clippings because of the sensitivity of the process and poor quality of the biochar produced.
- ✓ **Economic feasibility** – we have compared the cost of cut and leave and cut and collect green space management strategies, finding ways to make them more cost-effective.
- ✓ **Environmental impact** – we established baseline data for biodiversity, identifying 149 plant species on open, grassy verges, and conducted soil carbon testing to measure environmental benefits.
- ✓ **Long-term planning** – working together, the project team continued the development of the Greenprint model showing how the changes in verge management might be applied in other local authorities.



## Project challenges

Greenprint faced several challenges, including delays in regulatory approvals for co-mingling cut grass with food waste for anaerobic digestion. These challenges affected the timeline for some activities, but the team is working to overcome them.

## Innovations

Innovation is at the heart of our Greenprint project. Key innovations include refining carbon measurement methods, expanding biochar production, and using data to make better decisions. The project also tested new equipment and worked with manufacturers to improve machinery.

## What's next for Greenprint?

In Year 3, the focus will be on consolidating findings, refining methods, and see the project team testing the full Greenprint system as something that could be integrated by local authorities as business as usual for managing green spaces and verges.



We will continue to work with the Town and Parish Councils involved in the project and the local communities.

Despite the challenges, Year 2 of the Greenprint project showed significant progress and a strong commitment to sustainable innovation. We will continue to work towards achieving the project's goals.



## Where can I find out more about the project?

To find out more about the Greenprint project and what's happening in your local area visit:

[www.westsussex.gov.uk/greenprint](http://www.westsussex.gov.uk/greenprint)

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To find out more on the Live Labs 2 programme, visit:

[www.adeptnet.org.uk/livelabs2](http://www.adeptnet.org.uk/livelabs2)



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