What is Greenprint?

Our project 'Greenprint' is investigating a sustainable and replicable model for local authorities, to transform the role and value of green spaces and highway verges – to enable highways, waste and other service functions to work together to deliver environmental, social value, and financial benefits while reducing carbon emissions.

South Gloucestershire Council and West Sussex County Council are working together collecting grass cuttings that will be processed to produce biofuels, generate heat and power, and provide asphalt additives that may further reduce the cost and emissions from highways operations.

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 first year?

- In the first year, officers from South Gloucestershire and West Sussex Councils, along with project partners and contractors, have made a tremendous start ensuring the Greenprint experiment has a solid foundation for the three-year project:
- Carried out a complex assessment of our carbon baseline, to understand current emissions levels, to track the impacts of the project interventions.
- Carried out 'cut and collect' in selected areas and engaged with several town and parish councils to identify additional sites for year 2 trials.
- Around 85 hectares of grass cut and collected
 equivalent to 140 football pitches.
- Over £400,000 worth of specialist equipment procured to enable trials of 'cut and collect' activity to be fully tested and rolled out from 2024.

- Began investigating converting cut grass into usable resources via anaerobic digestion.
- Research started to allow tracking of the biodiversity impacts at selected sample sites.
- Established soil carbon sampling and site protection protocols – 24 soil carbon core samples taken and analysed.
- 20 samples of grass and soil taken and analysed for routine waste characterisation and persistent organic pollutants.
- Six project partner organisations engaged

 including two universities and specialist consultants.
- Participated in Women in Leadership programmes and work-based learning opportunities for apprentices at specialist industry events.





















What's next for Greenprint?

Over the coming year, we will continue to scale up the work we are doing, refine our strategies for environmental conservation and test our Greenprint for decarbonising the highways network.

Key areas of focus will include:

- Talking to, and working with, communities about Greenprint and the work we are doing in their local area.
- Carrying out 'cut and collect' operations on our designated sites throughout the cutting season.
- Biodiversity sampling across sites in South Gloucestershire and West Sussex.
- Testing newly purchased equipment in operational trials, gathering information that will help to inform decisions around potential changes to verge management.
- Recording and monitoring data around carbon emissions and project costs.



- Biomass processing trails through anaerobic digestion, pyrolysis and hydrothermal carbonisation.
- Working towards producing commercial scale quantities of hydrochar and biochar, plus bitumen and aggregate applications.
- Developing connections with industry and other labs to enhance learning through knowledge sharing.









The expertise and combined specialist knowledge within the project team has shown how great teamwork and collaboration can be the key to successful delivery.

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.southglos.gov.uk/greenprint
- www.westsussex.gov.uk/greenprint

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

www.adeptnet.org.uk/livelabs2

















