

What is Greenprint?

Greenprint is an innovation project which is investigating potential new ways grass cuttings could be used, including producing biogas, biomethane fuel for vehicles and an additive for asphalt road surfacing material called biochar.

It is hoped the Greenprint project will reduce the council's carbon footprint, encourage wildflowers, help insects to thrive and allow the soil to store more carbon.

We are working in partnership with West Sussex County Council on the project.

What is Live Labs 2?

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

Visit the ADEPT Live Labs 2 website for more information. Go to <https://www.adeptnet.org.uk/livelabs2>.

How much is this project costing the council?

Greenprint has been awarded £4 million by ADEPT Live Labs 2.

Where is the funding coming from?

The funding is from the Department for Transport and does not impact on funds available in South Gloucestershire for other council services.

Why not spend the money on potholes?

The financial restrictions on public spending mean that capital funding from Government (this funding opportunity) cannot be used for funding bus services, filling potholes or other council areas such as social services, education or libraries.

Transport is responsible for over a quarter of carbon dioxide emissions in the UK. Innovation in transport decarbonisation has focused primarily on the tailpipe through promoting modal shift, behavioural change and technological advancement. Much more focus needs to be dedicated to decarbonising road construction and maintenance. Approximately £2 billion is spent every year on maintaining our local highway assets with additional spending on building new local infrastructure assets - all of which have a significant carbon impact. Live Labs 2 will address embedded and hidden carbon from specification and procurement, through construction, delivery and operation to decommissioning and reinstatement.

How will the project drive innovation?

Live Labs 2 has been designed to stimulate innovation amongst local government, commercial and academic partners, suppliers and specialists. Innovation can be risky for local highway authorities, which is why the DfT have agreed to fund the programme within the parameters set by ADEPT, ensuring robust monitoring of the outcomes.

How long will the project last?

The project will last three years, (2023-2026), followed by a further five years of monitoring of the environmental benefits, impact, and costs.

How will the project work?

We will use new machinery to cut and collect grass from highway verges and other green spaces. The grass will be mixed with the council's food waste and taken to an energy-from-waste plant where the mixture will be subject to a process called anaerobic digestion.

Reducing the frequency of grass cuts is also a key element of the trial as this encourages greater biodiversity and increases the levels of carbon stored in the soil.

Where are you doing this?

During 2023 we carried out a pilot in selected areas of Yate.

Working with Yate Town Council we identified plots of grass that could be cut less often, and the grass removed.

From spring 2024 we are rolling the project out to selected areas of Bradley Stoke, Kingswood, Patchway, Staple Hill and Mangotsfield, Stoke Gifford and Thornbury.

What about other places?

We hope to be able to roll this new way of managing our grass areas out to other towns and villages, subject to how the trial progresses. Before we do this, we would engage with town and parish councils.

Will I notice a difference?

Because we are cutting the grass less, the grass will grow more between cuts. We are also removing the grass after we've cut it. We will also be removing the clippings.

Why are you cutting the grass less often?

We are moving to a different way of managing some grass areas to reduce our carbon footprint.

Reducing the frequency of grass cuts encourages greater biodiversity and increases the levels of carbon stored in the soil.

Allowing the grass to grow longer between cuts means when we do cut, we will have more to send to the energy-from-waste plant for the production of biofuel.

How often will you be cutting the grass?

Areas of grass are usually cut eight to 10 times a year. Under this new way of managing our grass areas the number of cuts will be reduced to between four to five cuts a year. Some areas, including a few specially selected sample plots, will be cut just twice a year to determine the effects on carbon and biodiversity levels.

Why are you removing the grass?

Collecting up the grass clippings after each cut will slowly reduce soil fertility. As the grass is weakened the wildflowers will have more of a chance to thrive increasing biodiversity.

Changes to plants and soil will take several years. Studies have shown that improvements continue year on year; and a great meadow can take 100 years to form. Many wildflowers are now very rare. Insects are under threat. Soil carbon is important. Our changes will help the environment.

Where will you be taking the grass?

The grass will be mixed with household food waste at a local Recycling Centre and then transported to the Geneco energy-from-waste plant at Avonmouth to produce biofuel.

Is this just to save money?

This new way of managing our grass areas is about finding new and innovative ways to reduce our carbon footprint and is part of our Climate and Nature Emergency action plan. The objectives of the project are to:

- Achieve net zero
- Ensure an integrated 'ecosystem approach', knowledge sharing and scalability
- Deliver financial savings
- Collaborate across the sector
- Ensure customer satisfaction
- Increase biodiversity

Won't this use more petrol / diesel?

We believe this scheme will save energy. We are committed to phasing out fossil fuels and when electric mowers and lorries are available, we will swap to these. We already use some small electric battery mowers and trimmers. We already have an electric pool car fleet. Fuel usage will be monitored during the project and compared with existing consumption to determine any savings made.

Will you plant new wildflowers?

We will monitor this but, in many cases, we expect the wildflowers to arrive naturally or already be there. We are working closely with project partners Plantlife International and learning from their experiences and work with other authorities in this area. Biodiversity sampling on selected verges is due to begin in July and on-going monitoring of these sites will take place to determine the effects on the vegetation.

How will you know whether the project has been a success?

To help assess whether the project has been successful, the impacts will be measured within the following categories:

- Carbon
- Sector Impact
- Behavioural Change
- Customer Satisfaction
- Social Value
- Cost
- Biodiversity

Could this new trial become permanent?

The trial will last three years, and this will be followed by a further five years of monitoring of the environmental benefits, impact, and costs. This information, as well as feedback from the community, will be used to decide whether to make the changes permanent. No date has been set for this decision.

Will you be cutting the existing roadside nature reserves or existing wildflower meadows more often?

No, these will stay with a late summer cut.

How can I provide feedback?

If you have any questions or comments, you can email the team at climate.emergency@southglos.gov.uk or call 01454 868000.

Where can I get more information?

People wanting to know more can go online to www.southglos.gov.uk/greenprint