

Farm Carbon Calculator Guide

Carbon Audits in Scotland

The Calculator works the same in Scotland – but why you might use it, and what you can do with your report is different. We've brought as much of the guidance you need together in one place so that farmers, growers and crofters in Scotland feel confident to get started.



Read on to find out how to use the Farm Carbon Calculator to estimate your farm's carbon footprint. You will be able to complete a carbon footprint for free yourself in around 1 to 3 hours, depending on the complexity of your farm – but you don't have to do it all at once, and you can get help. Our [resources](#) page and website contain lots of guides and information – and our friendly team are here to help too.

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Carbon footprints and carbon audits

There are around 51,000 farms in Scotland, and agriculture makes up almost 80% of the country ([source](#)). Not all farms will want, or need a carbon audit, but we are rising to the challenge of ensuring as many as possible can get one for free, or from a farm consultant using The Farm Carbon Calculator.

The Calculator is in use across the UK to create carbon footprints of farms in the different nations and regions. In Scotland the receipt of future payments from the Scottish Government are dependent partly on the requirement that farms generate what they call a Carbon Audit - or what we understand as your farm's carbon footprint. You can use several tools to complete this task - provided they meet criteria set out in the guidance and are compliant with PAS2050:

1. **The Farm Carbon Calculator (this guide)**
2. Agrecalc
3. Cool Farm Tool
4. Solagro (JRC) Carbon Calculator

Useful to note at this stage, **if you think you already have a carbon footprint** it is likely that this will be accepted by the SGRPID - the Scottish Government Rural Payments & Inspections Directorate. These might have been completed on your farm or croft as part of a UK supply chain contract (via the dairy, someone you supply, or supermarket agreements), by the Farm Advisory Service, as part of the Farm Business Survey, or from the Soil Association Exchange. **Ask them for a copy** - it's your farm data after all and you will need this in case of inspection later.

We think there are many good reasons why you might want to do a carbon footprint but lets look first at what the benefits are as set out in the Whole Farm Plan.

What is the Whole Farm Plan?

Carbon Audits are part of Whole Farm Plan (WFP) guidance.

Most farmers in Scotland are, by now, familiar with the WFP. As the name suggests it is designed to encourage a comprehensive view of your farm or croft which should allow you to assess current performance, identify growth opportunities, and align practices with Scotland's climate and nature goals - and this is where The Farm Carbon Calculator can help.

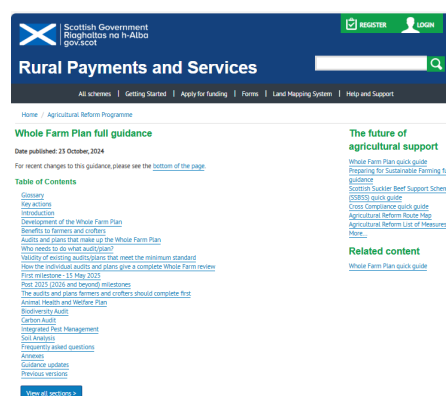
Looking towards 15 May 2028, farmers seeking to claim Basic Payment Scheme payments will be required to implement the following key activities and plans (where applicable):

1. Animal Health and Welfare Plan – reviewed annually
2. Biodiversity Audit – reviewed every 5 years
- 3. Carbon Audit – reviewed every 5 years**
4. Integrated Pest Management Plan – reviewed annually
5. Soil Sampling of Region 1 land – every sampled field reviewed once every 5 years

By **15 May 2025** all farms and crofts would need to have completed 2 out of the 5 audits to remain eligible for Basic Payments.

As of March 2025 we understand that the audits required for 2026 (presumed to be required by 15 May 2026) will be made known in summer 2025 and announced as part of the [Agricultural Reform Programme route map](#) to give you time to prepare. We will revise this guide as more information is made available.

What is clear so far, is that by 2028 at the latest, all businesses will need to have all the plans and audits which apply to their business in place. Carbon audits will be required on all farms and crofts at this point, so there is a good case to tackle this first – especially since carbon audits completed for the year 2024–2025 would remain valid in 2028. We are also working to ensure your carbon audit is one of the easier audits to complete.



Check the eligibility criteria in the guidance carefully to ensure you only complete audits which are required for you, and bear in mind the guidance can change. [Read more](#)

There is lots here to take in, especially if you have not undertaken any of the above activities yet. We are here to help.

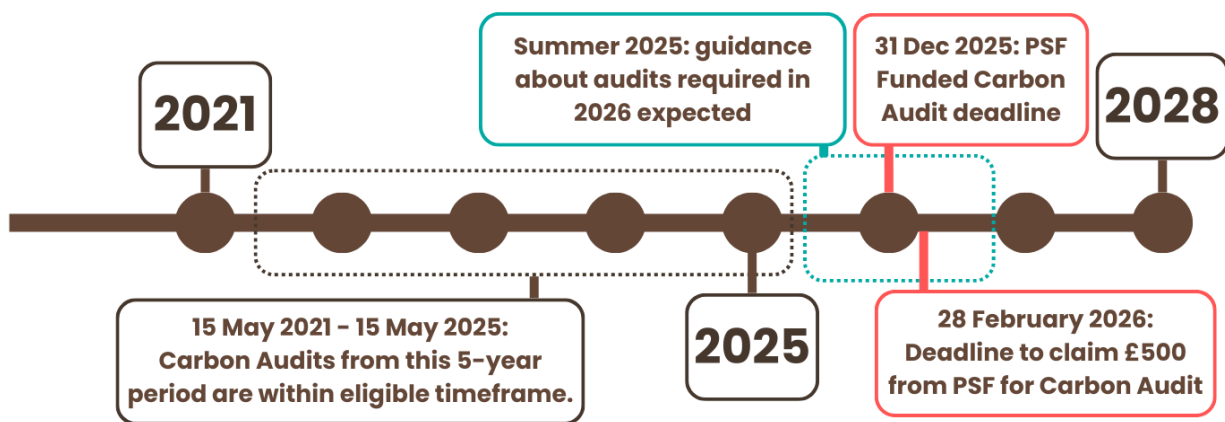
Useful Whole Farm Plan links

Whole Farm Plan guidance can change, or be amended in the annexes and ‘guidance updates’. We recommend you also read and become familiar with the available guidance at the following links:

- [Whole Farm Plan full guidance](#) – start here, click ‘Carbon Audits’ to read more

- [Annex L: Carbon Audits including seasonal land](#) - more specific guidance about what areas to include in your audit. Follow this note as it may differ from information you read within our Calculator guidance elsewhere.
- [Whole Farm Plan - Frequently Asked Questions](#) - this regularly updated document is a great source for more detailed information.

Useful Dates



The benefits of a carbon footprint

If you have read this far, it is likely that you already want to get to grips with a carbon footprint on your farm. However, we understand it can be frustrating to spend more time at the computer. Here are the benefits we have witnessed with farmers over the past 15 years -

We fundamentally believe you stand to gain from completing a carbon footprint using The Farm Carbon Calculator.

You will start to benefit as soon as you get started with our tool. People use the Calculator for all sorts of reasons:

- **Boost your interest** in carbon - people want to understand greenhouse gas (GHG) emissions and how they might be reduced. Combining 10 hectares once for example produces emissions of: 0.52 tCO₂e, and this kind of information is readily available to you whilst you work on your report
- **Gain a unique view of your farm** - often a fresh look at any business is a valuable exercise but you can also potentially make even more informed decisions

- **Create a baseline now for the future** – it is likely that the earlier you footprint, the better prepared you will be for any future changes to guidance or otherwise
- **Be part of a positive narrative** – more and more people are getting involved, and you can too. We think agriculture is ahead of the curve here.
- **Improve your business resilience** – you may pinpoint cost-saving opportunities through resource efficiency
- **Someone asked you to** – for example Meeting Carbon Audit standards as we have set out above in the Whole Farm Plan.

Funding and support available

Find a leading free tool to help

We know navigating these requirements can be challenging, but that's where our team steps in. [Our tool](#) is free and we're here to support farmers and crofters with dedicated support whilst you are completing your report. You can therefore get started with the tool yourself – and take control of this part of the process.

Who else can help me?

You will receive great advice from the [Farm Advisory Service](#) on their website, via email advice@fas.scot or telephone 0300 323 0161 to support your journey.

But you may also want assistance with the carbon audit particularly if your farm is complex, you don't have time, or you just want someone to take care of it for you.

There are a number of farm advisors we also support in Scotland who can help guide you through your footprint, or offer you recommendations based on your carbon audit. Check with us, or ask that your advisor uses The Farm Carbon Calculator and check their fees and the total cost to you. Email calculator@farmcarbontoolkit.org.uk to check.

If they are not sure about what tool might work best, put them in touch with us so we can offer them support. We have a [range of plans](#) available for farm consultants to use our software and give you great footprints at a low cost.

In order to receive funding for support it is usually a requirement that the advisors you contract should be Farm Business Advisory Service Scotland (FBAASS) accredited – so why not search the list available on the LANTRA website to find one near you: [see list](#).

Receive funding for your Carbon Audit – Preparing for Sustainable Farming

We are pleased to see that **funding is again available** to help you under the Preparing for Sustainable Farming (PSF) programme as of February 2025. We had thought that funding was to close at this point to new applicants.

Funding in this programme is expected to close in February 2026 and you will be able to claim for footprints completed in the 2025 calendar year. If you can claim, don't delay in doing so. [Read more](#)

Check carefully the [eligibility criteria](#) for this funding which we have simplified slightly here:

- A new carbon audit can be funded every 3 years – which sits within the 5 years required for the whole farm plan
- If you have a carbon audit but it is not of the required standard, or your farm has changed materially you should be able to make a new claim
- Carbon audits can be claimed for that were completed in the 2025 calendar year. With claims being made by February 2026
- When you use the Farm Carbon Calculator – either yourself, or you have a consultant prepare your audit – this should be reviewed by an FBAASS advisor and they should give you recommendations to accompany your report that will help you reduce emissions.
- If other funding becomes available you should not double claim.

Getting started

Your Carbon Audit doesn't have to be overwhelming. Use this checklist to help guide your decisions prior to getting started.

- Get familiar with the Whole Farm Plan** > read guidance
- Check which audits are required, and by what dates** > check up to date guidance. Carbon Audits are for all farms, but there may be others you would like to tackle first.
- Check if you already have a valid Carbon Audit** > if yes, you can stop here.
- See if you can receive funding** > check eligibility
- Decide if you want to complete the Carbon Audit yourself, or pay for help** > why not create an account and login to check. You may be able to receive funded and paid for assistance either way.
- Complete the Carbon Audit**
 - a. Complete your own Carbon Audit** > the rest of this guide will help
 - > you can still send this to an advisor for recommendations

b. Find an advisor who can help > Contact us or use [LANTRA's list](#).

- > check they use The Farm Carbon Calculator
- > check the cost to you.

- Keep a copy of your Carbon Audit on file**, or in our system. Should SGRPID inspect your audits you may need this to hand.
- Ask, what next?** > completing your Carbon Audit frees you up to look at other audits, but also may allow you to undertake funded soil analysis.

Soil Analysis is a requirement on Region 1 farmland, and should include carbon. These results can be inputted into your report to make your footprint even more accurate. Read the WFP guidance on [Soil Analysis](#), the [PSF guidance](#) around funding, and our very own [Monitoring Soil Carbon guide](#) too.

General suggestions

- Most guidance suggests you should use the same carbon footprinting tool over time for consistent tracking. We'd agree – though don't forget you can replicate, or complete a previous year in any calculator. Talk to us if you need help with this.
- Whichever tool you use, keep a good record of changes made based on your report.
- At the very least, keep a copy of your report for your records, as it is your hard work, and your data. Your Farm Carbon Calculator dashboard is a great place to keep your reports secure over time.
- Once you have a carbon audit look for or ask an advisor for actionable recommendations. You might like to start on our [Farm Carbon Toolkit](#) – the original place for great guidance and case studies – and where we began!



Any questions?

We're here to help every step of the way. Contact Michael Brown
Customer Service Officer – calculator@farmcarbontoolkit.org.uk.


1 → Create an account or login

It's quick and easy to create an account.

On the [calculator website](#) click **Register** for a free account, or **Login** with your username if you already have one.

Once logged in you can secure your account by setting up two-factor authentication with an authenticator app on your phone. We recommend you take this simple step.

Our email newsletter is a key source of information for relevant events, and useful information to help reduce carbon, and about the calculator tool. You can sign up from your dashboard.



Complete your setup

- Protect your account
- Sign up to newsletter
- Tell us what you think

[Watch our quick start video guide →](#)

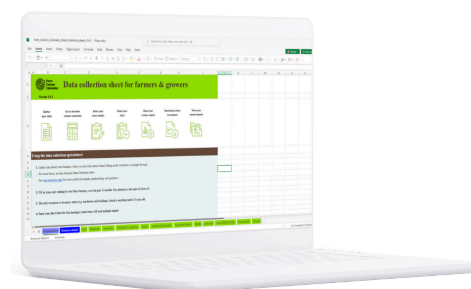


More of a visual person? [click the image to open and watch our quick-start video guide](#)

2 → Gather your data

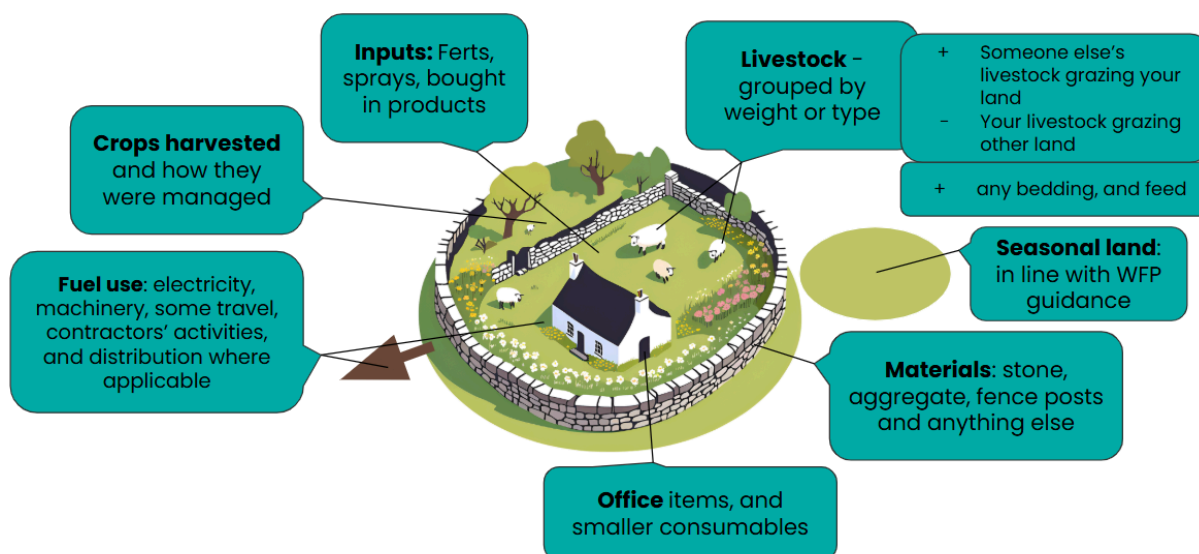
Gather or collate information about your farm or croft together so you can enter this into the Calculator. We have resources available that will get you thinking and show you what information you need at hand to complete a carbon footprint report. or you can skip to step 3. Use our **data gathering guide** to find out what to include. Use our **data collection spreadsheet** if you want to record your information offline first.

You'll be asked about the activities, purchases and processes on your farm over the past 12 months. This is no different between a large farming enterprise and a small croft.

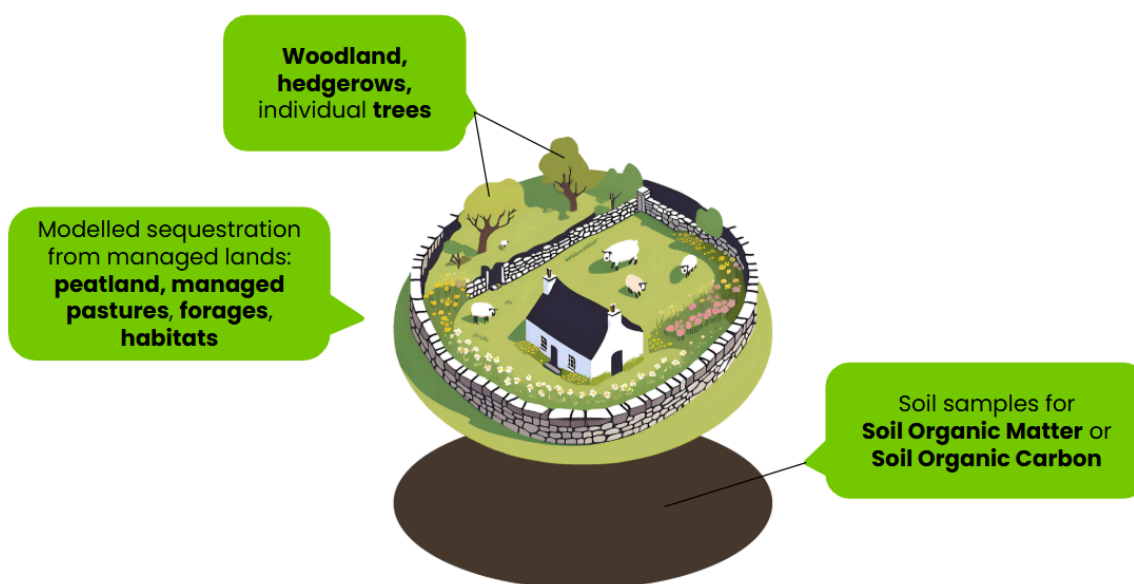




This illustration indicates what you may be expected to know to build a picture of emissions.



This illustrates what you can enter to include sequestration, or potential sequestration in your report. You will need to decide if modelling sequestration is right for you.



Gathering your data together can be hard or just time consuming. **If you don't know some information or can't find it all, move on to the next step.** Don't let this stop you from receiving your carbon footprint report. If you have questions contact → calculator@farmcarbontoolkit.org.uk

3 → Create a report

Once logged in you will reach your **Dashboard** where all your carbon reports are held.

› Click **Add New Report** which begins a new report and opens the report details page



› Enter some details about your report, and about your farm to start with. Some fields are mandatory – give your report a name, enter a reporting period, select some report options, and if you want to you can enter some farm information which allows us to build a better report and benchmarking for you.

Your report is created when you click **Save**.

› At any time you can return back to your **Dashboard** to continue, edit or view any of your reports.



4 → Enter your data

You will enter your information on the Data Entry pages as shown below.

Categories

Fuels Materials Inventory Crops Inputs Livestock Waste Distribution Sequestration Processing

Fuels ⓘ + Add New

Live results

Emissions Totals

Type	t CO ₂ e
Total:	0.00

Click on any **category** from Fuels through to Processing in any order to add your information or just explore what is available. You can start by adding your data directly here, or refer back to our data collection guide or spreadsheet for your information to begin entering it. Both resources mirror the categories in the Calculator.

Click on **+ Add New** and follow the drop down options available to enter your information under each category. Add all data that is applicable to your farm business. Follow the helpful hints throughout wherever you see this symbol: ⓘ



Your entries are **automatically saved**.

Check each category, and when you're done you can check the box entitled 'mark as complete' to record your progress.

Mark as complete

4.1 → Specific to the Carbon Audit in Scotland

Guidelines set out in [Annex L: Carbon Audits including seasonal land](#) – go into detail about what areas to include in your audit. Follow this note as it may differ from information you read within our Calculator guidance elsewhere.

When you are thinking about gathering the data for your report, if you make use of seasonal land, include this land in your report and any activities, or purchases that relate to it based on the period where you made sole use of this land.

If a crop is harvested from the seasonal land enter this as normal in the ‘Crops’ section of the Calculator. If livestock graze the seasonal land, or land you later rent out, add these as you normally would (check your figures with our [livestock wizard](#)) and ensure that you account for their animal wastes correctly. You would not need to include animals that graze the land whilst not under your occupancy.

Entering land-based emissions when the land is seasonal

If however you want to enter soil samples from seasonal land, or modelled sequestration from this land into your report in the ‘Sequestration’ section – this will require you to calculate the percentage usage and apply this to the land area you intend to enter into the Calculator. For example:

If you rent the land monthly, per month your percentage use is 8.33%, and to work out how to enter the figures times the number of months of lease $\times 8.33$.

So in this example if you rent on average 100 hectares of grazing land annually for nine months of the year, you would calculate the percentage usage as 9 months multiplied by 8.33% which would be 75%. To enter this seasonal grazing land you would enter this as 75% of 100 ha, which is 75 ha.

As this was not the true hectareage of the land you used we would suggest that you note down your working in the ‘Section notes’ > being sure to save.

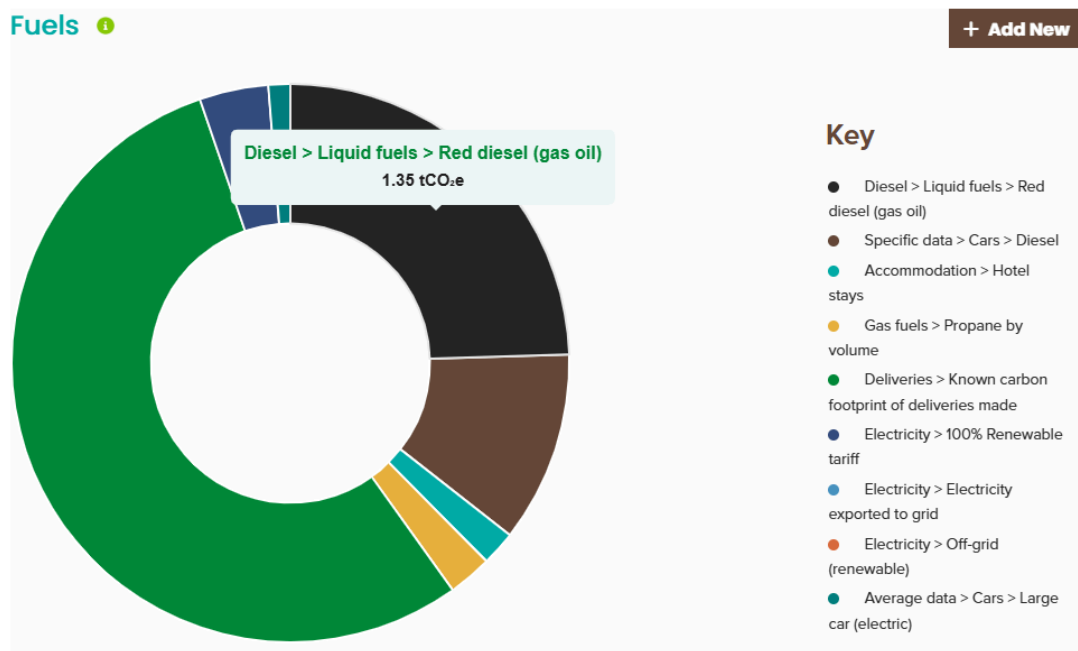
Section notes

Save notes

If you rent the land weekly, per week your percentage use is 1.92% , and if you rent the land by the day, per day your percentage use is 0.27%.

5 → View live results

Your emissions results in tonnes of Carbon Dioxide equivalent (tCO₂e) per year will update in real time as you enter your information as shown below – as an example.



Hover over the graph to see detailed information or look below for a table showing the emissions you have entered in each category. Here is where you can edit or delete items on the list – so don't worry about making a mistake.

Type	Quantity	Emissions (t CO ₂ e)	Offset (t CO ₂ e)	Edit	Delete
Liquid fuels > Diesel > Red diesel (gas oil)	397 l	1.35	0.00		
Cars > Specific data > Diesel	1,500 miles	0.61	0.00		
Accommodation > Hotel stays	4 nights	0.11	0.00		
Gas fuels > Propane by volume	60 l	0.14	0.00		
Deliveries > Known carbon footprint of deliveries made	3,000 kgCO ₂ e	3.00	0.00		
Electricity > 100% Renewable tariff	1,000 kWh	0.22	0.00		
Electricity > Electricity exported to grid	50 kWh	0.00	-0.01		
Electricity > Off-grid (renewable)	300 kWh	0.00	0.00		
Deliveries > Known carbon footprint of deliveries made	10 kgCO ₂ e	0.01	0.00		
Cars > Average data > Large car (electric)	elec car 500 miles	0.07	0.00		
Total:		5.51	-0.01		

On the right of the page is a chart running total of all the emissions data you have entered across all categories – a preview of your final report.

Type	t CO ₂ e
Fuels	228.17
Inventory	128.40

You'll be able to see how your carbon footprint is stacking up as you go. Use it as a decision making tool if you like - see the effect of changes to your overall emissions as you make changes to the data entered.

You could, for example, start or copy a report and tweak the figures to compare the impact of different practices: planting some new woodland; switching from plastic to paper bags in your packaging; using a new electric vehicle; or building your soil organic matter - try entering these ideas and instantly see the results.

We provide advice

Our farm advisors at Farm Carbon Toolkit are well placed to offer you advice on your farm - and they can complete soil samples, or help in lots of other ways too. *Click this box to find out more.*

6 → Your report

Click **View Results** at any point to see your report.

[View Results](#)

You will see a **Summary** report with graphs and tables displaying your farm's carbon footprint. Click **Full Results** to see all information entered. You can also **Benchmark** your results against your peers and industry averages.

[Summary](#)[Full Results](#)[Nitrogen](#)[Benchmarking](#)

From this page you can take various actions:

- › Return and **Edit Data**
- › **Download** a PDF, CSV or JSON export of your Report information - great for saving offline or sending to someone else
- › **Compare** your reports
- › Create farm **Scenarios** to explore the effect of changes
- › **Share** the report with another logged-in user via a link
- › **Lock** a report so it can't be edited further
- › **Recalculate** results in a report if you had a problem during the process or we ask you to

[Edit Data](#)[Download...](#)[Compare](#)[Share Report](#)[Recalculate](#)[Lock report](#)[Scenarios](#)

do this.

You can edit the details you set at the start by clicking **Edit Report Details** on the report page.

You will now have completed the process of creating your carbon footprint for your farm or croft.

To repeat the process in another year you can simply **copy** the report you created using the button next to the report on your dashboard. If you do this, don't forget to change the reporting period, and make edits or delete your data. If you are careful to change the information to reflect the new year then this speeds up the process.

You can even complete your data monthly or whenever you have a spare moment throughout the year - it does not have to be all at once.

7 → Make changes

The Farm Carbon Calculator helps you make positive changes to reduce your carbon footprint every year. There are lots of opportunities to cut emissions in all sectors, and to increase carbon sequestration in the soils and biomass on your farm.

A carbon footprint report will show you carbon hotspots on your farm - where the most emissions are generated. Whilst cutting emissions from all parts of your business is important, don't shy away from tackling the big ones.

In your Full Results table you'll see links to relevant sections of our Farm Carbon Toolkit - where you will find detailed advice, information and resources for farmers and growers to reduce their emissions or increase sequestration in specific areas

→ [See the toolkit](#)

Extra → Comparing reports

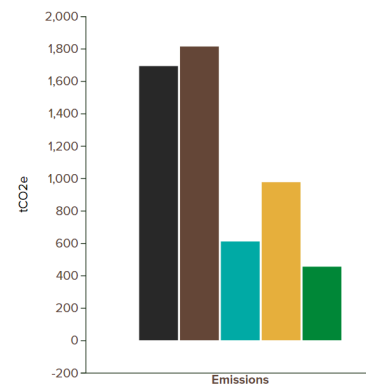
If you have two years' reports or information from different farms or scenarios you might want to see how they compare. To begin, click **Compare** on your results page from any report and select up to 5 reports you want to compare from your list.

Compare	Timeline
Title	
Farm 1 September 22-23 01 Sep 2023	<input checked="" type="checkbox"/>
Farm 1 September 21-22 01 Sep 2022	<input checked="" type="checkbox"/>
Farm 1 September 20-21 01 Sep 2021	<input checked="" type="checkbox"/>
Farm 1 September 19-20 01 Sep 2020	<input type="checkbox"/>

Selecting **Compare** will compare your selected reports on key headline figures, such as emissions or sequestration, or key KPIs such as fuel per hectare.

You might want to track several different farms across the same year on some key data for example.

Selecting **Timeline** allows you to see changes to emissions, sequestration and carbon balance, and compare these over time.



Extra → Investigate farm scenarios

If you want to see the effects of changes and compare these with the present on your farm you can create a scenario report. From your report page, click **Scenarios**

You can then create a scenario copy of the report you are viewing. Check the boxes to make preset changes and see the difference, though you can later edit the scenario report any way you would like. Use this to imagine different decisions that can be taken on farm and investigate the associated footprint.

When you are ready to compare the scenarios you can click **Scenarios > Scenario comparisons** or **Scenario timeline** to see the differences.

Remember you can edit or delete all reports at any time.

You can use this report as the base to create a new scenario - either starting from a duplicate of this report or choosing one or more of the presets below.

Don't forget to change the reporting period for the scenario report. You will then be able to compare it against the base report and other scenarios on a timeline.

- Reduce red diesel by 10%
- Switch to 100% renewable tariff
- Reduce fertiliser usage by 10%

Create Scenario

Scenario comparisons

Scenario timeline

Can I offer carbon footprinting as a service to others?

- ↳ The Farm Carbon Calculator is free for farmers
- ↳ We support consultants, producers and projects to monitor their footprints with professional licences, white labelled software, and custom integrations using our API. There are a host of ways that our highly skilled team can help your business, so do get in touch - calculator@farmcarbontoolkit.org.uk
- ↳ We also offer Consultancy services where we offer advice, expertise and training to farmers and organisations who want more in depth support. We work with farmers, growers, food businesses and consultants large and small.

Click this box to find out more

Where to go for more support

[Read the FAQ's](#) available on the Calculator website

Click on the green help icons throughout the tool

You can [contact us](#) for help at any time calculator@farmcarbontoolkit.org.uk

The Farm Carbon Calculator is part of The Farm Carbon Toolkit. Created by farmers for farmers, for over a decade we've worked to further the understanding of greenhouse gas emissions in agriculture. We provide tools and services to measure impact and run projects with farmers that inspire action on the ground. [Find out more](#)