Farm Carbon Calculator

Farm Carbon Calculator Guide | Gathering your data

How to gather together the information from your farm to begin a carbon footprint. You'll know all sorts of information about your farm and this guide explains what to remember or find out so you can calculate your farm carbon footprint.

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Choose a time period for your carbon footprint

The calculator is set up to calculate your farm's carbon footprint over a 12-month period. Use the same across all areas of your farm or estate. Some users choose financial year, cropping year, or calendar year; this makes no difference to the result, but is a key decision and one to stick to in future years.

Time period	Start date	End Date
12 Month Period		
Financial Year		
Other period		

Print and write in this document if you like

Your farm details

Note down how your farm area breaks down into the following categories which make a difference to your report.

	Hectares (ha)
Total farm area	
Cultivated areas (cropped / temporary grassland)	
Uncultivated areas (permanent pasture / margins / rough ground)	
Non-agricultural land (built environment / woodland / water bodies)	

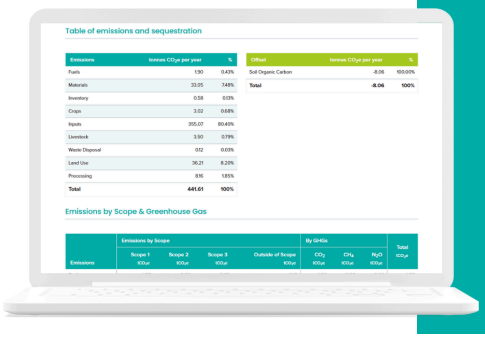
Watch our quick start video guide ➔

More of a visual person? click the image to open and watch our quick-start video guide for tips about the whole process going through data gathering and entering your data (youtube).

Fuel usage

Gather information together about the fuels used on farm, think about the following:

- Diesel and other liquid fuels recorded in litres (1 gallon = 4.54609 litres)
- Electricity consumption and source of electricity including renewable sources
- Gas or solid fuels used and the amounts
- Contracted activities on your farm - this can be split out per activity or just recorded as total fuel use
- Renewable energy or heat produced on the farm and used on-farm or exported to the grid.



Where do I find this information?

- Fuel use is rarely recorded all together - so you will have to look in a range of places
- Try invoices, receipts, annual accounts, or your own budgeting software
- The calculator can estimate your fuel use from vehicle mileage and miles per gallon
- If you contract out any farm operations like combining or spreading make sure you think back across the whole year so that nothing is missed.

As with all the data mentioned in this guide - **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**

Livestock information

Your livestock numbers can have a significant impact on your carbon footprint so try to gather information in some detail about the following:

- Numbers of livestock on-farm (average weight and number per category i.e. 10 dairy heifers, 12-18 months, average 500kg weight, milk yield and quality)
- How manure is managed for your animals (type and application, i.e. housed for 6 months of year on straw - FYM spread on grassland)
- Livestock feed and sourcing
- Quantity of bought-in bedding.

Bedding and feed produced on-farm like straw from wheat crops does not need to be included here.

Fertility and cropping

Include all details for cropping in the selected 12 months for the farm. This includes both arable cropping, cover cropping and any organic amendments.

- Arable cropping - area (ha) and yield (tonnes) of crops for the specified year of footprinting
- Any bought in manures / composts / lime.

Inputs used

- Quantity of any fertilisers or sprays applied in the selected 12 months on farm. You can input many brand-name products, or generic products if you don't have the detail - or a mixture of both.

Materials

The Farm Carbon Calculator asks what items are used each year like bale wrap / twine for example; or for wear and tear - like aggregates for repairs, fencing materials.

- Items used on the farm in the specified 12 months
- Fencing, repair and maintenance projects
- Include water use on-farm (m3)
- Don't forget other consumables - silage making, office supplies etc.

Capital items/ inventory

Include all machinery, implements and buildings that are under 10 years old on the farm. Here you can account for the larger items of a farm that would either be above standard wear and tear (i.e. a new shed, a large fencing project) or larger purchases (i.e. a tractor).

- Machinery - year of manufacture and engine size for tractors, combines and loaders and tracks
- Implements - year of manufacture and either width or plated weight

(whichever is easier)

- Buildings - year of construction and dimensions of building and material used
- Include any renewable energy projects here (if they are under 10 years old).

Waste

The calculator will ask for tonnage of waste produced on-farm and whether it is recycled, sent to landfill, or disposed of in another way. To get you started why not add the wear and tear items you replaced earlier when thinking about 'Materials'.

Sequestration/ land use

The calculator asks for details about your land use, and any soil testing completed to give an accurate and detailed carbon removal figure for your overall farm.

- Areas and details of stewardship options
- Areas of hedgerows, woodlands and single / in-field trees on farm
- Any soil test results that you have which reflect soil organic matter, or soil organic carbon analysis
- Any perennial crops or areas of wetland on-farm.

Are you wondering where to add something

This guide is designed to give you a general overview of what information you'll need to make it easy to get started with a carbon footprint. The different categories mentioned cover only a part of most farms' entire footprint - but are important parts which are useful to measure.

If you want to add more information make sure you explore as you go through the calculator. You will see many more different actions or items which produce emissions that can be entered.

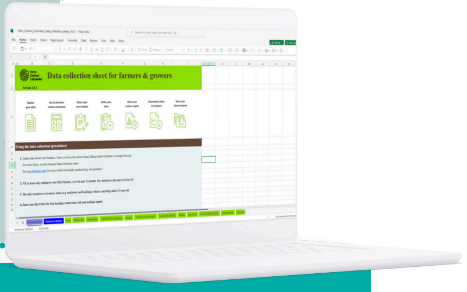
Footprinting can get complicated - so if you still do not find where to enter something then let us know and we will guide you.

Like spreadsheets? download our data collection spreadsheet

Some users prefer to see everything in one place and gather their data together first before entering it into the calculator online. We provide a data collection spreadsheet for this purpose found on the resources tab of the calculator.

The spreadsheet can look complicated but it has its benefits. The data can be gathered offline, and in subsequent years you have a ready-made record of all your data.

- Work through the spreadsheet left to right using the different sheets or tabs along the bottom
- Each tab mirrors what data can be entered into the calculator
- If you need to search for something - or where to enter this you can search the spreadsheet for a keyword
- The spreadsheet will give you the units required, as well as references for our methodology should you wish to look something up.



Download the data collection spreadsheet

Space for notes

Fuels	Notes
Red diesel	*Topped up farm tank with 400L in Feb.*
Livestock	**Notes**
Bedding	*Got 16 heston straw bales from John in Nov.*

Fertility/ cropping	**Notes**
Manure	*Spread 4x 8 tonne loads of manure over summer. 32 tonnes in total*
Inputs	**Notes**
Herbicide	*Bought 5L of glyphosate to deal with weeds in wheat fields.*
Materials & Waste	**Notes**
Fencing	*Replaced storm damage. 20 posts binned, 20 replacements.*
Sequestration / land use	**Notes**
Hedges	*Have 250km hedges, trim/manage 60km of them.*

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

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