

How to get prepared for your carbon audit



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Taking the time to prepare the data required for your carbon audit before you sit down to complete it will make it an easier and more manageable task. If using an advisor for your carbon audit, this should reduce the duration of your appointment and therefore could reduce the total cost of your carbon audit.

This guide will:

- Advise of the first three steps to complete as you begin the carbon audit process.
- Summarise the information needed for a carbon audit focusing on the areas that require most preparation.
- Indicate which existing farm records to consult for this information.

How to start

- 1) Select which 12-month period you will assess as part of your carbon audit. This could be financial year, harvest year or calendar year. Make a note of which 12-month period you will use as it can be helpful to remind yourself as you start to pull data together.
- 2) Decide on which carbon calculator you would like to use. There are four to pick from: Agrecalc; Cool Farm Tool; Farm Carbon Calculator Tool and Solagro (JRC) Carbon Calculator. If you are using an advisor, they are likely registered on one specific tool, in which case ask your advisor which tool they will be using.
- 3) Data for a carbon audit can be split into sections and the tables below show the data that is required and what existing farm records you can consult for this information.

Checklist of data to prepare in advance

Below are tables which detail the information you need to complete a carbon audit. Beneath the tables, are listed categories which carbon calculators will often ask for, but as the format of how they will be needed varies between calculators, we cannot provide precise instructions on how to collate this data. However, we can provide an indication of what will be needed to allow you to pull out some of the potential records you need. All carbon calculator tools have their own data entry guidance. It is advised you consult this once you have decided on which calculator you will use.

Land and Crops			
✓	Data Field	More Detail	Farm Record Sources to consult for the information
	Land areas split by crop	Grass often needs split out into pasture grazing; silage and hay. Seasonal land can be entered separately on some calculators so feel free to keep a note of the area and the percentage of the year that you have access to it separately as this can be useful for reference in future years to understand what data you have included.	SAF form for the relevant year. Details of crofts taken for grazing/cutting on unofficial sublets, not claimed on SAF.
	Woodland areas	As well as the hectares, make a note of whether it is conifer or broadleaved and its approximate age.	Previous grant applications for areas and years.
	Hedge lengths	Make a note of whether your hedge length is in metres or km so you can include it in the correct format for the calculator you are using.	Farm records. Previous grant scheme applications or records for length planted and year of planting.

	<p>Quantity of fertiliser and lime applied</p>	<p>Fertiliser should be noted as product and tonnage per crop (e.g 2t of 20:10:10 for grass).</p> <p>For lime applications, it would be beneficial to look out records for more than the 12 months being assessed as some platforms will ask for only the annual requirement. This means that where you only apply lime every 3 – 5 years then you will need to take a third or fifth of the quantity you last applied.</p>	<p>Field records for NVZ or SQC.</p> <p>Diary.</p> <p>Invoices for lime.</p>
	<p>Manure applications</p>	<p>For imported manures, calculate the quantity applied.</p> <p>For home produced manure, make sure you know what land it was applied to in the year you are assessing (spring barley; silage etc).</p>	<p>Field records for NVZ or SQC.</p> <p>Diary.</p> <p>Other farm records such as Excel spreadsheet.</p>
	<p>Number of pesticide applications</p>	<p>Split by herbicide, fungicide and insecticide most commonly.</p>	<p>On farm spray records.</p>
	<p>Yield of silage, combinable crops, oilseeds, potatoes and veg.</p>	<p>The t/ha yield is required as well as the applicable items from the following list:</p> <ul style="list-style-type: none"> - Quantity sold - Quantity used for feed/bedding - Quantity home saved for seed <p>If you have combinable crops and bale the straw, you will need the yield and tonnages of the straw as well as the grain.</p>	<p>Cropping record software.</p> <p>On farm paper records.</p> <p>Sales slips for crops sold off the farm.</p> <p>Feed programme notes for quantity fed.</p>
	<p>Silage Dry Matter</p>	<p>This data can be obtained from silage analysis documents if you have your silage analysed.</p> <p>If not, you will need to use a typical value based on whether it is bales or pit.</p>	<p>Silage Analysis Documentation.</p>

Livestock			
✓	Data Field	More Detail	Farm Record Sources to consult for the information
	Average number and weight of livestock	This data requires to be split down by sex and age category. So first taking heifers, steers and male entries separately followed by age categories 0-12months etc.	ScotEID monthly stock totals. On farm herd/flock records (paper or digital).
	Number and weights of purchases and sales	For purchases and sales, both the total number and the weight of the purchase/sale is required.	On farm herd/flock records (paper or digital). Invoices. Slaughterhouse portals.
	Deaths (split per livestock class)	Rather than a total number of deaths, try and split this out per stock class. For example, lamb deaths separate from ewe deaths.	On farm herd/flock records (paper or digital).
	Calving/lambing percentage	Split of singles, twins and triplets is also required for sheep in some calculators but this can be estimated from the scanning record.	On farm herd/flock records (paper or digital).
	Quantity of wool sales	Required in kgs most typically.	Receipts, invoices or texts from Wool Board or merchant.
	Quantity of milk sales	This is required as total litres for the entire herd across a 12-month period.	Milk records.

	Daily Liveweight Gain	Required for each age class of stock.	This can be calculated from weigh records, liveweight at sale/closing while remembering to account for estimated birthweight.
	Bedding and feed purchases	Type of bedding /feed and tonnage purchased of each is required.	Invoices.

Energy and Waste			
✓	Data Field	More Detail	Farm Record Sources to consult for the information
	Electricity use on the farm (kWh)	This should be electricity bought from the grid and separate to any renewable electricity produced.	Invoices. Meter readings.
	Fuel usage (litres)	Red diesel, white diesel and petrol.	Invoices. Farm records completed by staff when using fuel tanks.
	Renewable Energy	Quantities of renewable heat and electricity produced and quantities used on farm.	Feed in Tarriff receipts. Meter readings.
	Waste Plastic	Quantity of waste plastic generated in a year based on the materials used on the farm such as bale wrap, fertiliser and feed bags.	Waste disposal invoices.

Other topics to be aware of (calculator dependent):

- Grain drying energy may require to be separated out from general fuel use.
- The calculators ask for information about grazing time and the time stock spend inside in varying formats, but this should be easily answered without preparation.
- For transport, the boundaries of tools differ so this data will be needed in a varying level of detail. Consult data entry guidance of the tool you are using for further guidance.
- Some tools may ask for soil organic matter, texture and pH.
- Tillage practice and grazing method can sometimes be needed.
- Some tools may ask for data on machinery, implements and buildings that are under 10 years old.