



## Climate Friendly Food carbon calculator - checklist

This is a checklist to help you fill out the CFF carbon calculator. Note down all every element of the checklist relevant to your farm, and use this data to enter in to the calculator. Fill in data in the **blue** column.

Please note:

- All data is relevant to the business only
- Everything relates to the last 12 months, except machinery and structures, where you account for the last 10 years

Where emissions are shared between different uses - for instance an office at home, split the emissions accordingly, e.g. 10% of house's electricity for office use. If you really can't work out an input, write down what it is and why you can't attach a figure to it. It's better to do that than ignore it all together.

Don't be daunted by the length of this list - not all data will be relevant to all businesses, so just ignore the sections that don't apply to you. Write down all data, in the relevant units, in the **blue** results column or carry on another sheet if there's not enough space. If you get really stuck then feel free to contact Jonathan Smith by e-mail on [jonathan@climatefriendlyfood.org.uk](mailto:jonathan@climatefriendlyfood.org.uk) to discuss any issues.

When you have all this data go online to [www.climatefriendlyfood.org.uk](http://www.climatefriendlyfood.org.uk), click on "Calculator" and fill it out online for free. We estimate it won't take more than an hour to fill out online. You can save the results and print them out to look at.

### All farmers and growers

<i>Heading</i>		<i>Item</i>	<i>Units</i>	<i>Result</i>
<b>Fuel</b>	Liquid	Red Diesel	Litres	
		Blue Diesel	Litres	
		Petrol	Litres	
		Heating Oil	Litres	
		Contractors' fuel	Litres	
	Solid	Coal	Kg	
		Wood logs	Kg	
		Wood chips	Kg	
		Wood pellets	Kg	
	Gas	Propane	Litres	
		Butane	Litres	
		Natural Gas	kWh	
		LPG	Litres	
	Electricity	Non-renewable	kWh	
		100% renewable	kWh	
		30% renewable	kWh	
		Off grid: renewable	kWh	
	Vehicles	[if fuel not accounted for above]	Annual mileage and engine size	
<b>Materials</b>	Aggregates	Asphalt	Kg or m3	

		Sand	Kg or m3	
		Stone/gravel	Kg or m3	
	Concrete	[note type of mix]	Kg or m3	
	Cement		25kg bags	
	Stone	General	Kg or m3	
		Limestone	Kg or m3	
		Slate	Kg or m3	
	Clay	Bricks	Kg or bricks	
		Tiles	Kg	
	Steel	[note type]	Kg	
	Timber	Planks - note size(s)	Kg or metres	
		Plywood - note size(s)	Kg, m2 or m3	
		MDF	Kg	
	Fencing	Posts - note size(s)	Number posts	
		Wire	Kg	
	Decorating	Plaster	25kg bags	
		Plasterboard	Kg	
		Carpet	m2	
		Underlay	m2	
		Paint	Litres or m2 covered	
	Water pipe	HDPE pipe - note diameter(s)	Metres or Kg	
		LDPE pipe - note diameter(s)	Metres or Kg	
		PVC pipe - note diameter(s)	Metres or Kg	
	Water storage	Steel tank	Kg	
		EDPM/Butyl liner	Kg	
<b>Vehicles</b>	Road vehicles	Up to 1.4l engine size	No. vehicles	
(under 10 years old)		1.5l - 2.4l	No. vehicles	
		2.4l or over	No. vehicles	
		4 x 4	No. vehicles	
		Van - up to 1.3 tonnes	No. vehicles	
		Van - 1.4 to 3.5 tonnes	No. vehicles	
<b>Machinery</b>	Tractors	Note horsepower per tractor	No. vehicles	
(under 10 years old)	Combine harvester	Note horsepower per combine	No. vehicles	
	Forage harvester	Note horsepower per forage harvester	No. vehicles	
<b>Implements</b>	PTO-powered	Note width of each implement	No. implements	
(under 10 years old)	Non PTO-powered	Note width of each implement	No. implements	

<b>Distribution</b>	Total	Annual quantity food sold (human or animal)	kg	
	Method	Own vehicle(s)	%	
		Courier	%	
		Sold through local box scheme	%	
		Sold through regional box scheme or wholesaler	%	
		Sold through centralised distribution	%	
<b>Carbon sinks</b>	<i>Helpful tip:</i>	<i>Use your Countryside Stewardship, ELS, HLS or OELS documents to help get the following data (except SOM)</i>		
	Woodland	Broadleaf	Hectares	
		Coniferous	Hectares	
		Willow/poplar	Hectares	
	Hedgerows	Note the length and width of hedges (1.5, 2, 2.5, 3m wide)	Metres	
	Wetland	Permanent wetland	Hectares	
	Orchards	Top fruit/Stone fruit/Nuts	Hectares	
	Field margins	Note width and length of all field margins	Metres	
	Soil	Organic matter levels in every cropped field #	% annual change	

# If you have soil organic matter levels, and how they have changed each year, collate the information for as many fields as you have data. If not, don't worry.

## Horticulture

<i>Heading</i>		<i>Item</i>	<i>Units</i>	<i>Result</i>
<b>Materials</b>	Crop protection	Bird netting	m2	
		Mulch	m2	
		Enviromesh	m2	
		Fleece - note thickness	m2	
		Plastic	m2	
		Windbreak netting	m2	
<b>Structures (under 10 years old)</b>	Polytunnels	Frame - note width and length	Metres	
		Cover - note width and length (under 5 years old)	Metres	
	Glasshouses	Steel	kg	
		Timber	kg	

		Glass	kg	
<b>Fertility</b>	Compost	Bought-in	tonnes	
	Compost & composted manure	Produced on the farm	tonnes	
	Lime	Note: ground or dolomite?	tonnes	
	Propagation Compost	Note: Green waste or peat based?	litres	
	Woodchips		tonnes	
	Green manures	Note species and relative performance #	ha	
<b>Crops</b>	Annual production	Beans and peas	kg	
		Potatoes *	kg	
		Root crops *	kg	
		Alliums *	kg	
		Brassicas *	kg	
		All other veg *	kg	

\* only include if the crop residues from each category are turned in to the soil

# note how well each leguminous green manure is performing relative to a perfect crop (to the nearest 10%). Also note any mixtures (e.g. 50% grass/clover or rye/vetch). A higher performing crop fixes more N and therefore releases more nitrous oxide.

## Arable

<i>Heading</i>		<i>Item</i>	<i>Units</i>	<i>Result</i>
<b>Materials</b>		Plastic	kg	
<b>Fertility</b>	Compost	Bought-in	tonnes	
	Compost & composted manure	Produced on the farm	tonnes	
	Lime	Note: ground or dolomite?	tonnes	
	Woodchips		tonnes	
	Green manures	Note species and relative performance #	ha	
<b>Crops</b>	Annual production	Field beans and dry peas	tonnes	
		Lupins *	tonnes	
		Soya *	tonnes	
		Wheat *	tonnes	
		Oats *	tonnes	
		Barely *	tonnes	
		Maize *	tonnes	
		Oil Seed Rape *	tonnes	

		Sugar Beet *	tonnes	
		Rye *	tonnes	
		Triticale *	tonnes	

\* only include if the crop residues from each category are turned in to the soil  
# note how well each leguminous green manure is performing relative to a perfect crop (to the nearest 10%). Also note any mixtures (e.g. 50% grass/clover or rye/vetch). A higher performing crop fixes more N and therefore releases more nitrous oxide.

## Livestock

<i>Heading</i>		<i>Item</i>	<i>Units</i>	<i>Result</i>
<b>Animals</b>	Cows	Dairy	Heads	
		Cows in calf	Heads	
		Beef cows and heifers	Heads	
		Other cattle under 2 yrs	Heads	
		Other cattle 1-2 yrs	Heads	
		Other cattle under 1 yr	Heads	
	Pigs	Under 20kg	Heads	
		20-50kg	Heads	
		Over 50kg	Heads	
	Sheep	Breeding	Heads	
		Other sheep over 1 yr	Heads	
		Lambs	Heads	
	Goats		Heads	
	Horses		Heads	
	Deer	Stags and hinds	Heads	
		Calves	Heads	
	Poultry	Broilers	Heads	
		Broiler breeders	Heads	
		Ducks - laying	Heads	
		Ducks - table	Heads	
		Laying hens	Heads	
		Pullets	Heads	
<b>Manure</b>		How handled for each livestock category		
	Waste system*	Slurry	%	
		FYM	%	
		Daily spread	%	
		Pasture (in field)	%	
<b>Feed</b>	Imported	List all types bought in feed	kg	

\* for each type of livestock make a note of how their manure is handled