

GFM LUNZ Data Requirements

There are 12 categories for you to answer questions in, with a short opening and closing survey. Some questions you will know off the top of your head, some you will need to check farm records for, and a few will require active field tests.

Once you have answered all of the questions, you will instantly receive your GFM results. Your answers will then be shared with Agrecalc who will calculate your carbon emissions. This will be shared with you via email.

Component	Data requirements	Unit
Basic farm information	Postcode	postcode
	Holding number (if applicable)	no.
	Soil type	main soil group
	Annual rainfall	mm/year
	Altitude	m above sea level
	Average annual temperature	°C
	Location	longitude/latitude – chosen on map

Crops (per crop)	Area of crops grown	hectares (ha)
	Area of crops grown on seasonal land	ha
	Annual occupancy of seasonal land	%
	Marketable yield	t/ha
	Opening stock	t
	% crop removed	%
	Harvested dry matter	%
	Yield sold or sent off farm	t/ha
	Home saved for seed	t

	Fed or used for bedding	t
	Number of years crop is in the ground	Years
	% crop allocated to each livestock enterprise	% per livestock enterprise
Straw	Harvested or forage straw yield	t/ha
	Straw sold	t
	Straw fed or used for bedding	t
	% straw crop allocated to each livestock enterprise	% per livestock enterprise
Forage crops (per crop)	Area of forage crop	ha
	Area of forage grown on seasonal land	ha
	Annual occupancy of seasonal land	%
	Opening stock	t
	% forage removed	%
	Harvested dry matter	%
	Harvested or forage yield	t/ha
	Sold	t
	Fed or used for bedding	t
	Number of years forage crop is in the ground	years
	% forage crop allocated to each livestock enterprise	% per livestock enterprise
Permanent pasture and rough grazing (per pasture type)	Area of permanent pasture	ha
	Area of pasture on seasonal land	ha
	Annual occupancy of seasonal land	%
	% pasture removed	%
	Number of years permanent pasture is in the ground	years
	Clover in grass sward	%
	% permanent pasture allocated to each livestock enterprise	% per livestock enterprise
Non-cropped and environmental land features	Area of moorland, ponds and watercourse, non-cropped areas (e.g. field margins), built up land, and other land	ha
Land use change (per land use/crop type)	Fraction of land converted to current use in last 20 years	%
	Land use before conversion (if applicable)	Land use type (grassland/arable/perennial or tree crop/fallow)

Livestock	Per livestock type, average number of animals held on farm over 12 month period	no.
	Opening weight	kg/head
	Average daily weight gain	kg/liveweight/head/day
	Brought on farm	no.
	Average liveweight at purchase	kg
	Sold or sent off farm	no.
	Average liveweight at sale	kg
	KO% if sold dead weight	%
	Slaughter/sale age	months
	Nmber of deaths	no.
	Estimated number of livestock 20 years ago	no.
Cattle only	% breeding cows producing calves	%
	Cow's average age at first calving	months
	Average calf birthweight	kg
Sheep only	Average liveweight at weaning	kg
	% lambing ewes	%
	Percentage of sheep lambing were singles	%
	Percentage of sheep lambing were twins	%
	Percentage of sheep lambing were triplets	%
Pigs only	Animals per batch	head
	Batches per year	no.
	Length of storage	days
	Average number of piglets born per litter	no.
	Average number of piglets reared per litter	no.
	Average number of litters per sow per year	no.
Poultry only	Animals per batch	head
	Batches per year	no.
	Length of storage	days
	For hens, the average laying period	days
	Average egg weight	g/egg
	Average housing temperature for poultry laying	°C

Livestock products (eggs, milk, wool)	Brought on farm	dozen/1000l/t
	Sold or sent off farm	dozen/1000l/t

Farm woodland and agroforestry area (ha)	Farm woodland area (by woodland type and age)	ha
	Total hedge length	m
	Average hedge width	m
	Length of hedge harvested for woodfuel	m
	Harvested wood products (woodfuel or timber)	t or m3
Soil carbon sequestration (per crop/ pasture/ woodland type)	Tillage practice	Full/reduced/no or direct
	Fraction of rotation under fallow	%
	Fraction of rotation under perennials	%
	Fraction of rotation as re-vegetated set aside	%
Seeds (for each seed type)	Brought on farm	t
	Sold or sent off farm	t
Feeds (for each feed type)	Brought on farm	t
	Sold or sent off farm	t
	Destination of feedstuff	Livestock type
Feed ration (per livestock type)	Diet digestibility	%
	Diet crude protein	%
	Cattle - share of the year 3NOP fed	%
	Pigs & Poultry - gross energy	MJ/kg DM
	Pigs & Poultry - metabolisable energy	MJ/kg DM
Arable straw	Brought on farm	t
	Sold or sent off farm	t
Bedding	Per bedding type, total tonnes	t
	Bedding destination	Livestock type
Manure management	Transferred manure to crops/forage crops (by livestock manure type)	%
	For each livestock type, % time manure managed by strategy (e.g. slurry, pit storage, deep bedding etc)	%
Organic Fertiliser (for each	Brought on farm	t

fertiliser type used)	Sold or sent off farm	t
Biochar (per crop/forage crop/permanent pasture)	Quantity (oven dry)	t
	H/C ratio (if known)	ratio
	Organic carbon content (if known)	%
Inorganic Fertiliser (for each fertiliser type used)	Brought on farm	t
	Sold or sent off farm	t
Pesticides (per crop/forage crop/permanent pasture)	Herbicide-treated area	ha
	Insecticide-treated area	ha
	Fungicide-treated area	ha

Other Data

Component	Data requirements	Unit
Economics	Total income, per crop/livestock type	£
	Income from subsidies	£
	Income from grants (e.g. machinery, buildings, etc)	£
	Income from other agricultural enterprises (e.g. contractors, livery, grazing tenure)	£
	Income from other non-agricultural enterprises (e.g. consultancy, energy payments etc.)	£
	Livestock costs (marketing/processing, feed, vet/meds, bedding, other)	£
	Agricultural costs (marketing/processing, seed, fertiliser, crop protection products, fuel, other)	£
	Other farm costs (maintenance, land rent, labour, capital, other, depreciation)	£
	Costs associated with other agricultural enterprises (e.g. contractors, livery, grazing tenure)	£
	Costs associated with non-agricultural enterprises	£
	Owned land - rental value	£/year

	Machinery - current value (value receivable at resale)	£
	Other assets - value	£

Soil	% soil organic matter from three fields	%
	Soil structure (Visual evaluation)	VESS score
	Earthworm abundance	no.
	If available: soil carbon (per crop/pasture/woodland type)	t/ha
	If available: soil depth (per crop/pasture/woodland type)	cm
	If available:% of crop on peaty soil (per crop/pasture/woodland type)	%
Water	% of water from different sources (mains, abstracted,stored rainwater, recycled)	%
	Aquatic life presence/absence	Presence/absence
	Quantity (litres) of water used	litres
Carbon sequestration	If a carbon footprint assessment has been done in last 12 months	
	CO2 eq emissions	kg CO2 eq
	CO2 eq sequestration	kg CO2 eq
Energy sources and usage	Own fuel use - amount by fuel type	l/t/kWh
	Own fuel use - allocation to enterprises	%
	Contractor fuel use - amount by fuel type	l/t/kWh
	Contractor fuel use - allocation to enterprises	%
	Distance travelled (kilometres) using external haulage.	km
Renewable Energy	Percentage of the total energy used on the farm from renewable energy produced on the farm	%
	Renewable electricity production per type (e.g. wind, PV)	kWh
	Renewable heat production per type (e.g. logs, woodchips)	kWh
	Renewable heat used on farm	kWh
Waste & recycling	Total quantity (kg) of plastic waste produced.	kg
	Percentage of non-organic farm waste (e.g. plastics, metals, timber etc) recycled	%
Livestock	Number of labour units (FTEs) looking after livestock	no. Full Time Equivalents
	Per livestock type, access to pasture/range	months

	No. hours grazing per season	hours/day
	Mortality rate of new-born livestock	%
	Longevity of breeding animals	years
	Lameness incidences	no. cases/100 animals
	Hair/fleece incidences	no. cases/100 animals
	Mastitis incidences	no. cases/100 animals
	Feed related disorders	no. cases/100 animals
	Conception rates of artificial insemination	%
Crops	Number of pesticide spray rounds per crop	no.
Biodiversity	Crop diversity	no. species and varieties
	Livestock diversity	no. species and breeds
	Wild bird diversity	species present on farm
Community & governance	% of staff (who are not contractors/casuals) living within 10 miles of the farm	%
	Number of events hosted on farm for local community	no.
	Number of visitors to farm per year	no.
Farmers and workers	Number of part time staff	no.
	Total hours for all part time staff	hours
	Number of full time staff	no.
	Total hours for all full time staff	hours
	Number of sick days in total for all staff	days
	Number of training days in total for all staff	days