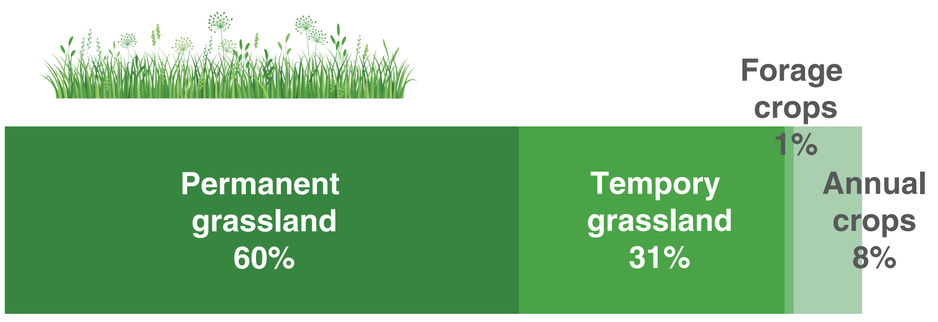
French Dairy Sheep Farming Sustainability Benchmarking

FRENCH - YEAR 2021

DAIRY SHEEP FARM PROFILE (AVERAGE (MIN-MAX))

Land use & area

Total Sheep Area (UAA): 82 (23-887) ha
Main Forage Area (MFA): 74 (23-861) ha
Stocking rate: 7.5 (1.0-23.4) ewes/ha

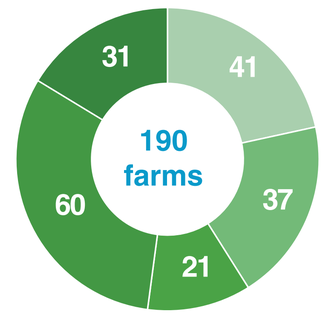


Productivity & dairy performance

Flock size (N° of ewes): 393 (90-1 037)
Milk Yield: 255 (30-493) kg FPCM*/ewe/year
*FPCM = Fat and Protein Corrected Milk 75-55

Useful Dry Matter (UDL): 128 (108-143) g/l
Litter size: 1.45 (1.07-2.00) lambs/ewe

Dairy sheep systems



Pyrénées-Atlantiques
- Non Transhumant systems
- Transhumant systems
- Cheese-making systems

Nord-Occitanie
- Grazing systems
- Pastoral systems

ENVIRONMENTAL AND ECOSYSTEM SERVICES FOR FRENCH DAIRY SHEEP FARMS

Food performance*

7 (1-19) *people/ha UAA*
**PerfAlim. Cereopa*

Maintenance of biodiversity*

1.26 (0.30-3.40) *ha biodiversity eq/ha UAA*
**Hedgerows included*

Nitrogen balance surplus*

88 (12-225) *kg N/ha UAA*
**(N_{inputs}-$N_{outputs}$)*

Direct fossil energy

3.39 (1.30-10.72) *MJ/kg FPCM*
**Fuel & Electricity consumption*

CARBON FOOTPRINT ASSESSMENT

Gross GHG* emissions

2.80 (1.58-4.63) *kg CO_2 eq/kg FPCM*
**GHG = GreenHouse Gases (CO_2 + CH_4 + N_2O)*

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Carbon sequestration*

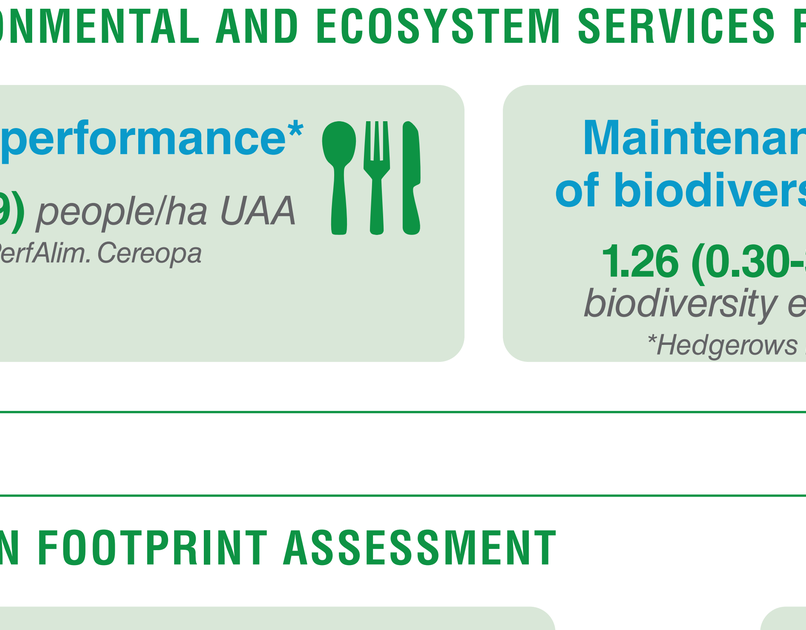
0.82 (0.09-3.81)
kg CO_2 eq/kg FPCM
**Hedgerows included*

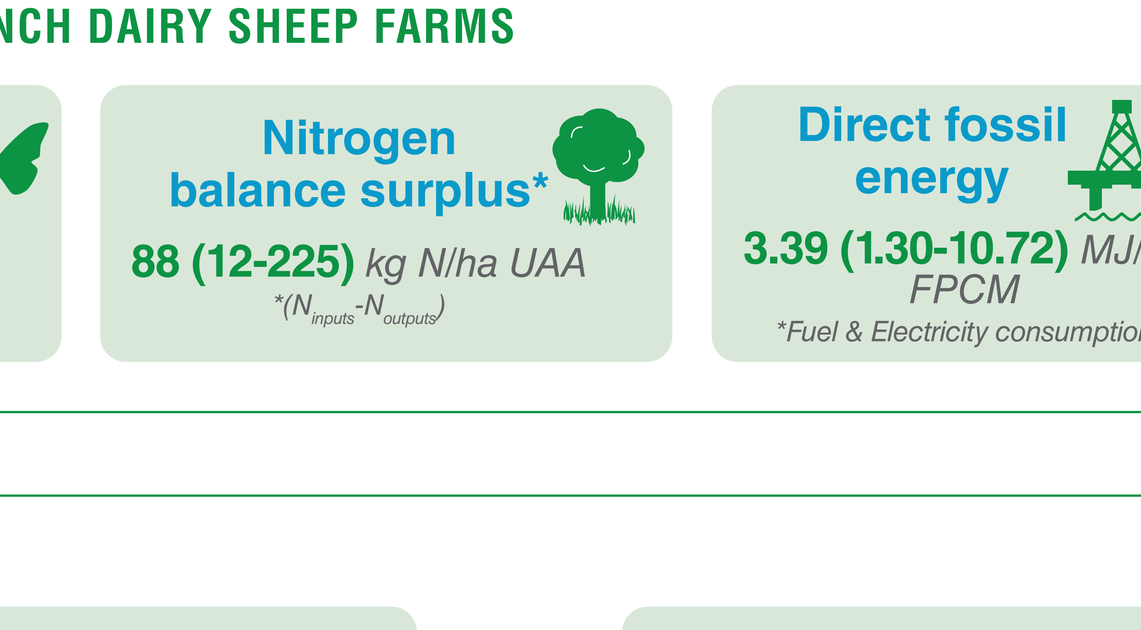
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Net Carbon Footprint

1.98 (0-3.54)
kg CO_2 eq/kg FPCM

GHG emissions sources





French Dairy Sheep Farming Sustainability Benchmarking

FRENCH - YEAR 2021

GHG EMISSIONS AND TECHNICAL RESULTS WITHIN EACH SYSTEM

Nord-Occitanie Grazing systems

Indicators		10% of farms that have the lowest emissions	Average (of the group)	10% of farms that have the highest emissions
GHG emissions	*kg CO_2eq/kg FPCM*	1.7	2.2	2.84
Carbon sequestration	*kg CO_2eq/ha UAA*	680	912	1 118
Technical indicators for Flock Management and Production				
Milk Yield	*kg FPCM/ewe/year*	441	363	275
Litter size	*lambs/ewe*	1.68	1.58	1.45
Concentrate consumption	*kg/ewe*	269	269	280
Concentrates self-sufficiency	*%*	52	45	55
Technical indicators for Land Management				
Mineral Nitrogen	kg N/ha UAA	39	47	37
Organic nitrogen pressure	kg N/ha UAA	80	95	102
Permanent grasslands & pastoral areas	%	14	14	26
Hedges	linear meter/ha UAA	62	118	125
Technical indicators for Manure management				
Grazing days for Ewes	days/year	80	47	44
Hours outside for Ewes	hours/day	5.2	3.1	2.9
Technical indicators for Energy consumption				
Electricity	kWh/kg FPCM	0.16	0.17	0.13
Fuel	litres/ha UAA	115	130	124

Pyrénées-Atlantiques Non transhumant systems

Indicators		10% of farms that have the lowest emissions	Average (of the group)	10% of farms that have the highest emissions
GHG emissions	*kg CO_2eq/kg FPCM*	2.5	3.23	4.26
Carbon sequestration	*kg CO_2eq/ha UAA*	1 604	1 815	1 768
Technical indicators for Flock Management and Production				
Milk Yield	*kg FPCM/ewe/year*	277	198	128
Litter size	*lambs/ewe*	1.53	1.43	1.31
Concentrate consumption	*kg/ewe*	234	200	185
Concentrates self-sufficiency	*%*	17	10	31
Technical indicators for Land Management				
Mineral Nitrogen	kg N/ha UAA	32	33	39
Organic nitrogen pressure	kg N/ha UAA	140	138	120
Permanent grasslands & pastoral areas	%	77	87	86
Hedges	linear meter/ha UAA	32	41	57
Technical indicators for Manure management				
Grazing days for Ewes	days/year	110	96	92
Hours outside for Ewes	hours/day	7.3	6.3	6.1
Technical indicators for Energy consumption				
Electricity	kWh/kg FPCM	0.11	0.12	0.16
Fuel	litres/ha UAA	149	160	203