QVIS Comparison Report

Littleton Farm

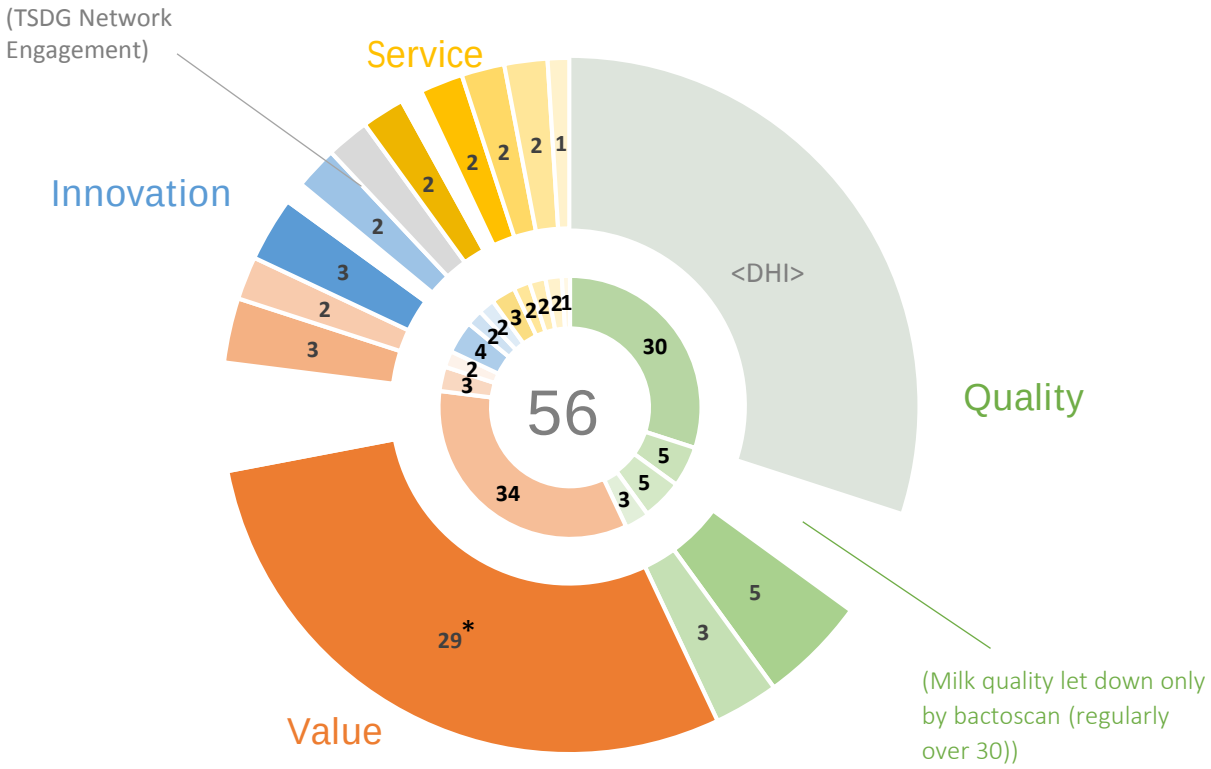
28/04/2017

Alltech® E-CO_2

INCREASING YOUR PROFIT AND PROTECTING THE ENVIRONMENT

Year Analysed: 01/02/2016 - 31/01/2017

Your Results



The QVIS benchmarking system is comprised of four areas - quality (Q), value (V), innovation (I), and service (S). These elements are individually evaluated and then combined to give an overall score out of 100.

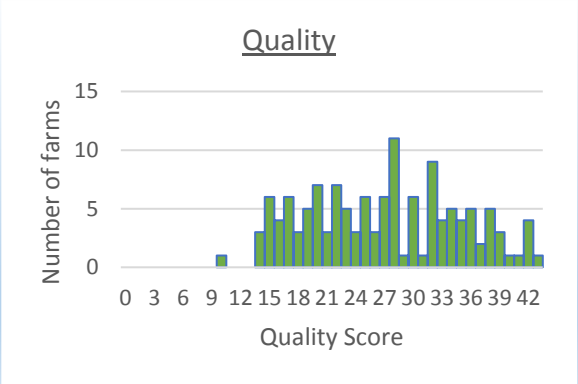
The graphic above shows how your farm's performance (outer ring) fulfills the QVIS ideal (inner ring), and presents your score out of 100 (in the centre). Please note that the grey-ed out elements were not appraised due to lack of data and, therefore, your overall score may not be fully representative of your farm's performance!

It is important to appreciate that whilst this report uses elements of the Tesco QVIS system, it is not intended to confer suitibility for the Tesco Suppliers Dairy Group (TSDG), which can only be decided by Tesco themselves.

On the following page, you will find the QVIS scoring breakdown and more information on the current score trends within the TSDG group.

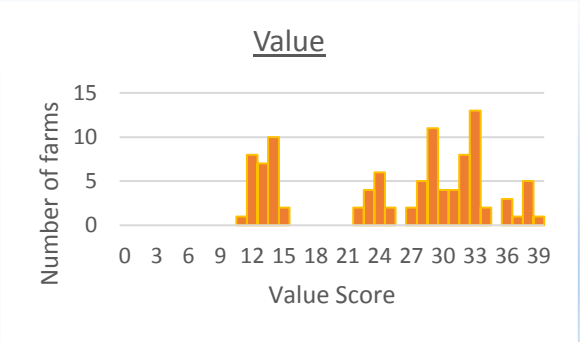
* **Please note that the scoring period is not complete, and results will be subject to change.**

QVIS Breakdown



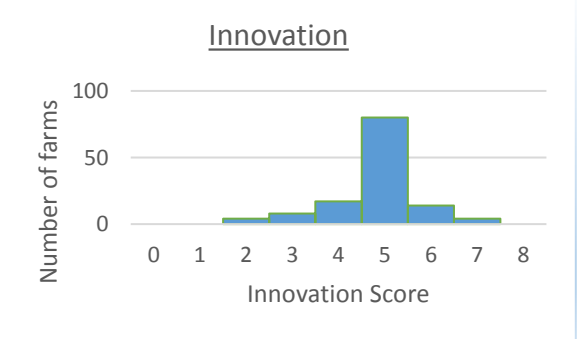
43 Points Available

- 30 Dairy Health Index
- 5 Milk Quality
- 5 Cleanliness
- 3 Red Tractor



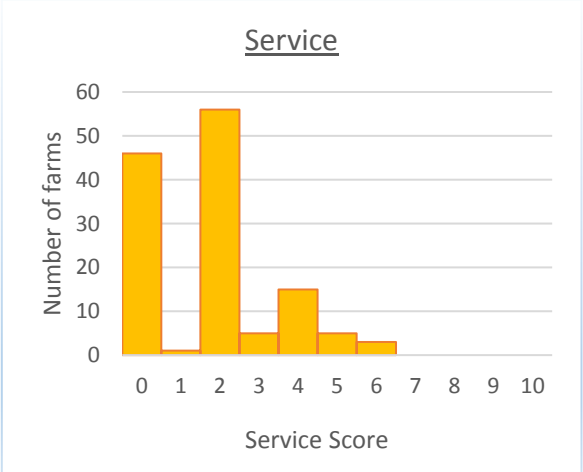
39 Points Available

- 34 Carbon Footprint
- 3 Milk Supply Profile
- 2 Future-proofing



8 Points Available

- 4 Environmental Schemes
- 2 Early Adopter Innovation
- 2 Supplier Network Engagement



10 Points Available

- 3 Public-facing Engagement
- 2 TSDG Conference
- 2 Cross-Sector Initiatives
- 2 TSDG Workshops
- 1 TSDG Scholar

Reminder of Your Carbon Results

A	<750
B	751-1000
C	1001-1250
D	1251-1500
E	1501-1750
F	1751-2000

This Assessment **998** g CO_2e/l FPCM

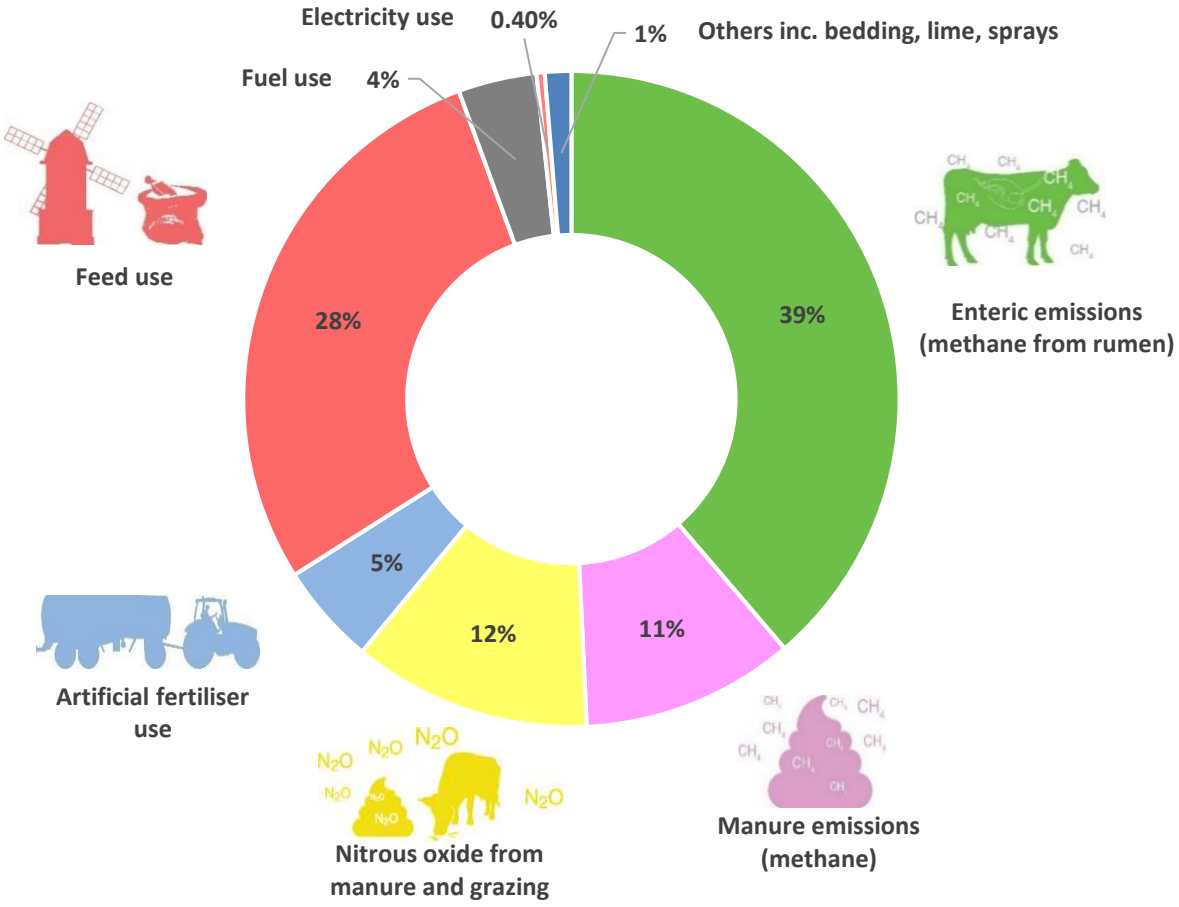
System Type Average **1185** g CO_2e/l FPCM

What does "g CO_2e/l FPCM" mean?

Grams of carbon dioxide equivalent per litre of fat and protein corrected milk produced. The sum of all emissions generated on farm in 365 days, divided by the total volume of fat and protein corrected milk produced.

Your farm emissions by source

This pie chart demonstrates the percentage contribution towards total farm emissions from the dairy enterprise, by their source.



Land, forage and resource use

	This Assessment	System Type Average	Alltech E-CO_2 Top 10%	
Cropping				
Land allocated to dairy	786			ha
Average M.E. value of winter forage	11			MJ/ kg DM
Fertiliser Use				
Nitrogen use*	99	130	101	kg N per ha
Phosphate use*	1	10	14	kg P per ha
Potassium use*	1	18	19	kg K per ha
Fuel and Electricity Use				
Total diesel use	163,000	41,352	22,672	litres
Diesel use per cow	110	122	96	litres/cow
Total electricity use (from grid)	120,000	125,207	77,489	kWh
Electricity use per cow (from grid)	81	470	395	kWh/cow
Renewable energy used on-farm	1,620,000	46,449	39,141	kWh
Total recorded mains water use	1,148	4,828	3,474	m^3

Livestock, health and performance

	This Assessment	System Type Average	Alltech E-CO_2 Top 10%	
Herd Size				
Average number of cows	1,485	300	213	
Average number of heifers	1,215	226	150	
Stocking rate	1.89	2.05	1.58	cows/ha
Milk Production				
Total milk produced	14,197,039	2,854,142	1,818,994	litres FPCM
Average butterfat	4.03	3.96	4.19	%
Average protein	3.32	3.24	3.36	%
Somatic cell count	132,000	166	150	cells/ml
Milk solids produced per cow	718	691	625	kg/cow
Milk solids produced per ha	1,356	1,436	995	kg/ha
Milk produced per cow	9,560	9,258	8,310	litres FPCM/cow/yr
Milk produced per ha	18,098	19,196	13,404	litres FPCM/ha/yr

Heifer Management	This Assessment	System Type Average	Alltech E-CO_2 Top 10%	
Average heifer calving age	**24**	26	26	months
Average heifer calving weight	**560**	566	531	kg

Feed Intake				
Average feed rate per litre	**0.41**	0.41	0.30	kg/litre FPCM
Estimated dry matter intake	**23.28**	23.54	21.11	kg DM/cow/day
Average feed rate per cow*	**3.59**	3.34	2.32	tonnes/cow/yr

*concentrates, straights, home grown cereals but excluding moist feeds (concentrate equivalent)

Herd Health				
Mastitis	**413**	32	28	cases per 100
Lameness	**401**	30	22	cases per 100
Milk fever	**2**	3	5	cases per 100
Displaced abomasum	**1**	2	1	cases per 100
Metritis	**3**	11	8	cases per 100
Acidosis	**-**	2	1	cases per 100
Ketosis	**-**	3	3	cases per 100

Culling				
Culling rate	**30**	26	23	%
Average cull cow weight	**504**	633	589	kg

Calving				
Cows calved in 365 days	**93**	89	90	%
Calf mortality pre-weaning	**3**	4	4	%
Calf mortality post-weaning	**2**	2	2	%
Number of known abortions	**-**	7	4	

Next steps

To improve your 'QVIS' performance you should aim to:

- Investigate whether any changes can be made to improve your milk's bacto-scan results
- Consider whether you could extend the scope and/ or detail of your environmental management (or recording thereof!)
- Reduce diesel consumption

Improving efficiency, reducing carbon

Alltech E-CO_2

OVER 6,000
ENVIRONMENTAL ASSESSMENTS WORLDWIDE

OVER 5,000
Dairy-EA and Dairy Swift-EA ASSESSMENTS

PAS 2050 standard for EA+Swift EA

CARBON TRUST CERTIFIED MODEL

CONSISTANT WITH IDF METHODOLOGY

776,770
COWS ASSESSED

AVERAGE HERD SIZE
180

106
gCO_2e/litre
AVERAGE DECREASE IN FOOTPRINT

96L FPCM/cow
AVERAGE INCREASE IN MILK YIELD

MILK YIELD

12 GRAMS
AVERAGE REDUCTION IN FEED/ LITRE

44 kWh
AVERAGE REDUCTION IN ELECTRICITY USE /COW

1 Benchmark your farm's performance

2 Compare your farm against industry data

3 Implement and evaluate changes on your farm

4 Next steps

More information

If you would like more information about this report or your assessment, please contact a member of the Alltech E-CO_2 team on **+44 1270 522645**.

Furthermore, if you would like further practical advice and consultancy to achieve the opportunities outlined in this report, please contact Alltech E-CO_2 at **enquiries@Alltech-E-CO2.com**

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Alltech-e-co2.com AlltechECO2 @AlltechECO2

ALLTECH E-CO_2
Spring Farm Business Centre | Moss Lane
Minshull Vernon | Crewe | Cheshire | CW1 4RJ
Tel: +44 (0)1270 522 645

Dairy Pro
The professional development register

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CERTIFIED MODEL