

PRESS INFORMATION



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NEW NET ZERO ROADMAP FOR DAIRY FARMERS ACHIEVABLE BOTH PRACTICALLY AND PROFITABLY

The Trehane Trust has published a major fellowship report, carried out by national advisory company The Dairy Group, detailing a roadmap for achieving net zero in UK dairying. The report, funded by the £15,000 fellowship grant from the trust, specified that this roadmap should be achievable both practically and profitably.

Led by The Dairy Group's Richard Lane, three dairy models were used to illustrate his proposed roadmap. It highlighted the gains that could be made from accurately-identified carbon-reduction strategies on each unit.

The roadmap highlights the necessity of using a suitable carbon calculator. "This might be determined by milk buyers or be independent, but it should be able to evolve as new developments are added, such as methane reduction feed additives, soil sequestration and natural capital like hedgerows," says Mr Lane.

"Before any dairy producer can embark on the roadmap to net zero, they must know their starting point," he adds. But he admits that the range of calculators available makes comparisons between farms more difficult. "And it is hoped that the UK dairy industry might progress to one system, as in The Netherlands and New Zealand, where the same measurement tool is used for all milk suppliers.

"But what is equally important, as producers embark on this roadmap, is that they can monitor progress on their own units by committing to a reduction plan."

“Detailed data capture is also key to accurate assessment. Milk recording, accurate herd management and financial data are also essential,” he adds.

Carbon calculation results on each farm will highlight current farm emissions and identify the strengths and weaknesses. “This will vary from farm to farm, but it will show where most gains can be made and highlight ‘low-hanging fruit’. The roadmap should model the potential outcomes of changes to see the impact on the carbon footprint and on the financial effect on the business.”

Modelling confirmed the main areas where carbon emissions can be reduced with production efficiency high on the list for all units. “This includes improving lifetime daily yields by targeting 22 months to 24 months old at first calving, fertility and health, breeding, and improving sire and dam selection by using new technologies like sexed semen and genomic testing as well as the new breeding indices. Improving forage dry matter intake is a big driver too.”

Mr Lane points out though that energy is way down the list. “Unlike most industries, fuel and power are small parts of the dairy farming picture when it comes to reducing carbon emissions and improving the unit’s CFP. But we are likely to see on-farm AD plants that use slurry become more cost-effective as energy costs rise, whilst helping manage and reduce nitrous oxide emissions.”

“Producers should assess their soils and correct pH so they know where best to target organic and inorganic nutrients.”

The report details the use of the roadmap on a spring-calving organic unit, an autumn-calving high-input herd, and an all-year-round calving high-input herd. All three units were already efficient carbon users with a footprint at or below the UK average of 1.25kg of CO_{2-e} per kilogramme of energy corrected milk. This is the most appropriate value to measure the carbon footprint on farm.

“We used financial data and a carbon calculation using the independent Agrecalc tool,” says Mr Lane. “On each unit we identified where the most efficient

improvements in carbon reduction could be made and for each, we assessed the financial effect of reducing carbon.

“This wasn’t a study to find the best system in terms of reducing carbon footprint, but it did confirm that each system can reduce its carbon footprint, without necessarily making big changes, and these can offer significant financial savings.”

“And it is important to make benchmarking a part of the roadmap. Measuring and monitoring data isn’t enough. Producers should develop a carbon reduction plan with measurable objectives and aim to be in the top 25% for the key metrics such as production, fertility and health. Dairy units can have a low carbon footprint by operating efficiently and following good practices.”

Chairman of the Trehane Trust, Diana Allen, adds that although the UK dairy industry is among the best globally, with a carbon footprint of a litre of British milk well below the global average (1.25kg CO₂-e compared with 2.9kg CO₂-e globally) there is still scope for improvement.

“There is a big variation between farms,” says Ms Allen. “But this roadmap should help all producers evaluate their status and commit to a plan so they can monitor progress. And this progress is typically reflected in increased efficiencies for the business, as well as helping to meet industry targets.”

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Copies of the report can be accessed from the Trehane Trust web site, or by scanning the QR code below:

<https://www.trehanetrust.org.uk/fellowship-report-roadmap>



Photograph of Richard Lane attached

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The Trehane Trust was set up in 1977 on the retirement of Sir Richard Trehane from Chairman of the Milk Marketing Board to mark his outstanding contribution to the dairy industry. It supports knowledge transfer and career development within the dairy supply chain. Through its scholarships, it provides awards for study of any aspect of the dairy industry. The Trust offers up to two dairy-focused Nuffield Scholarships each year and there are now more than 70 Nuffield Farming Trust Trehane Scholars. The Trehane Trust awards and manages its fellowships independently. It awarded its first fellowship in 2017.

The Dairy Group is a privately owned dairy consultancy business, with consultants working throughout the UK and overseas. We have developed a wide range of services to meet the needs of dairy farmers and those that operate in the dairy sector, and we pride ourselves in providing independent advice and practical solutions to our clients.