Greater Lincolnshire LEP Food Board

Date: 13th May 2021

Via Microsoft Teams

Minutes

Greater Lincolnshire Food Board: 13th May 2021 Notes

Sarah Louise Fairburn chaired the meeting

Attendees:

- Duncan Worth, AH Worth
- Hugo Marfleet, Kemin
- James Arnold, Sleaford Quality Foods
- James Dallas, Openfield
- James Truscott, Branston
- Jonathan Oldfield, Moy Park
- Mark Suthern, Barclays Bank
- Mos Kalbassi, 2 Sisters
- Neal Collishaw, Worldwide Fruit
- Oliver Shooter, AE Lenton
- Prof. Simon Pearson, LIAT University of Lincoln
- Rhonda Thompson, NFU
- Sarah Louise Fairburn, GLLEP Deputy Chair
- Simon Dwyer, Seafood Grimsby and Humber
- Will Naylor, Bakkavor
- William Burgess, Burgess Farms

Guests and Officers:

- Ruth Carver, GLLEP Chief Executive
- Kate Storey, GLLEP Communications and Operations Manager
- Martin Collison, GLLEP Food Advisor
- Duncan Botting, GLLEP Energy Sector Chair
- Bruno Gardner, NFU EnZero
- Matthew Smith, Alltech
- Prof Mark Swainson, NCFM
- Prof Val Braybrooks, NCFM
- Assoc Prof Wayne Martindale, NCFM

Apologies:

- Alric Blake, Alltech
- Justin Brown, Greater Lincolnshire County Council
- Robert Smith, Danish Crown
- Yvonne Adam, Youngs (850 Group)

Notes of the Meeting on 13th May 2021

Agreed Actions:

Action 1: Members to report existing or new investment in the food chain in Greater Lincolnshire to the LEP.

Action 2: Members to speak to Prof Simon Pearson if they can contribute to the horticulture automation review.

Action 3: LEP to consider how best to unite the energy and food chain work, so that the area can take a leadership position on low carbon food chains.

Action 4: Board members to comment on the suggested three Low Carbon Food Chain themes and, if appropriate, to volunteer to help lead work on these areas supported by the LEP and University of Lincoln.

Action 5: NCFM (Wayne Martindale) to work with the LEP to discuss how best to map the UK Food Valley and its carbon emissions.

Actions from 11th February 2021 Board Meeting & matters arising not covered on the agenda:

2021/05/1 Actions from 11th February 2021 Board Meeting & matters arising not covered on the agenda:

Food Chain Investment

It was noted that the work on food chain investment since 2016 is showing at least £2.25bn, creating over 6,000 job, but this is still believed to underplay the full position. Board members who have not yet told the LEP about any investments made were urged to do so to enable a full picture to be established.

Action 1: Members to report existing or new investment in the food chain in Greater Lincolnshire to the LEP.

It was noted that LEP partners have been successful with major bids since the last meeting, including:

- Trusted Bytes led by businesses in South Lincolnshire and the University of Lincoln, a £2.8m project to develop fully digital supply chains providing full traceability and integrating with government systems.
- A Centre for Food and Fresh Produce Logistics, developed by NCFM and Boston College working with the industry as part of the Boston Town Deal. This will now be developed into a full project, which aims to launch in spring 2022.

It was noted that the South Lincolnshire FEZ launch on 17th March 2021 attracted over 450 registrations and has directly led to a strong pipeline of enquiries. As a result all of phase 1 is now under offer and plots are being sold on phase 2 of the site. The Hub Building to

host start up SMEs has received planning permission and with funding in place will be operational by spring 2022.

It was noted that Prof Simon Pearson, Food Board member, has been appointed by government to co-chair a review of automation in horticulture with Rt Hon. George Eustice, Secretary of State for DEFRA. Simon would be keen to speak one to one with anyone in the industry who can offer insight and input to the review.

Action 2: Members to speak to Prof Simon Pearson if they can contribute to the horticulture automation review.

Main Meeting Items

2021/05/2 Low Carbon Food Chains

Three introductory presentations were given to set the scene for a workshop on how Greater Lincolnshire can develop its focus on Low Carbon Food Chains:

Duncan Botting, GLLEP Energy Board

- The UK is witnessing an energy revolution and the largest industrial decarbonisation challenge is on the Humber Estuary. Greater Lincolnshire also has the largest offshore wind farms and connections to Denmark's renewable sector.
- The area has the largest port in tonnage and links to national logistics networks – just in time capabilities become a challenge when by 2035 we need to terminate use of the combustion engine.
- The low carbon transition offers huge opportunities for Greater Lincolnshire, which can use local resources and capability to help lead this transition.
- The area has the largest hydrogen capability, offshore wind and distributed generation with AD stability on the grid in the UK. It is also planning the largest waste to energy operation and has a disused gas plant at Theddlethorpe.
- Ports offer the opportunity for ammonia production to transport clean hydrogen, and whilst the market is not yet developed, the UK's largest food transport hub located in South Greater Lincolnshire needs to lead the transition to Net Zero using EVs and green hydrogen fuels. Bringing the energy and food sector together can be transformational for both.
- Heating and cooling offers a large range of opportunities and provides connectivity between energy and the food industry. Food cost base is driven by the cost of energy.
- There is a need to build local area energy plans to support both the low carbon transition and to help major industry, such as the food industry, reinforce their position by developing low carbon supply chains.

Action 3: LEP to consider how best to unite the energy and food chain work, so that the area can take a leadership position on low carbon food chains.

Bruno Gardner, NFU EnZero (slides in annex 1)

- The NFU have committed the farming sector to achieve Net Zero by 2040
- This agenda also offers the potential for farmers to diversify their incomes with small scale renewables on farm or by developing larger scale options such as solar farms for grid export (now viable without subsidy).
- Farmers can also assist through the development of carbon and biodiversity offsetting, although both markets are currently uncertain and at a very early stage of development. The key issues are longevity, cast iron provenance and trust in the offsets and their measurement and audit.
- It is important to consider the whole food chain and scope 1, 2 and 3 emissions.
- Farmers are also keen to understand if they can 'stack' the benefits and revenues, e.g. by linking private sector revenues with new government backed schemes such as ELMS.
- Longer term soil carbon sequestration offers large potential benefits, but needs more development.

Mathew Smith, Alltech E-CO2 (slides in annex 1)

- Alltech believes that a whole supply chain approach is needed.
- E-CO2 is an Alltech owned tool for on farm assessment with 40 data points. It is linked to consultancy support so that farmers can go beyond measurement to understand what changes they can make to alter their carbon footprint. It also allows modelling of how changes to feed would impact their footprint.
- The tool is now moving to embrace a food chain focus, by working with McDonalds and supermarkets on multi-year (3-6 year) programmes. The long term commitment is needed to enable changes to be made, tracked and implemented.
- The language used is now changing from just carbon, to a focus on how carbon, productivity and business performance interacts. If you get this right then sustainability is not a cost, but is the same as profitability and will force you to focus on where improvements can be made.
- Alltech operates in 120 countries and E-CO2 is now active in 26 of these. It is also beginning to look at sequestration and biodiversity, with projects on this with for example the CoOp.
- In Greater Lincolnshire Alltech is working with the NFU to develop an audit and action focused programme to look at how to engage more farmers, through a pilot with 12 farms.
- Critical points are that:
    - Your carbon audit process has to link through to taking action on the results you get;

- Recognising that the EU will be legislating in 2021 on the claims which can be made on sustainability and that you therefore have to be able to prove any claims made.

2021/05/3 Workshop on Low Carbon Food Chains

The workshop was led by the University of Lincoln to seek feedback on the issues the industry is facing in delivering on this agenda, with the aim to identify a few (3-4) major themes which the LEP area should focus on.

Feedback from Board Members and Discussion:

- Businesses need to transit to low carbon because retailers are driving this agenda.
- Needs to cover whole food system.
- Already have the government benchmarks and a route map to net zero as a starting point, but industry remains to be convinced on the detail. A detailed roadmap is needed.
- UK GHG emissions are 550m tons per annum, of which 55m tons is food industry generated (10m tons within the farm system). There is scope to reduce emissions by 10m tons by addressing consumption/ dietary change and waste, and Greater Lincolnshire's food sector gives opportunity to solve that problem.
- The Emissions Trading Systems (ETS) programme is worth £1.5billion per annum, but is only available to sites with the largest emissions and thus does not include the food chain.
- NCFM are mapping the food chain to understand its emissions.
- Larger companies are all working on this challenge, but how do we get 5,000 farmers and 3,000 SMEs in Greater Lincolnshire to work on this challenge?
- James Arnold – as a company we are not reliant on local agricultural production but source from across the world. This is challenging as it is hard to control the supply chain beyond our boundaries. Transport emissions are a key area of concern which needs more action. What can we effect locally around emissions and the energy for manufacturing? We do need to try to influence global supply chains but these are very different in India, China etc.
- James Truscott – on the Net Zero journey we can relatively easily work out how to get half way to the target within the company, but it is much more difficult in the wider supply chain, for example the transport element is entirely dependent on other businesses. It would be good to position the LEP to attract pilots and to do early work on net zero with a whole supply chain focus (i.e. including cool chain and transport).
- Hugo Marfleet – larger companies are working on Low C, but there is a real challenge to embrace SMEs in their, often international, supply chains.
- Neal Collishaw – farm adoption of Low Carbon technologies is very mixed and those working in this field are very busy as more businesses seek to embrace this area.

Worldwide Fruit, as with others, have to develop this agenda internationally to cover imports as well as UK production. A key area for local action is to focus on the cool chain and transport, as this is cross cutting and impacts most businesses in the sector - this is an area in which Greater Lincolnshire could lead.

- Mark Suthern – UK financial institutions are all struggling with how do we measure emissions especially for SMEs. Greater Lincolnshire could lead on how we develop carbon footprints for SMEs.
- Duncan Botting - we must not underestimate the challenges of bringing issues together and the auditability of carbon credits. Greater Lincolnshire could be a testbed.
- Mark Swainson – it would be useful to develop a GLLEP refrigeration group to work on cool chain emissions, building on initial work in Grimsby.
- A collaborative hub approach to cold storage and logistics could help efficiency, but there can be difficulties with commercial sustainability. It would need retailer support and the Board should seek to engage them in this debate.
- Rhonda Thompson – NFU on the cusp of producing baseline data with Alltech project. Want to see carbon savings made through education and process improvements and not by taking good farming land out of use.
- James Dallas – the whole momentum of change is away from farm subsidies and the SFI is going to lead to further changes in how land is farmed. In the arable sector it will be vital to get large numbers of farmers to work together.
- Duncan Worth - a key target has to be get the many SMEs in our supply chains (e.g. farmers) working together with the supply chain. There is a need for a common baseline and standards as at the moment many differences exist.

Suggested Key Themes:

Based on this discussion the following three themes for initial Greater Lincolnshire led actions (innovation, skills and infrastructure projects) on Low Carbon Food Chains are proposed:

1. Logistics and Cool Chain:
    - Need for end to end supply chain view of Low Carbon;
    - Transport and logistics is an area which many businesses feel it is hard for them to directly impact. However, it is a critical issue and it is an area where there is pre-competitive space to bring multiple businesses together;
    - Cool chain, either as a separate issue or as part of transport, is another area where we need to take action with pre-competitive potential. Refrigeration and the need for a 'revolution in cold storage' are key areas of need;
    - A key question is how can we link all of this to the Greater Lincolnshire focus on low carbon energy and sustainable transport transition?

2. Supply base transition to low carbon:

    - Farmers and other SME food businesses in the supply chain need to collaborate on delivering low carbon. We need to work with the supply base to both set the baseline and work out how to reduce the supply base footprint, but don't yet understand how to do this effectively;
    - International supply base carbon emissions are hard to work out and many supply chains are struggling to understand what they can do with their international supply chains. Global food supplies are a major input to much of the food processed in Greater Lincolnshire;
    - A key question for large companies is how to work with the SMEs in their supply base to deliver lower carbon transition in their supply base both in the UK and internationally.

3. Standards and baseline:

    - Many food businesses are struggling with different end customers wanting to do their carbon footprint in a different way – whilst standards like PAS 2050 exist, the way it is being applied in industry is not standardised and this creates a fear that any claims can be challenged, consumers will lose trust, different changes to practice will be prioritised by different supply chain partners etc.;
    - It was also reported that some good practice is not being measured;
    - There is also some confusion about how you commercialise carbon and what the market will pay for (via food, offsets, government support etc.);
    - There is enthusiasm to work more on the standards question and how these could be developed along the whole supply chain (the work NFU and Alltech are doing will help on this for agriculture in Greater Lincolnshire).

In addition to these three priority project themes, it was noted that action on low carbon food chains also requires action on:

- Dietary change, but recognising that much of this is commercial IP and market focused, there is some degree of limitation on which aspects of this are in the pre-competitive space where collaboration needs to be focused;
- Waste as a cross cutting theme and way to address carbon reduction.

Action 4: Board members to comment on the suggested three Low Carbon Food Chain themes and, if appropriate, to volunteer to help lead work on these areas supported by the LEP and University of Lincoln.

Action 5: NCFM (Wayne Martindale) to work with the LEP to discuss how best to map the UK Food Valley and its carbon emissions.

2021/05/4 Alltech ONE Ideas Conference

Members were briefed on the opportunity to attend the Alltech ONE conference week commencing 25th-27thMay.

2021/05/5 UK Food Valley and HPO

It was reported that work on the UK Food Valley is progressing with major bids submitted to the Community Renewal Fund 2021-'22 to support development of the programme, with a decision on funding expected by July 2021.

UK Food Valley Communications are being developed with designers working on branding and an initial website. Members were encouraged to continue to send news stories to the LEP, which can be used in the monthly food newsletter and on the website.

It was noted that the DIT High Potential Opportunity for Greater Lincolnshire Food Processing and Technology Cluster will be launched with overseas DIT posts on 27th May, with the intention to attract inward investors to the areas (both food processors and the technology companies who support the sector).

It was noted that a Food Sector Investment Proposition has been produced by the LEP and Greater Lincolnshire County Council and is available to download at: Agrifood Sector Proposition Brochure | Greater Lincolnshire LEP

2021/05/6 AOB

It was agreed to alternate between face to face and virtual meetings for future Board meetings, but to remain flexible so that the format fits with the agenda being discussed.

Members were encouraged to come forward with ideas for speakers and topics for future meetings.

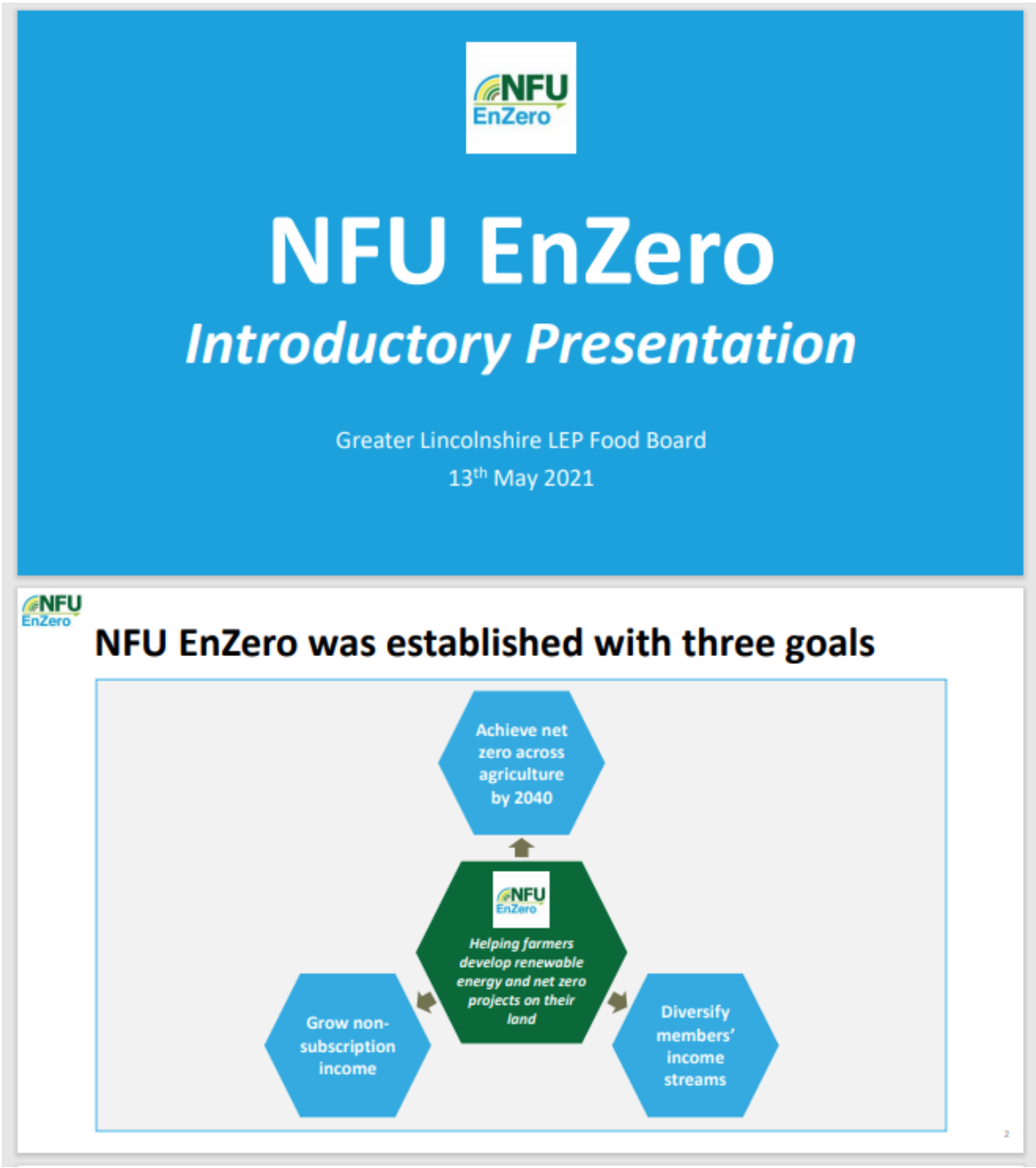
2021/05/7 Future Meeting Dates

Future meeting dates were noted as:

- 12th August 2021 4-6pm, including a subsequent evening visit to University of Lincoln AgriRobotics and digital centre at Riseholme. Potentially this will include some retailers.
- 17th November 2021 4-6pm online

Annex 1 - Slides Presented

Bruno Gardner, NFU EnZero:



We are focusing on three distinct propositions

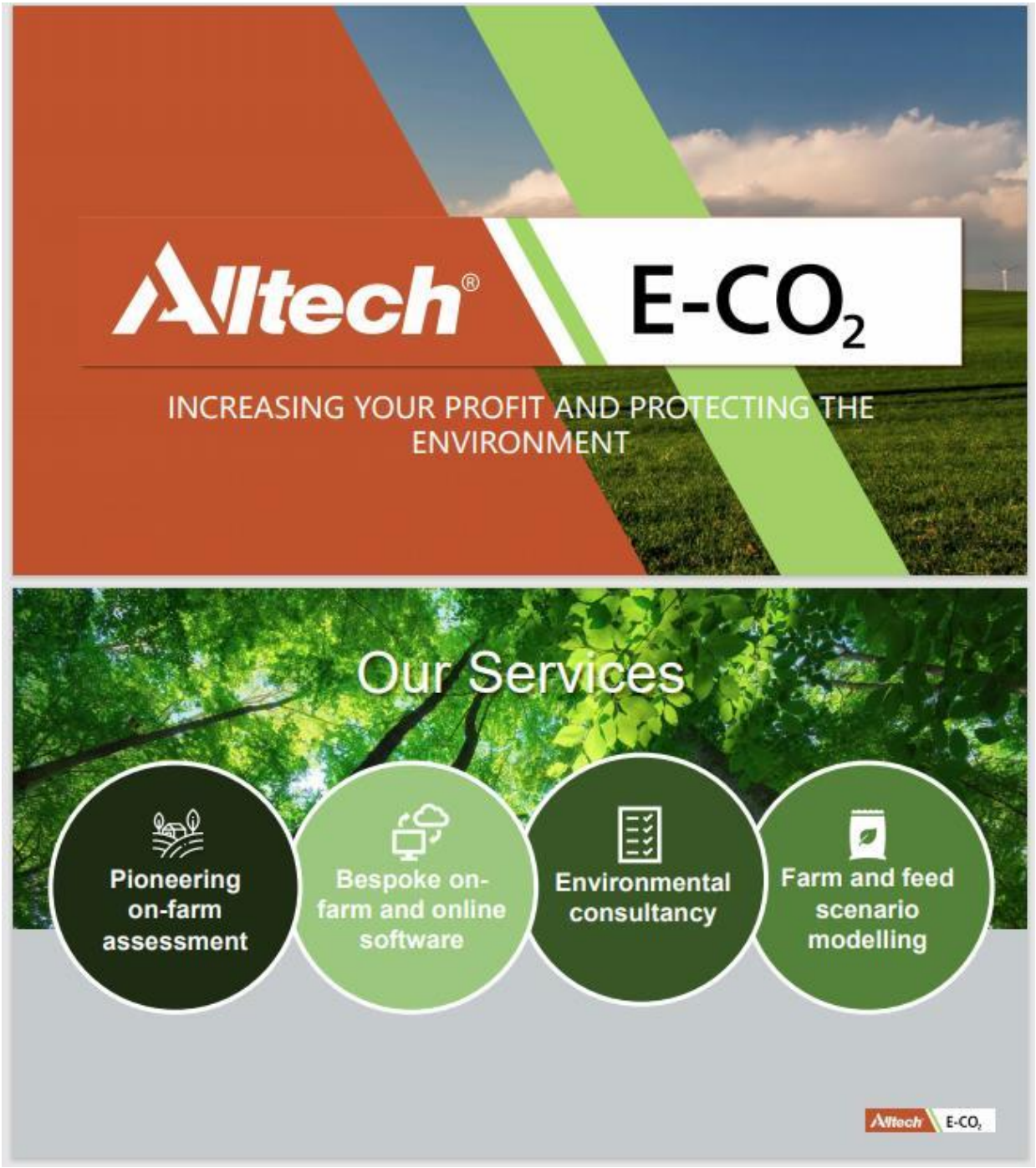
1 Small-scale renewables	Helping farmers install small-scale renewables for onsite consumption	
2 Large-scale renewables	Helping farmers develop large-scale renewable energy projects for grid export	
3 Offsetting	Helping farmers develop and sell carbon and biodiversity offsets	

It is currently unclear how offsetting markets will develop, and what role farmers will play

- What expectations will supermarkets and food processors places on farmers to reduce their Scope 1 and 2 emissions, and what implications will this have for farmers' ability to monetise offsets from their land?
- To what extent will the ELM Scheme allow farmers to 'stack' revenues from multiple sources for different actions on the same land?
- What needs to happen for less-established natural capital solutions such as soil carbon sequestration to become widely acceptable and economically/operationally viable?
- How much demand will there be for UK-based offsets, and how will this compare to the potential supply?

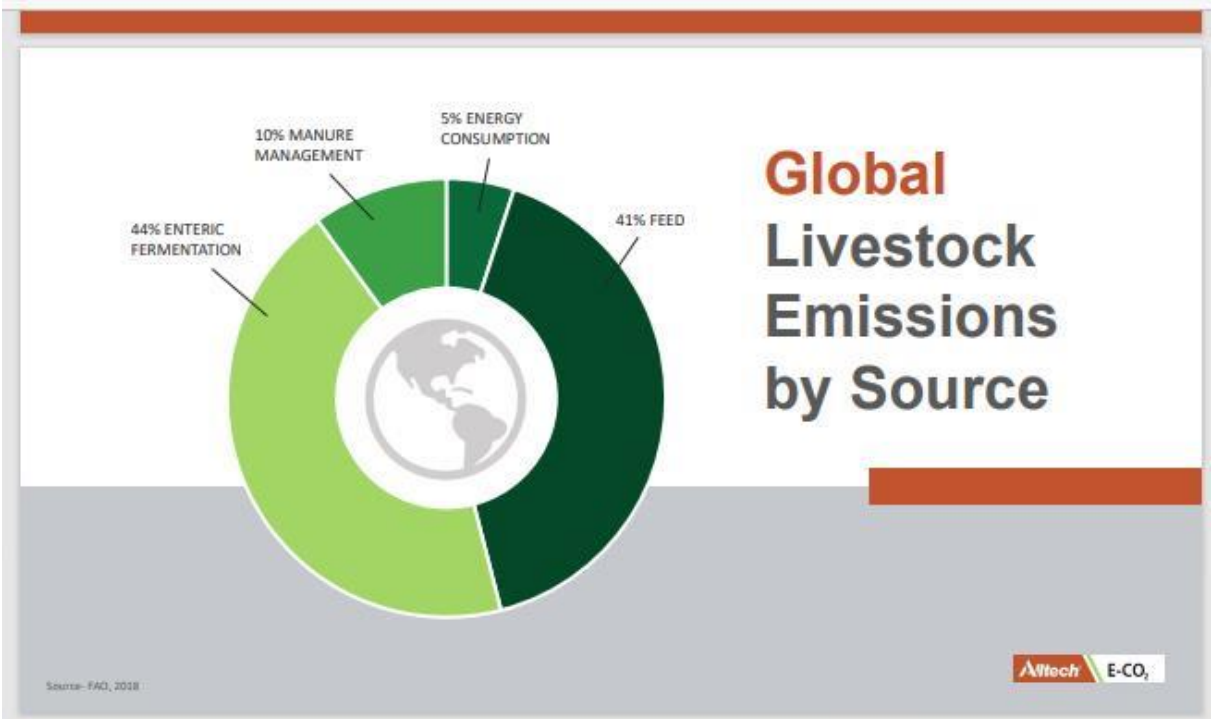
Answers to these questions will materially influence how carbon and biodiversity offsetting markets develop, and the role farmers – and the NFU – will play in them

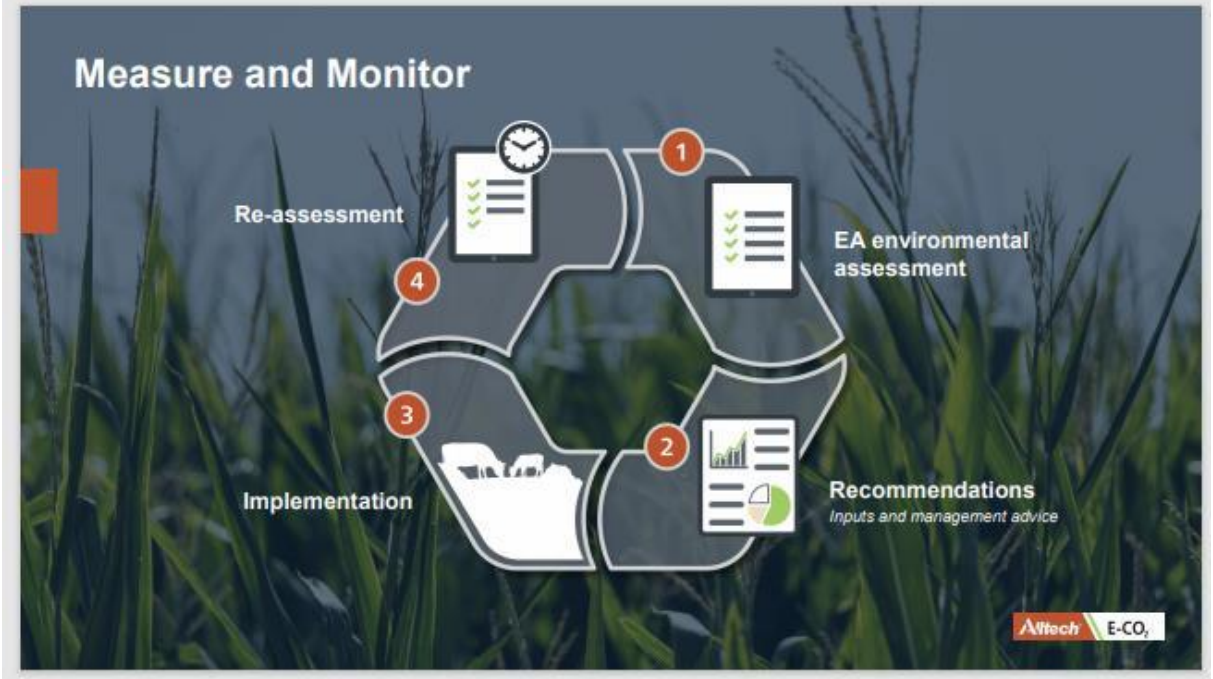
Matthew Smith, AllTech

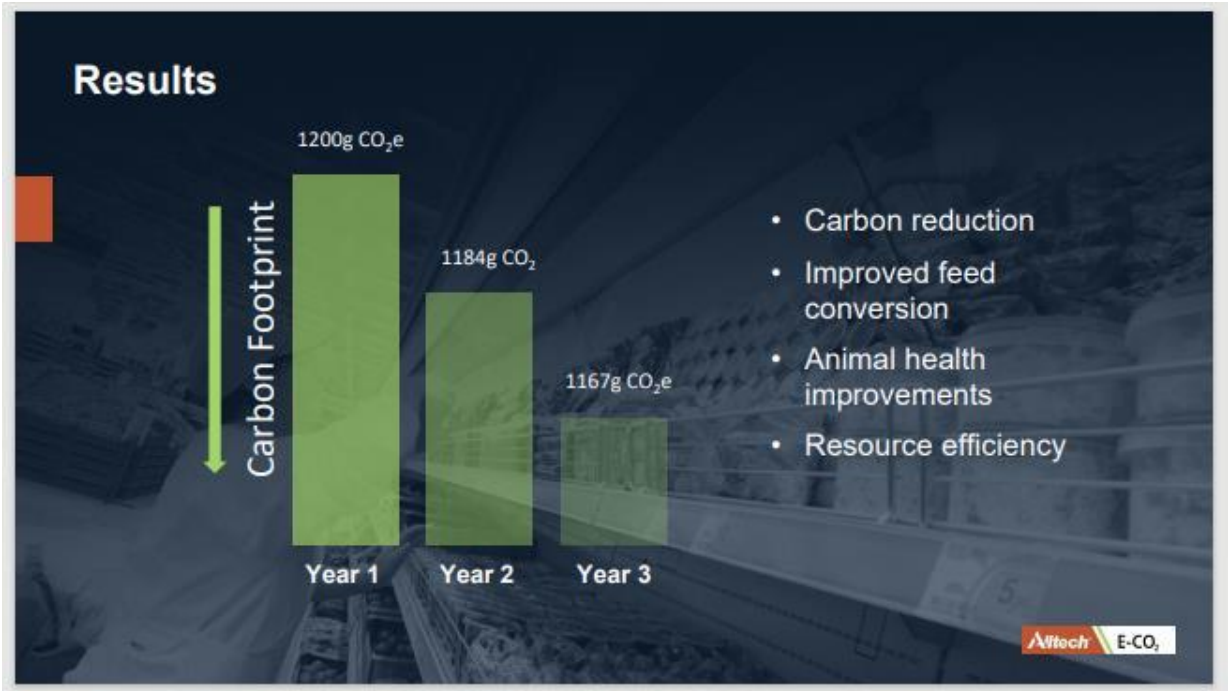


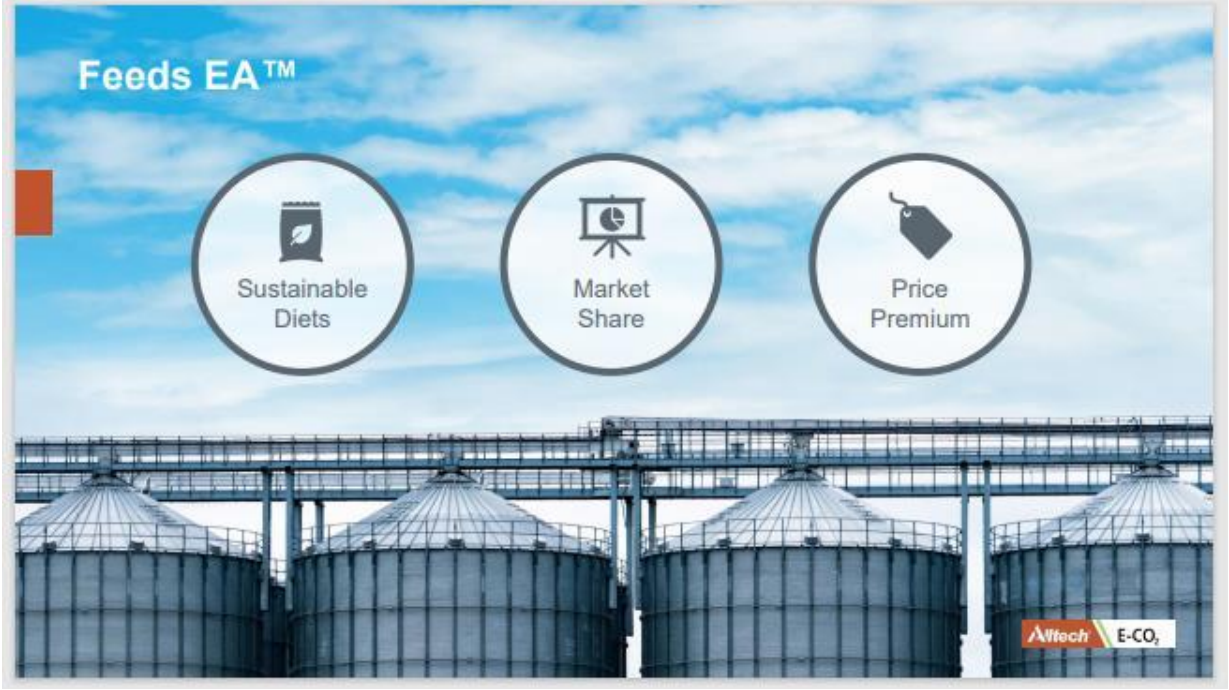

Methodology and Accreditation
• PAS:2050 methodology
• Accredited by the Carbon Trust
CARBON TRUST
CARBON TRUST
Alltech E-CO2


Who we work with
KEPAK
TESCO
COVAP
dlg


5% ENERGY CONSUMPTION
10% MANURE MANAGEMENT
41% FEED
44% ENTERIC FERMENTATION
Global Livestock Emissions by Source
Source- FAO, 2018
Alltech E-CO2


Measure and Monitor
1
EA environmental assessment
2
Recommendations
Inputs and management advice
3
Implementation
4
Re-assessment
Alltech E-CO2


Results
1200g CO_2e
1184g CO_2
1167g CO_2e
Carbon Footprint
Year 1
Year 2
Year 3
• Carbon reduction
• Improved feed conversion
• Animal health improvements
• Resource efficiency
Alltech E-CO_2


Feeds EA™
Sustainable Diets
Market Share
Price Premium
Alltech E-CO_2

Feed Additives

- Range of Carbon Trust endorsed solutions
- Focus on development of product LCAs
- Custom scenarios to measure the benefit of Alltech solutions on farm

YEA-SACC® | OPTIGEN® | MYCOSORB® A+ | KEENAN

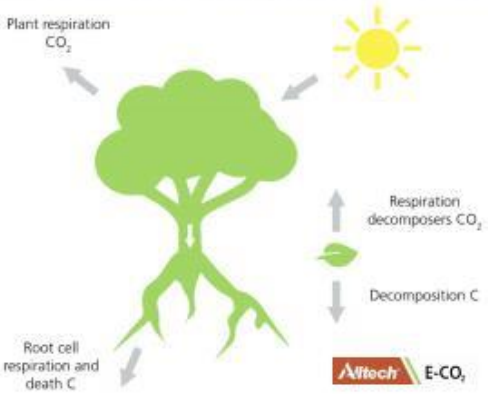
Alltech E-CO$_2$

Sequestration

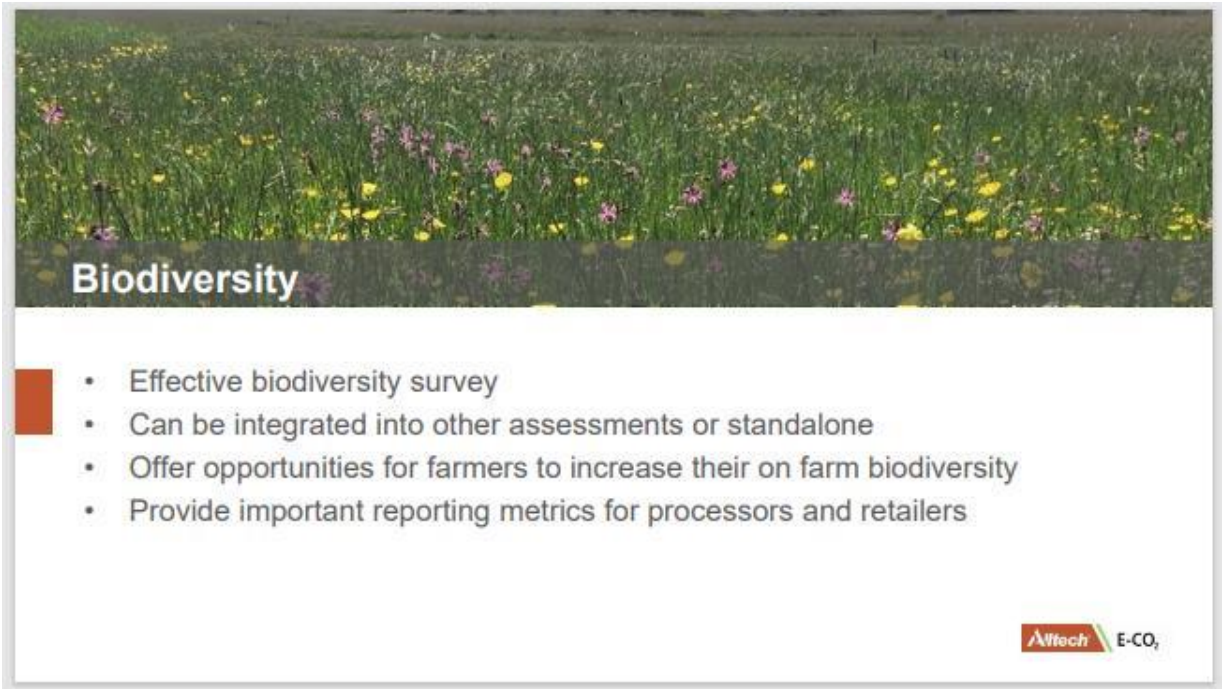
Carbon sequestration is a process by which carbon dioxide is removed from the atmosphere and held in solid or liquid form. We have developed our model to focus on the natural processes of sequestration by:

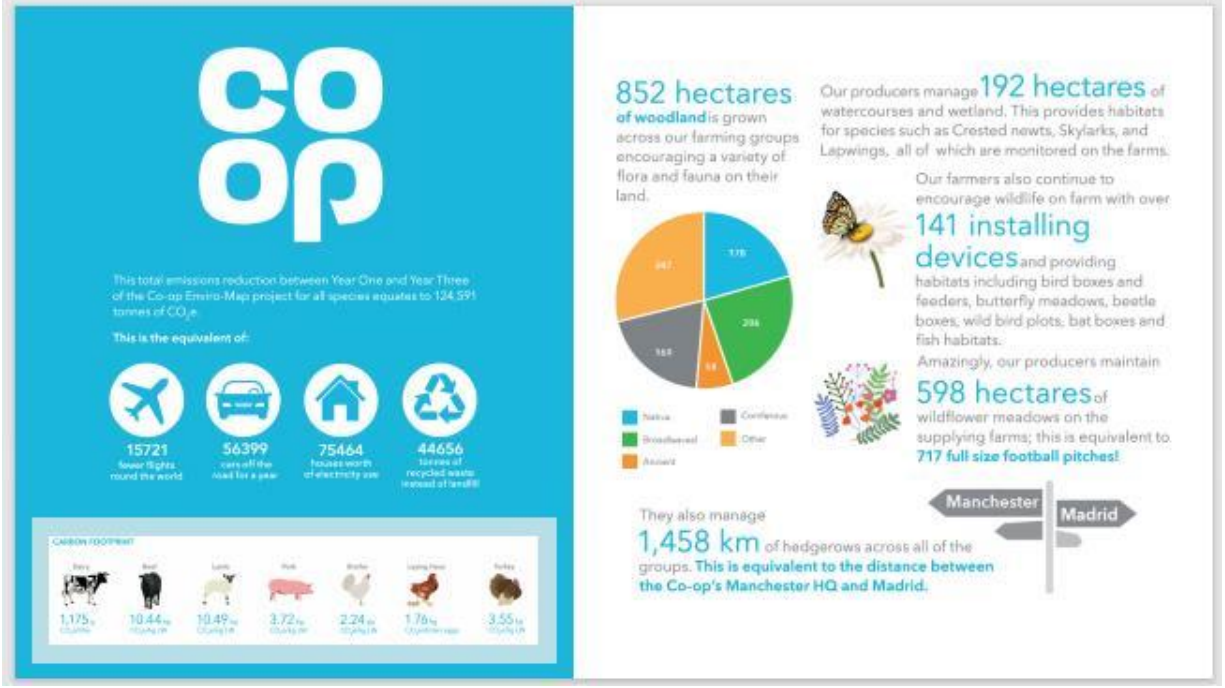
- Grassland
- Woodland
- Wetlands

Carbon itself is stored, it can be stored in living vegetation (trees, grass etc), or it is stored in the soil as soil organic carbon (SOC). SOC makes up around 80% of the terrestrial store of carbon.



Alltech E-CO$_2$


Biodiversity
Effective biodiversity survey
Can be integrated into other assessments or standalone
Offer opportunities for farmers to increase their on farm biodiversity
Provide important reporting metrics for processors and retailers
Alltech E-CO2


co op
This total emissions reduction between Year One and Year Three of the Co-op Enviro-Map project for all species equates to 124,591 tonnes of CO2e.
This is the equivalent of:
15721
56399
75464
44656
852 hectares of woodland is grown across our farming groups encouraging a variety of flora and fauna on their land.
Our producers manage 192 hectares of watercourses and wetland. This provides habitats for species such as Crested newts, Skylarks, and Lapwings, all of which are monitored on the farms.
Our farmers also continue to encourage wildlife on farm with over 141 installing devices and providing habitats including bird boxes and feeders, butterfly meadows, beetle boxes, wild bird plots, bat boxes and fish habitats.
Amazingly, our producers maintain 598 hectares of wildflower meadows on the supplying farms; this is equivalent to 717 full size football pitches!
They also manage 1,458 km of hedgerows across all of the groups. This is equivalent to the distance between the Co-op's Manchester HQ and Madrid.
Manchester
Madrid


Planet of Plenty™