LIFE Carbon Farming

Newsletter #8- September 2025

Welcome to the eighth issue of the Irish newsletter for LIFE Carbon Farming.

This issue highlights the 3rd EU LIFE Carbon Farming networking event in Grange, Co. Meath, Ireland, the DAFM agriculture and climate conference - 2025, and a notable event scheduled for the last quarter of this year. We outline the topics discussed at these events and the dairy and beef farms visited.

European LIFE Carbon Farming Networking - Ireland

Participants pictured at LIFE Carbon farming seminar at European Commission Centre in Dunsany

Day 1: Morning session - Seminar

The third European networking meeting of LIFE Carbon Farming convened the six partner countries of the project - France, Ireland, Spain, Belgium, Germany, and Italy – in Trim, Co. Meath, Ireland, from June 23-25, 2025. The 3-day event brought together farmers, advisors, policy actors, and industry at the European Commission building in Grange, Ireland, where the morning session was dedicated to a series of presentations related to carbon farming and emission reduction. Dr. Paul Crosson, Head of Enterprise at Teagasc Grange commenced the morning session with a presentation on the Irish agricultural sector, particularly the beef sub-sector, highlighting the aim and mission of the Teagasc Animal and Grassland Research Centre. Emmanuele Paolo Sicuro, a representative of the European Commission (EC), followed with a talk on the EU carbon removal and farming certification framework to limit climate change. His presentation gave details on the scope of the certification framework from soil emissions reduction to permanent carbon removals from the atmosphere using technologies such as biochar. One interesting development in the CRCF framework is the potential inclusion of livestock, which encompasses reducing emissions from enteric fermentation and manure management.

In addition, Emmanuel described current activities of the EU expert group on carbon removal, and a report on the implementation of carbon removal and carbon farming (CRCF) actions, which is due to be completed in 2026.

Bernard Harris, DAFM, discussing the development of a National Carbon Farming Framework for Ireland

Bernard Harris, from the Department of Agriculture, Food and the Marine (DAFM), continued with a description of Ireland's efforts to develop a national framework for carbon farming initiatives. This framework expects to expedite the mitigation of greenhouse gases and the sustainability of farm businesses. He noted that since the introduction of the CRCF framework by the European Commission, Ireland has been developing and implementing action plans to meet its climate targets, for example, lowering total greenhouse gas emissions from agriculture by 25% by 2030 compared with 2018 levels.

Dale Crammond, Director of Meat Industry Ireland (MII), followed up with a discussion on sustainability initiatives currently underway in the meat industry to ensure the efficient production, processing, and marketing of quality meats. Dale outlined targets adopted by the cattle sector to reduce emissions, including lowering the finishing age of livestock to an average of 22-23 months by 2030, improving calving rates, and decreasing age at first calving.

He also elaborated on the various collaborative efforts with key stakeholders like Bord Bia and the National Biodiversity Data Centre, to promote a comprehensive approach to advancing the sustainability of the meat sector.

Project co-ordinator, Anaïs L'Hote (Institut de l'Élevage) discussed the progress and early results from the LIFE Carbon Farming initiative. Anaïs highlighted the completion of the first carbon audit of the farms, elaborated on current project activities, and emphasized the importance of developing a reliable certification system.

Anaïs L'Hote, IDELE, delivering a talk on the progress of LIFE Carbon farming and baseline results

She drew attention to the current state of Label Bas Carbone (LBC) via a study conducted by the Institute for Climate Economics (I4CE), which was presented as an example of a carbon credit certification program in France. The study highlighted the potential of tillage projects and Carbon Agri-projects to reduce GHG emissions and sequester carbon by approximately 1.30 $tCO_2eq/ha/year$ and 1.13 t $CO_2eq/ha/year$, respectively. Further highlights presented were the strengths of the LBC certification system:

a. LBC is valued for quality, balancing requirements with transaction costs.
b. 'Framing' methods reduce bias, aid project review; LBC faces competition from parallel private standards.

c. Agriculture and forestry transitions need added tools, with LBC serving as a testing ground.
d. Project transferability and delisting.

Some limitations of LBC:

1. Clarify on certificate types: direct reductions, absorptions, and indirect reductions.
2. Issue with readability and consistency of co-benefit grids.
3. Unable to promote systemic agricultural transitions.
4. Unclear position of LBC regarding financing transitions via insetting model within value chain and beyond.

Anaïs' presentation included an overview of the current state of the voluntary carbon market:

- Trust challenges: Recent controversies have discredited carbon credits in some markets, raising doubts and uncertainty.
- Agrifood hesitation: Many companies remain reluctant to commit due to double-counting risks, opting instead for sector-specific premiums.
- Clarifying rules: Greater clarity is needed on offsetting, and insetting. LBC is developing product-level allocation methods to align with the Science-Based Targets initiative (SBTi) and the GHG Protocol.
- Regulatory push: Stronger policy incentives are required to accelerate adoption.
- Agricultural hurdles: Companies often struggle to understand agricultural complexities, finding it easier and cheaper to support forestry projects instead.

She emphasized that the LIFE Carbon farming project is contributing to reducing emissions across the six nations and a strategy is being developed to pilot the initiative across the EU.

Finally, George Ramsbottom (Teagasc) and Niamh Bambrick (Bord Bia) presented the role of the Signpost Programme and Origin Green in supporting carbon farming in Ireland through the digital sustainability platform, AgNav. Niamh explained that the introduction of Origin Green and the signpost programme, with the support of AgNav, has significantly improved farm record keeping, sustainability assessments, and quality assurance auditing. These outcomes enable Ireland to position livestock products in high value markets due to their quality and responsible production. George opined that despite the significant improvement, there exists a challenge with the adoption of a few sustainable practices introduced by Teagasc. This challenge is expected to be tackled with increased training and encouraging peer-to-peer learning among farmers.

Tour of Teagasc Animal Research, Grange

The afternoon session kicked off with a visit to Teagasc's research facilities in Grange that are dedicated to beef production. The research team, alongside the group, led a tour of the experimental farm showcasing pasture and herd management practices.

Key highlights from on-site observations:

➡ Silage made from a ryegrass–clover mix delivers higher weight gain per animal compared with pure ryegrass silage.

➡ Steers on ryegrass-clover silage can achieve earlier slaughter age, ahead of the current Irish average.

➔ Teagasc is leading multiple research initiatives to reduce enteric methane emissions, including:

- Using green feed to measure emissions
- Testing feed additives derived from algae or oils (e.g., linseed, rapeseed)
- Evaluating methane inhibitors such as Bovaer
- Exploring calcium peroxide (30% emissions reduction potential, with strong potential for Irish farming systems)

Day 2: Farm visits

On day two of the network, participants visited beef farms located in Co. Offaly and Co. Meath, specializing in suckling and fattening of cattle, respectively. The first farm was split into 2 blocks, covered 127.84 ha and had a carbon footprint of 9.14 kg CO_2eq/kg beef in 2023. Discussions focused on grassland management and financial incentives necessary for emissions reduction and optimum productivity. A notable feature on the farm is the use of Eddy Covariance technology for measurement and monitoring of fluxes between the land and the atmosphere. By tracking variations in wind speed alongside CO_2 and CH_4 concentrations, this technique enables the collection of valuable data on:

- Carbon uptake via photosynthesis
- Ecosystem respiration
- Methane emissions

A photo of Eddy Covariance tower measuring CO_2 flux during the farm visit

Kepak Farm was the second farm visited, a large-scale beef farm situated on 320 ha with a large area used for crop production. Annually, the farm finishes approximately 3,500 cattle and has an average carbon footprint of 9.68 CO_2eq/kg LW.

The farm serves as a knowledge transfer hub for farm suppliers, customers, and industry stakeholders. Key areas of focus include herd health and welfare, crop and grassland management, efficiencies and meeting market specifications, breeding and genetics, and carbon footprint and sustainability. This prompted thoughtful reflection among the visiting farmers and advisors, offering them an understanding of Irish beef farming.

Day 3: Farm visit and closing session

The final day of the workshop was dedicated to a visit to Michael McGuigan's Blackwater Farm in Longwood, Co. Meath. This farm has about 24 ha, specialising in a suckling production system. Michael discussed a few actions implemented to reduce the farm's carbon footprint, including

- Lowering age at first calving
- Reducing slaughter age
- Improving genetics for better productivity
- Optimising grassland management

- Planting of hedgerows, even along the riverbanks, to protect water quality and support biodiversity.

He highlighted that these actions provide financial advantages as well, making them a win-win for sustainability and profit. The farm visits and seminar created space for knowledge sharing, particularly among farmers, advisors, and policy makers, and sought to drive a holistic effort toward building agricultural resilience and sustainability.

2025 Agriculture & Climate Change: Science into Action Conference

The Department of Agriculture, Food and the Marine (DAFM) organised the 2025 Agriculture and Climate Change conference, which took place on Thursday, 5th June 2025, at Dublin Castle. A key feature of the conference was the scientific evidence supporting the sustainability credentials of agriculture, with an emphasis on livestock systems and the need to build resilience in the face of climate impacts. Speaking at the conference, Martin Heydon T.D., Minister for Agriculture, Food and the Marine, said, "farmers can't go green, if they're in the red". This suggests that to go green, farmers need a roadmap rooted in robust science, one that stacks up economically and environmentally. He further stated that conferences such as this are a clear signal of the government's commitment to both climate action and the future of Irish agriculture, serving as a forum for knowledge exchange, showcasing cutting-edge research, and ensuring it informs practical farming solutions and future policy development.

During the conference, Professor Peter Thorne presented on 'IPCC Synthesis Report – the key things you need to know'. In his presentation, he highlighted 7 key points:

1. Climate change since the late 19th century - It's entirely us. Not a little bit. All of it.
2. We are already feeling the effects of climate change, and those least responsible are most vulnerable.
3. Things will get rapidly worse if we do nothing.
4. Keeping climate change at 1.5°C with minimal or no overshoot requires: everything, everywhere, all at once.
5. We have the technologies, tools, and policy instruments to act, and many return money to our pockets.
6. Not acting on climate makes acting on everything else that matters to us much harder.
7. Climate change is personal to all of us.

Human-driven activities continue to accelerate global warming, intensifying its effects on both natural and human systems worldwide, with the greatest burden falling on those who have contributed the least to the problem. Additionally, keeping climate change at 1.5°C depends on choices now and in the near term.

Professor Conor Murphy, a lecturer in the Department of Geography, Maynooth University, followed with a discussion titled '*Climate Change and Irish Agriculture – from impacts to adaptation'* which conveyed four important messages:

1. Climate Change is happening; the signal is discernible in Ireland.
2. The agricultural sector is vulnerable and must adapt.
3. Future impacts will be more severe, how much depend on future greenhouse gases.

4. A climate-resilient Ireland needs a resilient and well-adapted agricultural sector.

Conor stressed on several key impacts from climate change including shorter grass growing season, animal heat stress, drought, trafficability, livestock diseases, and erosion, which necessitate a resilient and adaptable approach to maintaining the future of Irish agriculture and the economy. Accordingly, a well-adapted approach must include well-defined objectives, an understanding of social dimensions, a decision-making technique particularly under uncertainty and avoiding lock-in and maintaining flexibility.

Among the presentations, Stephanie Preston, Director of Programmes, Policy & Trade, New Zealand Ministry for Primary and Industries, presented on *Agriculture emissions trends and climate policy in New Zealand*, highlighting the role of agriculture in driving emissions down and the need for sustainable livestock production. Stephanie's discussion primarily pointed out that though agriculture contributes about 53% to the country's total emissions, several measures are being implemented to reduce emissions, including reduced use of synthetic fertiliser and a change in land use. These measures continue to drive emissions downwards since 2020, from a steady progression from 2014. Interestingly, New Zealand operates an emission trading scheme, which offsets 25% of its emissions through carbon farming approach. The key driving factor of this initiative is the price of carbon, which is about €49 ($100 (NZD)).

The conference concluded with a panel discussion on the progress made in line with climate efforts, threats, and opportunities necessary for the sustainability of Irish agriculture. Professor Frank O'Mara, Director of Teagasc, emphasized that over the years, his organization has been identifying challenges, offering and communicating innovative solutions, and providing support to farmers. However, there is a need for greater adoption of sustainable practices to improve financial performance while limiting environmental impacts. These factors are necessary to ensure the sector is progressive and economically attractive, and socially sustainable. For more information on the event, visit the DAFM website here.

Upcoming Events

The next EU networking of LIFE carbon farming will be held in Cordoba from November 3-5, 2025. The event will gather advisors, researchers, farmers, and policy actors from across the consortium. The activities of this event will include farm visits, seminar presentations by researchers and industry actors, and short testimonies from project participants.

See you in the next issue

Newsletter compiled by Bright Ketadzo and edited by Dr. Donal O'Brien, Teagasc, CELUP, Johnstown Castle, Co. Wexford.

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- LIFE Carbon Farming Ireland
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