



**LIFE Carbon Farming
Newsletter #6- February 2025**

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

In this issue, we highlight events that took place in the fourth quarter of 2024 and describe action plans adopted by Future Beef farmers as well as events related to limiting the contribution of the livestock sector to climate change.

Future Beef Stakeholder meeting



Beef Stakeholders discussing Farming for Water EIP on the Future Beef farm of John Dunne

In the last quarter of 2024, the Teagasc LIFE Carbon farming project team visited the Future Beef farm of John Dunne in Portarlinton, Co. Offaly. John runs a suckler calf to beef system and rears crossbred beef calves sourced from dairy herds. He maintains about 460 animals on a 128 ha that is divided into two blocks. The farm is bounded by the river barrow, which serves as a source of drinking for the local community. John Dunne's farm is one of 24 Irish beef farms implementing various actions targeted at reducing farm emissions. According to Bernard Doorley, a local Teagasc advisor, John is one of the beef farmers successfully collaborating with Teagasc protocols and sustainability initiatives.

Currently, John's farm records a carbon footprint of 9.5 Kg CO_{2e}/kg beef LW, as compared to the project target of 8 Kg CO_{2e}/kg LW for his farm. To reduce emissions, John has adopted several

actions, including reducing age at first calving, better calving rate, use of protected urea, increase soil P, and hedgerows management. These actions are expected to contribute to an emission reduction of approximately 99-149 tonnes by the end of the initiative in 2027. Other discussions touched on the various measures under the Farming for Water EIP – European Innovation Partnership, which supports farmers in priority areas for promoting actions such as stream fencing, hedge and tree planting, fenced margins, and alternative water supply to enhance environmental sustainability. A number of stakeholders from Teagasc, including Martina Harrington and Aisling Molloy (Future Beef Program), meat processors, and a local biodiversity officer among others, attending shared various perspectives on environmental protection and sustainability.

2024 Signpost Conference and General Assembly

The Signpost conference occurred on November 21, 2024, bringing together Signpost farmers, researchers and industry partners. The conference began with a keynote address from the Director of Teagasc, Professor Frank O'Mara, who emphasized that farmers are more likely to adopt new practices when they see clear benefits for their businesses. He also stressed that achieving long-term solutions requires sustained efforts from all stakeholders in the sector. Discussions on weather trends highlighted that global climate change has led to a 0.7°C rise in temperature in Ireland over the past 30 years and led to higher rainfall and extended sunshine. The Signpost farms significantly progressed amidst these changes especially with implementation of emission reduction technologies such as application of low nitrogen fertiliser, use of low-emission slurry spreading, and use of protected urea. The benefits of these technologies was reflected in the output of the winner of 2024 Walsh family dairy farmer, whose carbon footprint was 0.81 kg CO₂eq/kg fat and protein corrected milk and whose nitrogen balance was 80 kg N per hectare. Other highlights from the conference are outlined below:

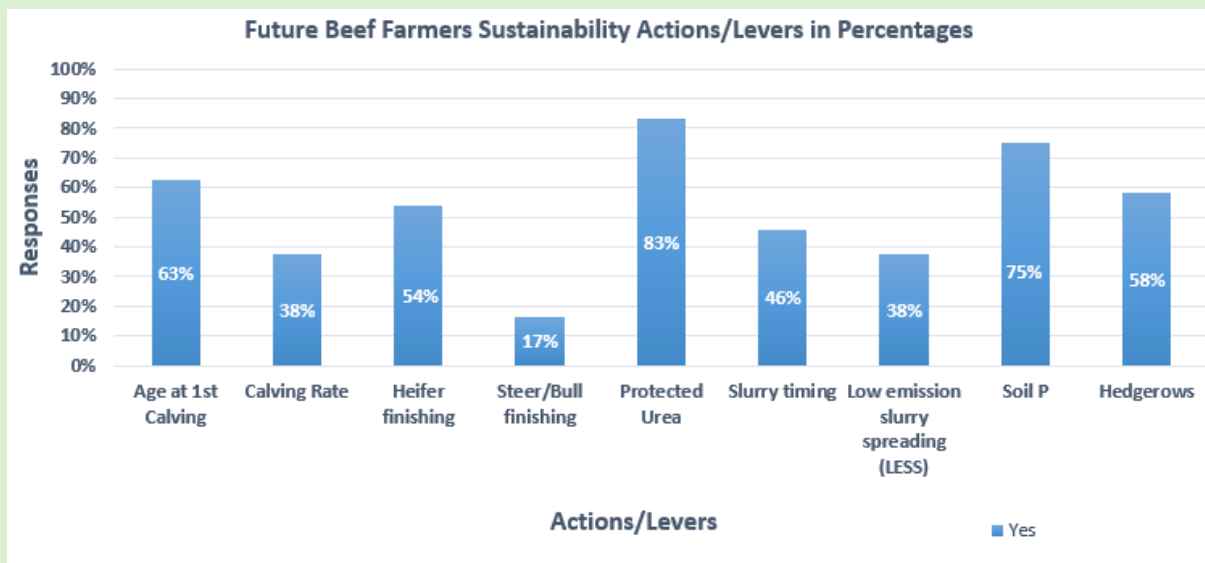
1. Lowering the finishing age of beef animals is essential for meeting our GHG reduction targets. Although significant progress was achieved over the past decade, this advancement stalled in 2023 and hence requires refocus.
2. Teagasc research on Signpost farms found that grassland soils generally holds more carbon than tillage soils. Deeper soil layers (up to 60 cm) potentially stores 20-

30% of the total soil carbon. Generally, soils on Signpost farms contains more carbon than typical Mediterranean soils, ranging from 48 to 199 tonnes per hectare.

3. Less intensive management of hedgerows and promotion of tree planting are expected to enhance habitat quality and boost carbon storage on Signpost farms. To track progress, biodiversity and carbon sink levels are being measured using a mapping technology deployed by Teagasc.
4. Cover crops are delivering positive results in terms of soil carbon and reducing nitrate leaching. However, the new support schemes, such as Farming for Water EIP and ACRES, are necessary incentives that will offer additional benefits.

Twelve Steps to Reduce Gaseous Emissions on Irish Farms

Agriculture’s contribution of 37.5% to total greenhouse gas emissions in Ireland necessitated the development and implementation of 12 practical steps to reduce gaseous emissions on farms in a sustainable way. These include the use of protected urea, lime application, the use of low-emission slurry spreading (LESS), maintaining soil fertility, reducing chemical N by 10 kg/ha, grassland management, animal health management, herd management, better calving rate, reducing age at first calving, reducing age at slaughter, and clover incorporation. So far, the top 5 actions adopted from the 12 actions by the Future Beef farmers participating in Life Carbon farming are protected urea, soil P, age at 1st calving, hedgerow planting, and heifer finishing, as shown below. These actions are set to improve climate sustainability goals and ultimately reduce greenhouse gas emissions.



Carbon actions selected by Irish farmers to reduce carbon footprint of beef production

EU Regulations on Carbon Removal & Carbon Farming (CRCF)- (EU/2024/3012)

The EU has released the carbon removal and carbon farming (CRCF) legislation that will guide and foster its goal of achieving ‘Fit for 55’ by 2030 and climate neutrality by mid-century. The regulation focuses on establishing a voluntary EU certification framework that will foster carbon farming, carbon removal, and storage. The EU CRCF is set to promote the adoption of high-quality carbon removal and soil emission reduction practices while supporting the EU’s biodiversity objectives, complementing wider emission reduction efforts across all sectors. The storage of carbon in soil and other effective mediums guided by the EU regulations is a potential gain for sustainability and economic benefits. Read more about [EU regulations here](#).

UPCOMING EVENT

The second European Carbon Farming Summit is scheduled for March 4-6, 2025, in Dublin, with the goal of **Putting Carbon Farming into Practice**. The meeting will gather various participants, including farmers, policymakers, researchers, and industry players for high-level conversation necessary for resilient carbon farming policies and rewarding mechanisms. The event aims to facilitate knowledge sharing and the exchange of innovative ideas for scaling up climate solutions. It will also focus on the development of a strategic roadmap for the collective adoption of climate actions across the EU. In this context, IDELE and Teagasc, partners of the [EU Life Carbon Farming](#) project, will present the potential of carbon farming and its innovative measures. Additionally, practical field insights will be shared to explore strategies for scaling up carbon farming in Europe. Read more information about the [2nd European Carbon farming Summit here](#).



[See you in the next issue](#)

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

To find out more about LIFE Carbon Farming in Ireland and Europe visit:

- [LIFE Carbon Farming Ireland](#)
- [LIFE Carbon Farming EU](#)

You can [unsubscribe from this newsletter here](#).