Carbon Credits: What are they and what do they mean for UK dairy farmers?

In December, the UK announced new emissions targets for reaching net zero by 2050, with plans to reduce greenhouse gas (GHG) emissions by 68% by 2030 under the Paris Climate Agreement.

As part of this, carbon reporting will become mandatory for large businesses, including all emissions in their supply chain that they do not control – known as Scope 3 emissions.

Many food retailers and processing businesses have also already made net zero commitments of their own.

Because a high proportion of carbon emissions in the food industry come from agriculture, large food businesses and retailers are already focusing on Scope 3 data within their food suppliers and agricultural supply chains and how to decarbonise within those areas.

What are Carbon Credits?

A carbon credit is a generic term for any tradable certificate or permit representing the right to emit one tonne of carbon dioxide or the equivalent amount of a different greenhouse gas (CO2e).

Agriculture has been identified as a possible source of carbon sequestration, as plants absorbs CO_2 from the atmosphere and store it internally or in the soil. This mass of carbon can then be credited back into the supply chain - or sold to external organisations - as "carbon credits".

There are two types of carbon credits, reduction credits and removal (sequestration) credits, and the type of carbon credit dictates whether that credit can be used towards carbon-neutrality or net-zero targets. Carbon-neutral goals can be met by purchasing reduction credits to offset emissions, whilst net -zero targets can only be met using removal credits if credits are required. This requires organisations to remove as much CO_2 from the atmosphere as they produce.

Terms to know:

- Reduction credits - created by reducing emissions
- Removal credits - created by removing CO_2 from the atmosphere via sequestration

Currently there is no agreed, centralised system for carbon credit trading, although one is likely to exist in the future. The existing 'voluntary' system is low-scale and fragmented, with volatile carbon prices and issues with fraud and transparency resulting in huge price discrepancies.

Why does this matter to dairy farmers?

As the carbon market becomes standardised and more companies look to purchase offsets, farmers may be presented with opportunities to monetise their farm's carbon credits.

Earlier this year, an Australian beef farmer sold carbon credits worth $500,000 AUS to Microsoft after saving 40,000 tonnes of sequestered soil carbon through sophisticated grazing management.

But UK dairy farmers should take these stories with conservative optimism. As of now, it is unclear what role offsetting will play within agriculture and there isn't a standardised method for measuring or pricing carbon and sequestration abilities. Additionally, dairy businesses in particular may find that they have few, if any at all, carbon credits to offer after their own farm's emissions are accounted for.

In the meantime, dairy businesses should focus their attention on measuring carbon output on farm and identifying areas in which emissions can be reduced. This will not only help reduce your farm's carbon footprint, but you will also be better prepared for future legislation, reporting requirements or mandates from your milk buyer. You should also speak to your milk buyer about how carbon credits will be used in their sustainability planning.

If you want to find out more about carbon credits, read our in-depth document on carbon credits here.

What is the Paris Agreement?

The Paris Agreement is an international treaty that was signed by 196 nations in 2016, with the aim of limiting the rise of global warming to less than 2˚C higher than pre-industrial temperatures. Signatory states agreed to implement plans and regularly report on efforts to reduce emissions in order to reach net-zero by mid-21st century.

What are Scope 3 emissions?

Scope 3 emissions are defined as 'any emissions that occur as a consequence of your organisation's activities but that aren't owned or controlled by your organisation'. Scope 3 reporting is not yet mandatory for agriculture, but large food businesses and retailers are already focusing on voluntary Scope 3 data collection from their food suppliers and agricultural supply chains.