

A simple approach to the carbon economy



"In the first year, we learned the carbon credits available from our current production system could be worth up to £45,000/year."

ALAN CLIFTON HOLT

With the loss of SFI and confusion over its structure for the future, growers are urged to embrace the carbon economy. But how do they ensure starting out on the journey is as simple as possible, while aligning with crop production plans? *CPM* finds out...

By Rob Jones

A simple, pragmatic approach to evaluating carbon resources in his business is helping Kent arable producer, Alan Clifton Holt, not only get a clear picture of the carbon credits available to him, it's highlighting areas where production efficiency could be improved.

By focusing on the carbon footprint of various operations including energy use, crop nutrition and fungicide use, he says he can focus precisely on where savings can be made, or where inputs should be used more efficiently.

"In the first year, we learned the carbon credits available from our current production system could be worth up to £45,000/year. After the cancellation of SFI, this could be really significant to us in the future.

"At the moment, however, we're

very much on a learning curve and starting to understand how we can get the biggest bang for our buck from the carbon economy."

The process is being implemented using a new approach developed by Agrii and Agreea, with Alan's agronomist Neil Harper aligning the farm's crop production objectives with its sustainability and environmental aspirations.

VARIED ROTATION

Based near Romney Marsh, the enterprise manages 1400ha of arable production based on winter wheat, winter barley, spring mustard, spring beans, linseed, flax and spring oats in a nine-year rotation interspersed with four cover crops, explains Alan.

"The target is to grow 600-700ha

of wheat each year with the rest of the crops working around that. We aim to have first wheats all of the time, using spring crops to enable them while also allowing a break in the rotation.

"Also, because blackgrass is a problem, we have to use spring crops and cover crops as part of the control process. With no oilseed rape in the rotation, winter barley enables early combining



A fine balance

Grower Alan Clifton Holt says he strives to find a balance between pushing boundaries and paying the right attention to sustainability and environmental factors.



Carbon contributors

Relatively early on it became clear the biggest contributors to the farm's carbon footprint are aspects such as diesel and fertiliser use, explains Agrii's Neil Harper.

► and spreads the summer workload."

All wheat is grown for milling, transitioning to Group 1 and some Group 2 varieties in recent years, highlights Alan. "Our view is we're in a highly productive area and most of our land is good, so we should farm it efficiently with high output a priority, alongside effective risk management.

"It's about finding a balance between pushing the boundaries and paying the right attention to sustainability and environmental factors. In the 80s and 90s, we'd often see 12t/ha wheat yields, but we seldom see those now due to pressure from factors such as blackgrass, having to drill later, and cutting back on inputs."

In truth, such a situation wasn't a sustainable proposition long-term, says Alan. "We have to be profitable, but we're increasingly focused on achieving this in the right manner. Although we still have a high input, high output ethos, we try hard to meet our environmental obligations."

Part of this is having the diversity and financial resilience to fight another day, he adds. "Sustainability is a key driver, which is where things like cover crops and trying to be insecticide-free come in.

"Insecticide costs us around £2-3/ha to apply so it's easy to say just use it and we're covered, but we try hard not to as we know its effect on the environment. Instead, we're growing some BYDV-tolerant varieties and have been insecticide-free for around 3-4 years."

The business also aims to increase the carbon content of its soils and takes part in a straw-for-muck scheme. "We use around 10,000t/year of FYM, but

learned early on that to increase organic content, you have to grow it rather than import it. We're constantly thinking about how we can cycle things in the rotation."

The idea of evaluating the carbon footprint of the operation and focus on the carbon credits it was generating, came from Neil following Agrii's partnership with Agreena. "Carbon has always been on the radar, but the focus for Alan has been farming well and in line with the business' sustainability objectives," explains Neil.

"When everyone was signing up to the toolkits years ago, we held back and unlike others, have never said we're in the business of farming to maximise carbon. But things change and you have to keep all options open.

"Fundamentally, we wanted a simple entry point and, as an agronomist, the idea of 'above the ground' carbon made perfect sense to achieve this."

MINIMISING INPUT

According to Neil, one issue was how much time would have to put into the process. "Our initial idea was to use Agreena's tool to input information we could access relatively easily, and see what came back.

"There was no initial cost, just our time involved in filling in the information we already had, based on our existing approach to production and the environment, and see what the carbon implications of the current practice was.

"It's never been about how much money the operation could potentially earn from carbon, it's to see what we have and how we might use this in the future."

Relatively early on it became clear the biggest contributors to the farm's carbon footprint are aspects such as diesel and fertiliser use, while use of cover crops and cultivations could reduce this significantly, explains Neil.

"This is all balanced against your offtake. The yield of wheat produced, for example, has a certain amount of carbon in it and you have to take that into account against your inputs such as chemicals, fertiliser and diesel, to achieve this.

"In the first year, we've learned we have 774 carbon credits available from the 1250ha which were eligible, from the 1400ha farmed – three fields were dismissed because they were fallow and nine had been ploughed.

"With an additional 10% from the premium pool, this gives 851

carbon credits which, at a current market value of around £50/credit, gives a total value of £42,570."

Neil says the business can either sell these each year or put them in a carbon credit bank. "For the time being, our feeling is we want to give it another few years of tracking and see how it all works out."

The value of the carbon credits even in the first year is significant enough for Alan to include them on the business' balance sheet, he says. "We aren't selling at the moment, just keeping a watching brief. The credits only relate to above the ground carbon for now and we haven't started looking at soil carbon and other areas," adds Alan.

"It's likely suppliers will want information on carbon footprint of production from growers in the near future and this could affect the marketability of commodities. It's certainly the case in dairy production and I'm sure it'll come in the arable sector."

Alan is yet to look at whether the business is at net zero or not. "It might be that in a few years' time, we use what we have in our bank to offset the carbon in our own business before we start selling it to someone else.

"It could be beneficial if suppliers want to know whether we are net zero, then we could go down that route by using our own carbon accumulated to achieve it. We're very much at the learning stage."

He says at the end of the day, they have to understand exactly what it is that they have and are potentially giving away. "None of us want to make other parts of the supply chain more carbon-friendly at our expense.

"I don't mind our carbon going downstream, but I do want to be paid for it and there are some very grey areas at the moment."

According to Agrii's Amy Watkins, the company takes a pragmatic perspective on how sustainability can be built into an arable business, with the view that financial stability has to be a key priority. "Without the ability to make a profit and reinvest, no business has a sustainable future.

"The partnership with Agreena incentivises growers in the short-term to transition towards more sustainable practices. With such wide-ranging changes in the agricultural landscape at the moment, we have to work with customers to find new ways to buffer farm business incomes," she concludes. ●