

“Understanding exactly what you’re selling is absolutely essential.”

Understanding opportunity

Carbon

Selling carbon looks set to become the latest diversification trend — but is it all it’s cracked up to be? *CPM* joined a recent webinar which examined the practicalities, opportunities and legalities of natural capital.

By Charlotte Cunningham

Novel trading platforms seem to have grown in popularity in recent years, with new ‘currency’ like bitcoin going from a virtually unknown household phrase to those early believers now reaping the rewards of millions of pounds worth of return.

And as more and more carbon trading platforms begin to emerge from the depths of innovation, there’s understandably a similarly huge buzz and excitement about the potential of a new opportunity to bring income into farm businesses via the sequestration and ‘selling’ of natural capital and carbon credits.

This is strengthened only by the imminent loss of farm subsidies as the industry has known them, replaced instead with payments for public goods. While the precise details of exactly how much could be received by growers and producers are yet to be confirmed, experts estimate that it will total half the value of current support schemes.

So when it comes to natural capital —

what is it? What is it worth? And what can we do with it?

These questions are on the lips of many in agriculture at present and were the theme of a recent webinar hosted by Wright Hassall Solicitors. The firm brought in experts from Natural Capital Solutions, Andersons Midlands and the legal sector to discuss the opportunities and the pitfalls of this potential new market and whether or not carbon trading could help to ‘fill the gap’ in support payments.

Natural capital

Opening up the discussion, Dr Alison Holt, director at Natural Capital Solutions explains how a natural capital assessment can help farmers make decisions on the future management of their land assets, in the context of changing policy and the increasing development of the natural capital finance sector.

“Natural capital produces a wide range of ecosystem services that provide benefits to people. These fall broadly into three main categories; provisioning — products obtained from ecosystems including food, time and water; regulating — benefits obtained from environmental processes that regulate the environment e.g., air quality, climate regulation and pollination; and cultural — non-material benefits people obtain from ecosystems including recreation, health and well-being.”

Alison explains that with natural capital policies at the core of the 25 Year Environment Plan, this is driving the current interest in the opportunities for growers to ‘sell’ such ecosystem services. “The Agriculture Act 2020 focuses on payments for public goods, and we know that much of these payments for ecosystem services will

be provided through ELMs — but it’s not the only payment mechanism.”

Some of the key natural capital finance opportunities at present include the Woodland Carbon Code; the Woodland Carbon Guarantee; ELMs; the England Woodland Creation Offer (EWCO); carbon banking and biodiversity off-set management/banking, she adds. “Some of these are fairly self-explanatory and have been around for a while, but there’s more conversation growing around carbon banking, where growers who have peat bogs or woodland, for example, could get paid for creating more woodland or restoring peatland.

“There’s also growing interest in biodiversity off-set management — or banking — which is where a developer who can’t reach 10% net gain on their land through development will pay a landowner to manage a biodiversity offset for them.



Before diving into trading opportunities, the focus should be immediately on reducing on-farm emissions, believes Joel Woolf.

“What’s more, a new scheme called the England Woodland Creation Offer provides payments to land managers for creating woodland, but that pays for a number of ecosystem benefits on top of the carbon advantage.

“However, I’d say that many of these schemes require quite a lot of development before they’re ready for farmers to make money from.”

In the immediate term, Alison explains that for growers who want to eventually be involved in these schemes, it’s first important to set baselines. “This will help growers understand what assets they have, what they’re providing (both benefits and the level of biodiversity) and how this can be enhanced for a financial gain, so that business plans can be made regarding how they might tap into some of the available schemes and prepare to do so.”

Alison continues that this is where a natural capital assessment could be useful. But what exactly can this tell growers?

“There are a number of aspects we can look at, but some of the key things include a natural capital asset base map; biodiversity and farm carbon assessments; ecosystem service capacity and demand maps; natural capital accounting to allow you to understand the monetary value of the benefits being provided from your land; habitat and ecosystem services opportunity mapping; data management and re-assessment.

“An assessment can include all of these steps, or just some of them, depending on the growers’ requirements.”

This can be complemented with a farm business assessment. According to Alison, this will identify interventions for increasing biodiversity and ecosystem services and test whether there are increases in the desired benefits. It will also provide a farm financial analysis to see whether payments for interventions through ELMs or other initiatives support a viable farm business.

For many, the hope of a new trading opportunity may be attractive with the change in subsidy funding imminent.

Sebastian Graff-Baker, partner at Andersons Midlands, picks up the conversation and looks deeper at the likely financial impact of eco farming services and how this might stack up compared with current support payments.

“When we look at the total income from farming in 2020 — an aggregate of all farming types — 70-80% of profits were made up of subsidy. What’s more, figures for UK farm profitability between 2010-2020 show that in the cereals sector, while there’s

a profit in some years, subsidies have largely propped this up (see English Sector Profitability chart, page XXX).

Turing focus to changing support payments, post-Brexit agriculture in 2028 onwards is unsurprisingly looking to receive the lowest level of support for a long time, he continues. “The government have committed to a funding guarantee to keep the total support received unchanged until the end of the current parliament. But thereafter, the level of funding available will be dependent on the spending review.

“In our view, we think that the industry will receive around half the level of support that they do at the moment.”

Selling carbon

What’s important to bring into context is that while the cost to farm businesses of collecting BPS wasn’t nothing, it’s likely to be relatively low compared with collecting subsidy in the form of many of the government schemes proposed at present, warns Sebastian. Essentially, it’s going to cost farmers more to implement the new environmental measures and standards.

“We’ve got some idea of payments from what we already know about the Sustainable Farming Incentive, but the ‘cost’ of exactly how much it’ll be to meet these standards will vary greatly between farms.”

To fill the gap, ‘selling’ carbon reduction/sequestration has received the most publicity, but Sebastian warns there are hurdles to overcome within this new market. “Clearly there are opportunities, but there are also questions around permanence, additionality and verification issues. There’s also the fact that agriculture might need the reductions itself in order to meet net zero targets.”

The scope for monetising carbon on-farm is limited at the moment, he adds, with buyers having to be willing to overlook the issues mentioned above. “What’s more, ELMs is likely to support actions that help reduce GHG emissions, but won’t pay on a tonne of CO₂e basis.

“There’s also the concern that there may



Natural capital finance schemes require quite a lot of development before they’re ready for farmers to make money from, warns Alison Holt.

not be a carbon ‘pot of gold’ for UK farming and low carbon production may just become a cost of ‘doing business’ in the food supply chain and subsequently monitored like farm assurance.

“Another big question is, can you sell carbon twice? And is it possible to count sequestered carbon towards agriculture’s ‘net zero’ while selling offsets to someone else?”

Putting all of this into a financial context, Sebastian explains some of the headline figures at present. “Firstly, I think the measurement of carbon sequestration should be based on much longer than just one year, largely due to the changing value of land, and we know this from looking at the UK balance sheet.

“Look at UK farm profitability, if we think about the current £3.2bn value of subsidy funding on approximately 18.5M hectares of UK agricultural land, on average that equates to around £170/ha. If we then consider estimations that future support payments will be half the value of the current — and growers have to spend half of that collecting subsidy, as the cost of delivering ELMs will be far greater than BPS — we might be looking at around £40/ha from future schemes, again on average.

“If we then add in potential contributions ▶

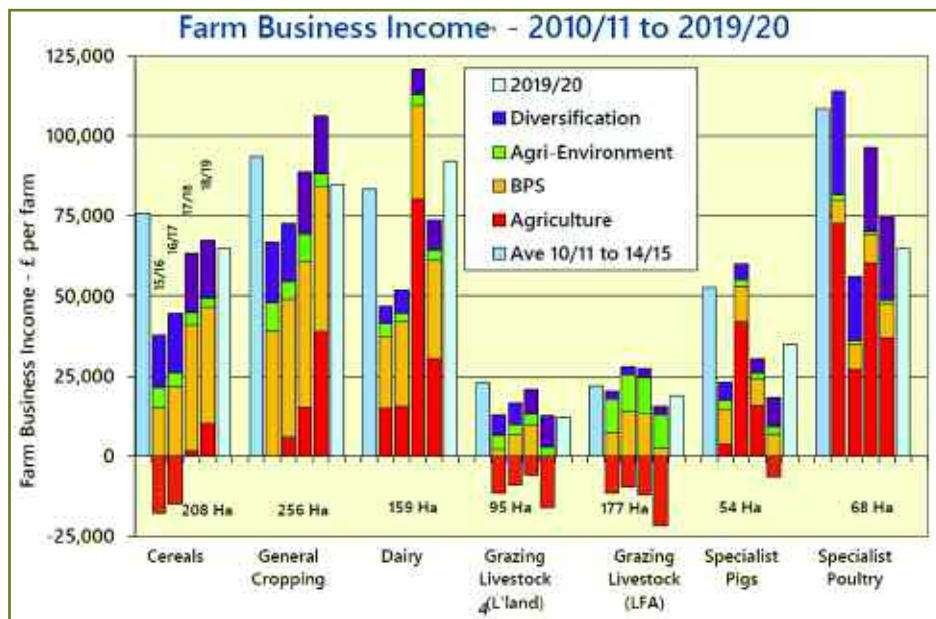
Finding value

There have been four auctions so far. Here’s the results of the auctions to date.

	Total bids	Successful bids contracts offered	Area successful bids (ha)	Ave pricesuccessful bids(weighted by noof WCU)
Auction 1 - Jan/feb 2020	31	18	182	£24.11
Auction 2 - June 2020	77	27	1,517	£19.71
Auction 3 - October 2020	46	31	620	£17.31
Auction 4 - August 2021	23	19	331	£18.62

Results of the Woodland Carbon Guarantee Scheme auctions to date illustrate some of this variation.

Source: Andersons



English Sector Profitability figures show that subsidies have largely propped up profits in the cereals sector. [source; Andersons]

▶ from carbon trading, using the data that's available to us — for non-tree uses of land — the value is looking to be in the region of payments of £20/ha. So effectively, this may total £60-70/ha when added together. This still leaves a shortfall of around £100/ha.

“What's more, that's based on business and land values staying the same — if this changes, that gap could be significantly more or less.”

Of course, these projections are based on averages, and Sebastian concludes

that the real value of such schemes and opportunities can only be realised by looking at the performance and potential of each individual farm and capitalising on both the most profitable and least productive areas of land.

Joel Woolf, partner at Wright Hassall, takes over the conversation and touches on Sebastian's earlier point on agriculture needing carbon reductions itself as he brings the focus back to what should be the immediate focus — and he says that's reducing emissions.

“There's a lot of buzzwords and 'what ifs' flying around at the moment but, amid it all, the one thing we do know is that all businesses are going to have to do something in order to be UK net zero by 2050.”

Exactly how farmers will do this depend on the type of farm and location, continues Joel, but ultimately, any opportunity to sell carbon should not be at the expense of the farm's own emissions, he believes.

Joel says that growers should approach carbon reduction and carbon selling in two stages — the first part focusing on reducing on farm emissions. “The first step should be carrying out a baseline assessment to

'Six Inches of Soil'

The US documentary film *'Kiss the Ground'* fast became a Netflix favourite and helped highlight regenerative agriculture to a far wider audience. Now a UK award-winning production company, Dragonlight Films, has just announced it's in production for an independent and what it describes as an environmentally important documentary feature film, *Six Inches of Soil*.

Directed by Colin Ramsay and produced by Claire Mackenzie, the film will tell the untold story of Britain's agroecological movement. It centres on both new entrant and established farming pioneers who are leaving behind conventional agriculture to build a future that focuses on the health of the soil and increases biodiversity. The film will follow their, often challenging, journeys and will examine the whole ecosystem of food and farming including how they access land and create robust business models.

Six Inches of Soil includes a small but highly creative production team of agroecological farmers and food campaigners including: George Young, Dr Lucy Michaels, and James Murray-White. To raise funds to push ahead with production in 2022, the team is launching a Crowdfunder on 1 March 2022.

Dragonlight Films claim the film's compelling narrative, engaging animations and interviews with leading figures will tell the story of the UK's broken

food system. It also believes the coverage will offer a provocative “focusing moment” for wider public debate giving farmers confidence to adopt nature-friendly practices, consumers the impetus to rethink food choices, and aims to create a groundswell of opinion resulting in policy change and funding for a British agroecological transition.

The lead characters will meet with both conventional and regenerative farmers across the country, including Jake Fiennes, head of conservation at the Holkham Estate, Norfolk and Stephen Briggs, who is a first-generation farmer and has been farming organically for 18 years at his 233ha farm in Cambridgeshire.

They'll also have discussions with experts in the food and farming sector including Vicki Hird, sustainable farming campaign coordinator and author of *Rebugging the Planet* and Henry Dumbleby, author of government commissioned *National Food Strategy*. Characters and additional nature friendly farming experts will be announced in the coming months.

“This project is a labour of love for the whole team. Farmers in the UK are becoming increasingly aware of how modern tillage and chemical input practices have damaged and depleted our soils,” says Colin, director of *Six Inches of Soil*.

“As the saying goes, despite all our

accomplishments, we owe our existence to a six-inch layer of topsoil and the fact it rains. We want to highlight these issues and look at agroecology through a British lens, showing the unique challenges but also the huge rewards this method of farming presents. We hope that by communicating clearly and accessibly why our food system is broken and how agroecology can help to fix it, we can help to be part of a transformation to the UK's food-buying choices.”

Claire Mackenzie, the film's producer, adds: “After a year of pre-production research, visiting farms, talking to agroecology experts and inspirational organisations throughout the UK, as well as creating partnerships with organisations including the Soil Association, Nature Friendly Farming Network (NFFN) and Sustain, we're ready to move into the second stage of our documentary film journey.

“Personally, I want more people to hear from the farmers that I've met over the last year, many of whom are happier in their work because of their reconnection with the soil and their land and the formation of strong and close communities of likeminded people who are all supporting each other on this intrepid journey.”

Six Inches of Soil is scheduled to launch at Groundswell 2023. For a preview www.sixinchesofsoil.org

understanding what's there now. From this point, growers can consider what their total emissions are and where they come from. For combinable crops, it's likely that this will be mainly from diesel, fertiliser and crop protection products.

"Knowing this will enable farmers to work out how to reduce those emissions, over what time frame and at what investment — ultimately, creating their strategy to get to 'net zero'. However, this has got to be a sensible, measurable and targeted approach."

Only once that is done, growers can start to think about the opportunities with carbon, he adds. "Start by identifying on farm eco-services solutions — but be warned, there's no point selling these to someone else to negatively impact your own emissions, as already explained.

"Once this is done, growers should then work out if there are any excess ecosystem services which may present an opportunity and whether or not they're commercially viable to exploit. Essentially, once you've worked out what the farm requires in terms of sequestration, there may be an excess (aka a surplus sequestration) but utilising this has to be commercially viable.

"After this it's a case of planning and

executing the strategy, but growers should also re-survey at regular intervals to understand progress and if anything has changed."

Legal advice

In terms of legalities, Joel warns of the issues to consider when getting into carbon trading agreements. "The overarching advice is to not sign up to the first agreement you come across. Consider the risk/impact it may have on your business, incorporation of commercial terms, specific wording and if — or how — either party can get out of the agreement. Seeking the relevant legal advice is absolutely essential here."

Explaining further the importance of the commercial terms and the need for written agreements, Joel stresses that it's essential for growers to understand exactly what it is they're selling.

"Many of these agreements are likely to be long-term, and if not considered carefully, could end up restricting what you do on farm.

"Some pitfalls to also be aware of include looking out for different carbon measurement techniques and ensuring you keep records and carefully analyse changes over time. If



Even when combined, the value of environmental payments and carbon could still mean a £100/ha shortfall in support compared with previous subsidy levels, warns Sebastian Graff-Baker.

carbon becomes regulated at any point, it may be that there's a requirement to go back and re-look at your carbon baseline.

"There's an awful lot of different information out there at the moment, and this advice is likely to change as science isn't a static thing, so be careful where you source any information from, and again, seek advice before entering into anything binding." ■



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