

Carbon markets & agriculture

Background/context

- 'Carbon farming' – new buzzword
- Varying understandings & perceptions of pros & cons
- UIF project – Why? Lack of knowledge in industry, lack of common/in-depth understanding about what it means for agriculture
- Team:
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 - Luisa Riascos
 - Other Consulting & Research contributors + external network

What's the real opportunity for farmers?

- For farmers, possible small, supplementary income stream – not a 'cash cow'
- Opportunity to add value to land (e.g. soil quality, & indirect income)
- Most current, successful case studies are large estates – mostly not linked to food production
- Quick 'factcheck':

Carbon price: £30/t	Carbon over timescale	Carbon per year	Revenue (whole farm) per year	Revenue per ha per year
10% reduction in farm emissions	14.6t over 5 years	2.9 t/yr	£87 /yr	£0.79 /yr
30% reduction in farm emissions	43.8t over 10 years	4.4 t/yr	£132 /yr	£1.2 /yr
Soil carbon sequestration	500t over 20 yrs	25t/yr	£750 /yr	£6.82 /yr
10% farm area planted (14.6ha)	2.97 t CO ₂ e/ha/yr	43.4t/yr	£1,302 /yr	£11.84 /yr

- Major downsides – carbon reduction/sequestration potential + transaction costs

Current state of play

Opportunities	Risks	Barriers
Additional income stream (small, not large)	Misconceptions around real scope	Land lottery & inequalities
Investment as carbon price increases	Unregulated markets	Lack of understanding/ specialist knowledge
Insetting- rather than offsetting	Margins of error in measurement & modelling	Lack of standardised contracts
Being paid for existing actions, or actions with co-benefits	Transparency & consistency of methodologies	Lack of regulation
Adding value & productivity to land (e.g. soil improvement)	Long-term, forward selling contracts – who knows where the price will go?	Lack of trust and uncertainty about due diligence process
Supply chain credentials & compliance	Proof of permanence & additionality	
Government price guarantees	Interactions between types of funding e.g. carbon & biodiversity	
	Implications of land use management on wider landscape & community	

Next steps & horizon scanning

- On the horizon:
 - Carbon codes & standards – new levels of checks on scientific methodologies of carbon codes which provide MRV to projects, to be provided by arms-length body
 - Impact analysis of land use change & farming – forthcoming research for RESAS by SRUC – expect further policy discussion around this
- Next steps needed:
 - Better understanding of the economics – currently only viable if transaction costs reduced, stacking of measures, indirect benefits to farm business, cost of carbon – studies needed
 - More resources & training of land managers & rural professionals navigate this emerging market
 - Innovation around scalability & reducing transaction costs
- Where to go for further info:
 - Webpage – glossary, guides, articles/briefings – resources for farmers & professionals working in the industry
 - Basecamp – managers, experts & practitioners in natural capital markets
 - Hannah Rudman, Mark Reed & Food & Footprint

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