



NATURAL CAPITAL MARKETS: What you and your clients need to know now

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I will cover...

- What is “natural capital”?
- What’s driving these markets?
- The principle of additionality
- What are the emerging opportunities?
- Seller beware! The risks
- What should I do next?
- Remaining challenges

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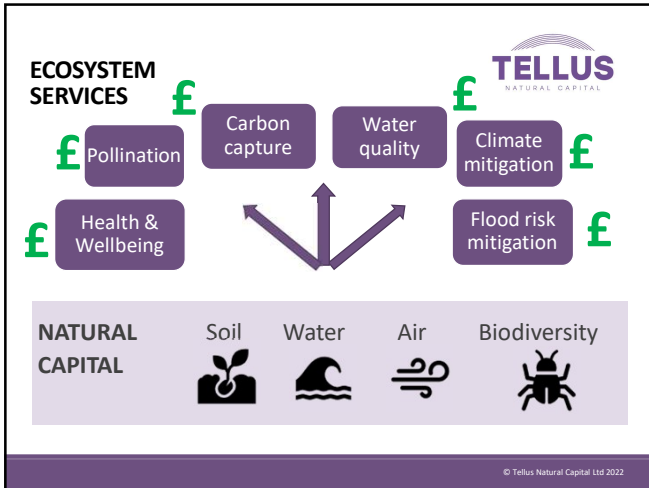
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What is “natural capital”?

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Public v private goods

- Private markets work for private goods:
 - Food, energy (wind, solar, woodfuel), fibre, construction materials etc
- Public goods have been delivered as “freeriders” with no economic market for
 - Carbon capture, biodiversity enhancement, water storage etc
- Can we create private markets for public goods?

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Market drivers

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The Agricultural Transition

- Brexit = out of CAP
- BPS being phased out
- Pressure on all Govt budgets – likely to ramp up as we start to deal with Covid debt
- HM Treasury would like private sector to fund provision of public goods

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Supply chain & finance

- Corporate Net Zero targets – supply chain:
 - E.g. Morrisons net zero by 2030 pledge
 - Arla's sustainability agenda
- Financial regulation driving investment:
 - Task Force on Nature-related Financial Disclosures
 - Task Force on Climate-related Financial Disclosures
- Importance of ESG agenda (Environmental, Social & Governance) – for benchmarking and reputation

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Assurance & standards

- Lack of consistent standards is a problem – supply chains developing their own
- Standards currently used in the UK include:
 - Woodland Carbon Code & Peatland Code
 - Biodiversity Metric 3.0
- New carbon standards under development for Hedgerow Carbon and Farmland Soil Carbon
- A Taskforce on Scaling Voluntary Carbon Markets is tackling the issue globally

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**Spatial planning:
where should it go?**



- Local Nature Recovery Strategies – awaiting Govt response to last year’s consultation
- Essentially a Local Plan for nature, at county scale
- Will identify areas of greatest potential for biodiversity gain
- Could become an important decision-making tool for local authorities and private sector

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The principle of additionality

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Additionality in off-setting

- A key concept: the change would not have happened without offset funding
- So the additional carbon sequestration (or habitat creation, or nutrient reduction) would not happen without funds from the sale of offset credits
- The work done must create ADDITIONAL benefit

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The conundrum

- How to reward existing good practice?
- Does additionality reward wrongdoers?
- Should society reward landowners who have enhanced natural capital at their own cost?
- How does it do so while securing value for money?
- Landowners won't want to undertake "for free" any project which might generate a new income stream in future

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Emerging markets

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Emerging markets

- Water quality – nutrient neutrality
- Biodiversity Net Gain
- Carbon sequestration
- Natural flood management
- Green prescribing
- Climate and air quality regulation

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Water quality - nutrient neutrality (1)



Where protected waterbodies are damaged by nutrient pollution, Natural England requires all development to be “nutrient neutral”.


Includes agricultural development, esp if increasing livestock numbers.

74 LPAs now affected, mostly in coastal catchments e.g. The Solent, Hampshire Avon, Stodmarsh

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Water quality - nutrient neutrality (2)



Developers must demonstrate nutrient neutrality by:


- Installing on-site measures, e.g. treatment plants, constructed wetlands
- Buying off-site credits, paying for nutrient reduction elsewhere e.g. arable land turned into woods or wetlands
 - Very long term: 80 – 125 years
 - Prices?
 - Must be in same catchment: supply & demand issues?

Buyers – developers

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Biodiversity Net Gain



- Environment Act 2021: statutory requirement for 10% increase in BNG from Nov 2023
- “Biodiversity Units” measured before & after using Natural England’s Biodiversity Metric
- Established operators such as The Environment Bank are seeking sites
- Local supply & demand likely to affect price
- Buyers: developers (housing, commercial, agricultural); statutory undertakers

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Scale of the credits market

- A 2021 BNG Market Analysis Study for Defra predicted an annual demand of 6,223 BUs
- With 317 LPAs, that averages out at 20 BUs per LPA per year
- Might create between 1 and 4 BU/ha depending on the scheme
- So this might not be a huge market: 5 – 20ha per year? But NB infrastructure schemes from 2025

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Carbon sequestration

- Emerging but immature market for carbon credits
- Supply chain may drive change on farms
- Emissions reduction vs off-setting – review farm business first – don't sell what might be needed!
- Woodland Carbon Code & Peatland Code already exist; Hedgerow Carbon Code & Farmland Soil Carbon Code under development
- Potential buyers: commercial ventures with Net Zero ambitions but NB still a VOLUNTARY market

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Farm Soil Carbon Schemes

- Numerous schemes emerging, such as:
 - Trinity Ag Tech, Agreeena, Soil Capital, Soil Association Exchange (supported by Lloyds)
- But NO agreed standard yet – a Soil Carbon Standard is under development
- Most schemes seek specific management actions (e.g. cover crops, min till)
- What data will be required? E.g. proof of increased SOM?

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Natural flood management

- Schemes to mitigate flood risk can include a range of measures to slow down flow and store water:
 - re-wiggling streams
 - constructing leaky dams
 - tree planting
 - creating washlands and floodplains
- Potential “buyers” could include EA, insurers, local authorities, statutory undertakers
- See Wyre NFM scheme for example

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Green prescribing

- 2 year, £5 million NHS England project underway
- In 2015 NRW & Ford Motors planted a wood in Wales for air quality (respiratory health) and green exercise provision
- Overall cost to the economy of physical inactivity in England is estimated at **£8.2 billion per year** (*Centre for Sustainable Health Care*).
- Potential “buyers” – the NHS, private companies with local employees and an ESG agenda

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Climate and air quality regulation





- Trees & shrubs can provide shading/cooling and air filtration benefits to the local environment
- Greatest benefit is near urban areas but also along watercourses
- Might “green lungs” be needed to enable future development?
- Potential “buyers” – developers, local authorities, private companies with a local ESG agenda

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Stacked benefits

- Biodiversity + carbon storage 
- Carbon + air filtration + green prescribing 
- Clean water + biodiversity 
- Flood risk mitigation + biodiversity + carbon 

Plus food production? Less intensive? Branded?
NB Additionality test

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CAUTION!
SELLER BEWARE!

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Caveat venditor

These emerging markets

- Often require land use change (NB tax reliefs)
- Are typically long term (30 – 50 yrs or more)
- May create income / access to supply chain
- But could impact on capital / rental value
- Will often bind successors in title

Don't sell what might be needed in the core business!

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What should clients do now?



- Identification: what is there now?
 - Watercourses, hedges, habitats, species data?
- What will the client need for themselves?
 - What are their aims & objectives?
 - Have they done a carbon audit?
- Identify areas of opportunity
- How might this fit into the core business?
 - Supply chain requirements
 - Supporting on-farm development
 - New ventures
 - NB Landlord / tenant relationships

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Assessing opportunities



- Future agri-environment schemes vs private sector investment?
- Multi-benefit projects – can you sell carbon, biodiversity and nutrient credits from one site? NB additionality...
- What do “buyers” want?
- What is this going to cost? (Maintenance, monitoring, administration, etc)

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Challenges



- Baseline assessment
- Measurement, verification & certification
- Valuation and setting a price
- Aligning different priorities, timescales and funding streams
- Supply chain requirements
- Delivering at scale – farmer clusters?
- Landlord – tenant relationships

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Questions

- What will the balance be between public and private investment?
- How will standards and assurance develop?
- What happens to the C price as companies find ways to reduce emissions?
- What needs to be in a contract? And how can you align the requirements of multiple sellers?

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