



OPPORTUNITIES FOR UK BUSINESS THAT VALUE AND/OR PROTECT NATURE'S SERVICES

NON-TECHNICAL SUMMARY

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14 June 2012

Suggested citation:

Duke, G., Dickie, I., Juniper, T., ten Kate, K., Pieterse, M., Rafiq, M., Rayment, M., Smith, S. and Voulvoulis, N. (2012) Opportunities for UK Business that Value and/or Protect Nature's Services; Elaboration of Proposals for Potential Business Opportunities. Non-Technical Summary submitted to the Ecosystem Markets Task Force and Valuing Nature Network. GHK, London.

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1. This paper summarises the Final Report of the study entitled '*Review of UK National Ecosystem Assessment (NEA) evidence to assess scope for business-related ecosystem market opportunities in the UK and tools for business sector uptake.*'
2. The study was commissioned for the Ecosystem Markets Task Force (EMTF) by the Valuing Nature Network (VNN), financed by the UK Department of Environment, Food and Rural Affairs (Defra) and the UK Natural Environment Research Council (NERC) and contracted through the University of East Anglia (UEA). VNN is an accredited activity of Living with Environmental Change (LWEC).

The business case

3. The report outlines the business case for valuing and protecting nature's services. A series of drivers are leading businesses to increasingly consider and manage impacts on ecosystems and to look for business opportunities while they do this. Until recently most business action in this arena was driven by regulatory requirements. New drivers include business risks arising from price volatility in key commodities, in part linked to resource scarcity and degradation, changed stakeholder expectations, and business-to-business pressures as the demand for more sustainable production impacts supply chains and procurement. Benefits to companies include enhanced reputations, entry into new markets and more comprehensive knowledge about the risks they are exposed to.

The EMTF

4. The 2011 Natural Environment White Paper contained a commitment to establish a business-led Ecosystem Markets Task Force to review the opportunities for UK business from expanding green goods, services, products, investment vehicles and markets which value and protect nature's services.
5. The EMTF will report in March 2013 to senior ministers through the Green Economy Council.
6. A range of work has been initiated by the EMTF since launch, including this scoping study, an EMTF call for evidence and in-house evidence scan and literature review. Taken together, these initiatives help provide the EMTF with a clear line of sight, with a view to delivery of its remit by March 2013. It is anticipated that the EMTF will commission further work to help deliver this remit.

The scoping study

7. This study aimed to: (1) Review the evidence available in the UK National Ecosystem Assessment; (2) Establish the potential for business opportunities based on nature's

services; (3) Identify actions to enable relevant markets; (4) Identify priorities for further EMTF work.

8. It involved: (1) development of a conceptual framework; (2) application of this framework for analysis of the NEA; (3) innovative thinking within the study team to identify, elaborate and assess business opportunities, related enabling actions and areas for further work; (4) stakeholder consultation, based on a Discussion Paper, and involving a workshop and peer review process.

Evidence in the UK National Ecosystem Assessment (NEA) for business opportunities

9. The NEA provides a wealth of detail on the state of the UK's ecosystems, the services they provide, and the value of these services. While identification of business opportunity was not a focus of the NEA, relevant references occur throughout, in chapters on drivers of ecosystem change, on state and trends in habitats, on state and trends in ecosystem services, on changing ecosystem service values, and on response options.
10. The study report summarises these references, assesses the implications for business opportunity, and presents a long-list of potential business opportunities that are either explicitly referred to in the NEA, or could be inferred from the NEA.

Types of business opportunity

11. Building on this analysis of the NEA and the study team's knowledge of ecosystem-related markets, the report identifies 8 main 'types' of business opportunity:
 - (1) **Product markets** - products derived from and/or sustaining ecosystem services, and related certification services.
 - (2) **Offsetting** – business opportunities linked to offsetting impacts on biodiversity, carbon or other natural assets or ecosystem services.
 - (3) **Payment for ecosystem services (PES)** – a variety of schemes through which the beneficiaries, or users, of ecosystem services provide payment to the stewards, or providers, of ecosystem services.
 - (4) **Environmental technologies** – these prevent or treat pollution, enhance management of ecosystems, and enable more efficient resource use.
 - (5) **Markets for cultural services** – e.g. for tourism, recreation and preventive or curative health treatments, based on nature's services.
 - (6) **Financial and legal services** - e.g. financial services for investment in nature-based businesses, legal services to secure property rights which underpin PES or offsetting.
 - (7) **Ecosystem knowledge economy** – services that deliver knowledge about ecosystems and ecosystem services; the UK could emerge as an international leader in this respect.

- (8) **Corporate ecosystem initiatives** – measures taken by companies to reduce negative impacts and enhance positive impacts on nature, in order to enhance brands, meet consumer demand, manage supply chain issues or simply ‘do the right thing’.

Specific potential business opportunities

12. The study report presents a catalogue of 40 outline proposals for potential specific business opportunities. This is by no means exhaustive, but is designed to illustrate the range of opportunities that could exist.
13. For each proposal, the report provides: (1) a brief description of the opportunity, (2) mention of which business sectors or types might be implicated, (3) a rough estimate of the potential size of the market, (4) an indication of the potential benefit to ecosystems, (5) a brief assessment of what actions might be needed to make the opportunity work in practice, and (6) suggestions for further EMTF research on the opportunity.
14. An attachment to the report (**Attachment 1**) presents a more detailed analysis of 15 of the proposals.

Some ‘more promising’ ideas, and suggested further research by EMTF to take these forward

15. The report highlights and tentatively ranks 12 opportunities which show particular promise both in terms of short- to medium-term market potential, and in terms of potential benefit to UK ecosystems. These offer a balance between those which might be taken forward largely by business alone, and those which might also require policy and/or regulatory measures.
16. For each, the report outlines what further work EMTF might consider to take it forward. Suggestions for further work might also inform a possible second phase of the Valuing Nature Network (currently under preparation), the recently launched UK National Ecosystem Assessment follow-on phase, and other research and knowledge exchange programmes such as those funded by the research councils.
17. The 12 opportunities which we highlight are ranked as follows:
 - **Rank 1=: BIODIVERSITY OFFSETS, INCLUDING THROUGH CONSERVATION BANKING** – an opportunity to stimulate creation of new companies and new business models for existing companies to provide biodiversity offsets in the UK, by moving from the current voluntary approach to a (soft regulation) mandatory regime.
 - **Rank 1=: PEATLAND CARBON CODE** – an opportunity to provide a transparent, verifiable framework for companies to purchase carbon credits to support restoration and re-wetting of degraded peatlands.
 - **Rank 3: WOODLAND ENHANCEMENT THROUGH A LARGER MARKET FOR WOOD FUEL** – an opportunity to meet growing demand for woodfuel and wood-burning stoves from UK woodlands.
 - **Rank 4: DEVELOPING THE UK ECOSYSTEMS KNOWLEDGE ECONOMY** – and opportunity to develop knowledge-based businesses providing high quality employment and growth opportunities.

- **Rank 5: LAYERED PES** – an opportunity to sell different ecosystem services, which arise from the same area of land, to different buyers.
 - **Rank 6: CARBON SEQUESTRATION AS AN ‘ALLOWABLE SOLUTION’** – an opportunity arising from Government plans that all new homes will be zero carbon from 2016, involving allowing developers to ‘solve’ this part of this requirement by paying for carbon sequestration through woodland creation or peatland restoration.
 - **Rank 7: EXPANDING THE REACH AND VALUE OF SUSTAINABILITY CERTIFICATION** – an opportunity expand the cover of sustainability assurance to sectors or segments currently not covered, creating business opportunities for producers, intermediaries, retailers and related services.
 - **Rank 8: OPTIMIZING THE ECOLOGICAL AND ECONOMIC BENEFITS OF SUSTAINABLE TOURISM** – a range of opportunities including enhancing accessibility to and recreation in nature, better distributing tourist visits to nature, investing tourism income in host ecosystems, better promotion of the UK’s natural heritage, addressing tourism’s ecological footprint, developing nature-based health tourism.
 - **Rank 9=: GLOBAL CENTRE OF EXCELLENCE FOR ECOSYSTEM SERVICES CERTIFICATION** – an opportunity to sell professional services that foster best practices in certification of products that benefit ecosystem services.
 - **Rank 9=: WATER RE-USE TECHNOLOGIES** – an opportunity to develop and apply technologies to increase re-use of water at the level of individual (or local groups of) businesses, with significant potential benefit to aquatic and wetland ecosystems.
 - **Rank 11: REDUCING RISK FOR INSURERS THROUGH INVESTMENT IN GREEN INFRASTRUCTURE** – an opportunity to enhance nature and in doing so reduce risk of catastrophic events such as flooding.
 - **Rank 12: DEVELOPING ENVIRONMENTAL BONDS AS VEHICLES FOR INVESTMENTS IN NATURE** – an opportunity to value the combined natural assets of a given area of land and market these to investors as an environmental bond, underpinned by government.
18. Many of the business opportunities are linked and the pursuit of various sets of linked proposals might deliver synergies in terms of both market potential and ecosystem benefit. Further analysis of such potential synergies might be a profitable element of any further EMTF work.
 19. The report encourages EMTF to build on consultation with the business community and others initiated by this study in order that final EMTF recommendations are all the more robust.
 20. The report also makes some brief observations on macro-economic implications, including: the development of compliance markets for ecosystem services (such as that for carbon); the importance of related Government initiatives towards including natural capital in national economic accounting procedures; and more fundamental changes in planning, economic development and wider decision-making.