Natural capital 101 – insights for sustainability professionals

IEMA

Transforming the world to sustainability

Contents

Acknowledgements

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Introduction

Natural capital is a concept that is gaining in popularity but that is not yet fully or widely understood, and is an increasingly important one for public and private organisations. IEMA's 2023 survey of its Biodiversity and Natural Capital Network members identified that this topic was a high priority, with 89% of respondents wanting to know more about it. This guide is designed to shed light on the concepts and approaches related to natural capital, using accessible language and frameworks to promote a common understanding among practitioners. It includes information on:

- What natural capital is – why it is important, and where natural capital approaches can bring benefits.
- Measuring natural capital – natural capital assessment and accounting basics, including tips for success.
- Key terms and useful links to find out more.

We hope that this paper will help drive holistic decision-making and empower practitioners and organisations to consider nature at the same level as other key risks and opportunities, understand and report their true environmental values and costs, and use this knowledge to influence decision-making for the benefit of the natural world, our economy and society.

What is natural capital?

In the IEMA *Biodiversity and Natural Capital Buzzword Guide*[1] we define natural capital as "the stock of renewable and non-renewable natural resources (e.g. plants, animals, air, water, soil, minerals) that combine to yield a flow of benefits to people", noting that quantity, condition and location are all important factors.[2] These benefits create economic value to business and society.

Natural capital includes living and non-living ecosystems, for example, water, air, soil, rocks and organisms. A stock of natural capital can create flows of ecosystems services such as timber, minerals, fresh water, climate regulation, flood protection, and recreation and education services.

The poor management or overexploitation of natural capital can be a risk for business as well as society because it can result in changes in the condition of natural capital stocks which in turn exacerbate environmental issues including resource depletion.

Figure 1, below, shows how ecosystems services flow from natural capital stocks, and how this in turn creates value to businesses and to society.

Figure 1

Relationship between biodiversity and natural capital stocks, flows and values

The elements of nature such as woodland, soils, freshwater, grassland, heathland, minerals and air.

Ecosystem services are often split into categories of classification,[3] for example, provisioning, regulating and cultural. Provisioning includes food crops, timber and water; regulating includes air quality, climate regulation and pollination; cultural services are recreation and aesthetic experiences. These are underpinned by the supporting functions that occur within ecosystems, such as nutrient cycling, soil formation and photosynthesis.

The flow of ecosystem services results in the provision of benefits to society and businesses, for example, food, clean air, clean and plentiful water, wood products and fibre, health and wellbeing, and noise, pollution and heat reduction.

Source: Permission to use modified image provided by Capitals Coalition and Cambridge Conservation Initiative. 2020. Origin: "Integrating biodiversity into natural capital assessments". https://capitalscoalition.org/wp-content/uploads/2020/09/Biodiversity-Guidance_Framing.pdf

1 https://www.iema.net/resources/blog/2022/12/05/iema-launches-biodiversity-and-natural-capital-buzzword-guide
2 https://capitalscoalition.org/capitals-approach/natural-capital-protocol/?fwp_filter_tabs=guide_supplement
3 https://www.millenniumassessment.org/en/index.html

Why take a natural capital approach?

Nature is as important as physical or human capital and therefore needs to be assessed and considered when making decisions, not just to meet legal requirements or corporate social responsbility but to ensure the best use of the organisation's resources and to enable an organisation to plan for any current and future risks (for example, climate change).

The World Economic Forum published a report at the beginning of 2024 finding that biodiversity loss and ecosystem collapse is the third-highest perceived risk over the next 10 years after extreme weather events and critical changes to Earth systems (ahead of debt or armed conflict or infectious diseases).[4]

In *The Economics of Biodiversity*[5] in 2021, Partha Dasgupta stated: "Truly sustainable economic growth and development means recognising that our long-term prosperity relies on rebalancing our demand of Nature's goods and services with its capacity to supply them" and that we should be "accounting fully for the impact of our interactions with Nature across all levels of society".

Nature is not free and has been historically undervalued in our economy. Our use of nature (our impacts) has costs for society and the economy that we don't generally consider in private business accounts. There are costs of exploiting nature without paying attention to how much is used and to what effect – including risks associated from overexploitation, resource scarcity and increased impacts from climate change. But there are also financial costs to maintain and enhance nature to ensure that these critical services can continue into the future.

While nature is hard to price, our ability to balance the supply with the demand for nature's goods and services relies on our ability to integrate the value of nature into economic decision-making to more accurately account for the impacts and dependencies (the reliance on or use of natural capital) of our activities.

Taking a natural capital approach

Valuing nature using an approach that integrates with existing economic and business processes can help us gain a fuller picture of our activities and allow us to make better decisions.

Natural capital assessments and accounts can help organisations gain a better insight when making decisions including an understanding of nature-related risks and opportunities, helping to:

- Identify priorities for business and decrease impacts on natural capital.
- Justify environmental spending.
- Inform decisions on climate change mitigation.
- Create new opportunities and improve resilience.
- Understand how the environment interacts with the economy.
- Improve reputation.

Understanding the concept of natural capital and taking on an assessment takes time. An initial qualitative assessment can be quick and help to provide focus for a more detailed assessment.

More detailed, and arguably more useful, assessments are a significant investment, especially if natural capital accounting is included. Support from a qualified practitioner will depend on the scope of the project but can save organisations a good deal of time.

4 https://www3.weforum.org/docs/WEF_The_Global_Risks_Report_2024.pdf
5 https://www.gov.uk/government/publications/final-report-the-economics-of-biodiversity-the-dasgupta-review

What is a natural capital assessment?

A natural capital assessment describes or measures natural capital stocks, the ecosystem services that flow from them, and their condition. It can also include an estimate of the value of the natural capital benefits or any losses as a result of business activities (if the former measures have been quantified).

Natural capital assessments are important because they create an evidence base on which to make decisions about maintaining the flow of natural capital benefits from natural capital stocks over time, and for mitigating a business' or an intervention's impacts on natural capital. They can be used to create a business case for a new policy, management strategy or intervention.

A natural capital assessment can also be used to demonstrate an organisation's contribution to the delivery of public benefits, and the value of those benefits.

Why would someone need to carry out a natural capital assessment?

Natural capital assessments are carried out by a wide range of sectors, including policymakers, businesses, landowners, developers and conservation specialists. Some reasons for conducting a natural capital assessment include:

- To understand the benefits that are supplied by land holdings for informing future management strategies.
- To identify or predict the impacts of development or supply chains on natural capital.
- To meet any future nature-related reporting requirements or as part of developing Local Nature Recovery Strategies.
- For farm baselines to identify income streams from environmental land management schemes and to identify natural capital finance opportunities (e.g. selling carbon or other ecosystem services within environmental market-based mechanisms).

In many of these circumstances a scenario analysis comparing the current situation with either past or future conditions can be included in an assessment, to explore the impacts of new business strategies, new legislation or interventions.

The most basic data you will need are: site details (project area, location, topography) and habitat data (area (ha) and condition). Depending on your project, it may be best to work with qualified practitioners to determine the data you will need for an accurate and robust assessment.

An introductory guide to completing a natural capital assessment

Before embarking on a natural capital assessment you should understand your goal, and question whether a natural capital assessment will help achieve it. If an assessment does, be clear why it is being done and clearly define the goals.

Defra's Enabling Natural Capital Approach (ENCA) is an excellent resource on all aspects of natural capital assessment, and its four-step natural capital assessment[6] template is a useful guide for preparing for, and carrying out, a natural capital assessment:

1) Describe the environmental context

Understand the environmental context of the project area, detailing the scale, location, outputs and spatial reach of the project. Then establish the current natural capital stock baseline – record the area and type of each of the habitats present in the project area (e.g. hectares of woodland, semi-natural grassland, etc). This can be recorded in a spreadsheet or on a map.

2) Consider how natural assets might be impacted

Explore how your intervention (for example, change in supply chain or land management policy) might impact the natural capital asset baseline identified in Step 1. How will it affect the quantity and quality of natural assets in space and over time? Are they positive or negative? The ENCA *Assets Databook*[7] can provide information on habitats to help the assessment of potential benefits and risks.

3) Consider the welfare impacts

Consider how the changes in quantity and quality of natural assets in the project area (identified in Step 2) impact on the ecosystem services and benefits they provide, considering provisioning, regulating and cultural services. This can be assessed qualitatively at first for the baseline (Step 1) and for the impact scenario (Step 2) but should be quantified in biophysical units where possible (for example, tonnes of carbon, tonnes of air pollutant taken up, number of visitors, etc). If quantified, the monetary value of these ecosystem service benefits can be estimated using thorough and robust methodologies. Defra's ENCA[8] provides information to support this quantification, but also see the 'Valuing natural capital' section on page 8.

6 https://www.data.gov.uk/dataset/3930b9ca-26c3-489f-900f-6b9eec2602c6/enabling-a-natural-capital-approach
7 https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fs3.eu-west-1.amazonaws.com%2Fdata.defra.gov.uk%2FENCA%2FENCA_Asset_Databook_Aug_2021_update.xlsx&wdOrigin=BROWSELINK
8 https://www.gov.uk/guidance/enabling-a-natural-capital-approach-enca

4) Consider uncertainties and optimise outcomes

Once the impacts of the intervention have been quantified it may be necessary to rethink it, depending on the outcomes of the assessment, and identify any gaps in understanding where more research may be necessary. If the outcome and trade-offs identified are acceptable, and the overall cost-to-benefit ratio is acceptable, a strategy that mitigates risks and ensures the delivery of the natural capital benefits should then be put in place. This should include how to monitor to ensure that the benefits are being delivered in the short and long term.

There are a number of other frameworks that can provide a structure for completing natural capital assessments:

- UK Natural Capital Committee 5 Stage Approach[9] is a natural capital assessment guidance that can assist and help inform an action plan. This approach follows many of the same steps as the ENCA guideline above, with a stronger emphasis on partner and stakeholder engagement, and was published in 2017.

- The Natural Capital Protocol[10] is a decision-making framework that helps organisations identify, measure and value their direct and indirect impacts and dependencies on nature.

- ACT-D[11] (Assess, Commit, Transform, Disclose), created by a number of NGOs including the Capitals Coalition and the RSPB, sets out high-level business actions that create a standardised framework for business to approach understanding impacts and dependencies on nature, including measurement and enhancement phases.

- The Taskforce on Nature-related Financial Disclosures (TNFD)[12] is a framework for disclosing impacts and dependencies on nature, but it also sets out steps for measuring nature in its LEAP process (Locate, Evaluate, Assess, Prepare).

Key principles of natural capital assessments

- **Transparency: this includes allowing stakeholders to view how an assessment was done, methodologies used, consultations with stakeholders, decisions and assumptions made, why they were made, etc (there may be exceptions where there are commercial sensitivities).**

- **Robustness: this includes using recognised and fit-for-purpose methodologies, credible data, and avoiding double accounting.**

- **Relevance and proportionality: this includes ensuring that the assessment is focused on the most material aspects for the organisation and that activities are proportional to the size of the site and complexity of the vision.**

- **Consistency: this includes ensuring that methods and data used and applied are compatible, consistent and replicable.**

9 ncc-natural-capital-workbook.pdf (publishing.service.gov.uk)
10 https://capitalscoalition.org/capitals-approach/natural-capital-protocol/?fwp_filter_tabs=guide_supplement
11 https://capitalscoalition.org/high-level-business-actions-on-nature-launched-at-davos-by-capitals-coalition-partners
12 https://tnfd.global

Valuing natural capital

Natural capital value is the value people place on the benefits that come from the natural environment, and valuation is the process of determining "the importance, worth or usefulness of something in a particular context".[13] Values can be expressed qualitatively, quantitatively or in monetary terms.

Natural capital can be given an economic value. Economic value is defined as the importance or worth of something to people, including all relevant market and non-market values (goods and services not traded in the market).[14] In the context of nature this can be summarised as the value people place on the benefits that come from the natural environment.

The Total Economic Value framework provides a way of identifying different aspects of value and is described as "the overall economic value of a particular natural resource, taking into account both use and non-use values"[15] (see below for definitions).

In economic valuation, the Total Economic Value framework characterises the different ways in which individuals value the benefits that flow from natural capital.

Total Economic Value is split into two parts:

1. Use value[16] is where people can benefit from the natural environment in the following ways:
    - Direct use value, for example, through the provision of food, timber products, water and so on.
    - Indirect use value, for example, through the recycling of nutrients in the soil or pollination of food crops.
    - Option value – the premium placed on maintaining resources and landscapes for future possible direct and indirect uses.
2. Non-use value[17] is described as the intrinsic value of resources and landscapes, irrespective of their use, for example, where people value the environment's existence for the benefit of others, for future generations and for nature itself, independent of its use by humans.

It is worth noting that price and value are not the same, although in the case of environmental goods and services that are exchanged in an established market (such as food or timber), price gives an indication of the value people place on them. For many of these services, however, markets do not exist, meaning that there are no prices we can take as a reference for value.

There are several techniques that can be used to estimate the value of nature. A full discussion of each of these is beyond the scope of this paper, but a further summary is available in the Natural Capital Protocol (2016).[18] Examples include:

- Asking people directly how much they value nature. This can be achieved using surveys where people are required to state how much they would hypothetically be willing to pay (or accept) for the provision (or removal) of certain natural assets.
- Asking people to choose between different choices showing different levels of natural capital stocks and flows, in order to determine their preferences.
- Eliciting values indirectly – for example, by looking at the money people spend when visiting a country park (such as travel costs) we can gain an indication of the 'minimum' recreational value the park has for visitors.
- Estimating avoided costs associated with the provision of ecosystem services, for example, property damage avoided due to flood protection services provided by wetlands.

Note, there are pros and cons to using each technique selection, and the one chosen will depend on your aims and the context for work. Environmental economic valuations should be carried out by a qualified environmental specialist.

There is no one standardised method for valuing changes in the provision of ecosystem services. However, there is guidance available, for example, Defra's ENCA tool, the Natural Capital Protocol and ISO14008:2019 *Monetary valuation of environmental impacts and related environmental aspects*.[19]

13 https://capitalscoalition.org/capitals-approach/natural-capital-protocol/?fwp_filter_tabs=guide_supplement
14 https://capitalscoalition.org/capitals-approach/natural-capital-protocol/?fwp_filter_tabs=guide_supplement
15 https://www.oxfordreference.com/display/10.1093/oi/authority.20110803105035290
16 Pearce, DW, Markandya, A and Barbier, E (1989). Blueprint for a green economy. Earthscan, London WBCSD Connecting the dots, adapted from Oxford Economics (2019)
17 Pearce, DW, Markandya, A and Barbier, E (1989). Blueprint for a green economy. Earthscan, London WBCSD Connecting the dots, adapted from Oxford Economics (2019)
18 https://capitalscoalition.org/capitals-approach/natural-capital-protocol/?fwp_filter_tabs=guide_supplement
19 https://www.iso.org/standard/43243.html

Example of valuing natural capital

Start by quantifying the existing natural capital assets (stocks), the ecosystem services (physical flows) and, lastly, the value of the benefits (monetary flows) provided by those (see Steps 1 and 3 of the natural capital assessment guide on page 6).

Imagine a green area, for example, a park, in the city. The natural capital stocks would be the woodland, grassland, waterbodies, etc. The ecosystem services provided by these stocks would be extensive, from cleaner air to climate regulation, noise reduction, or recreation. For this example, we are focusing on recreational opportunities, such as walking, running or birdwatching.

Park visitors engage in a variety of activities that provide them with physical and mental health benefits and improved wellbeing. To value these benefits, we could do a survey to find out how much park visitors would be willing to pay to continue having access to the park; we could enquire about their travelling costs to the park as a minimum estimate of the value; or we could, for example, use an estimate from a previous study on health costs avoided when spending time in nature, adjusting it to the number of visitors for this particular park.

(Note, this example does not attempt to establish the value of all ecosystem services that the park may provide.)

Natural capital accounting basics

Why use natural capital accounting?

Including information on natural stocks and flows of relevance in an organisation can help make better-informed decisions. It allows organisations to track their impacts and dependencies on natural capital, making it possible to identify risks and opportunities and prioritise a business strategy and actions to address issues associated with the long-term sustainability of the organisation.

The concept of natural capital accounting

A natural capital account is a record or statement relating to the stocks of natural capital, the flows of natural capital benefits that they provide, and their positive and negative impacts in relation to an organisation and its value chain. A natural capital account can include a natural capital income statement and/or a natural capital balance sheet.[20]

An account combines financial, environmental and social information to reveal the impact and dependencies on nature.

The main components of a natural capital account[21] are:

- A natural capital asset register that includes the area and type and condition of natural capital assets. This will be an output from Step 1 of the natural capital assessment steps on page 6.
- A physical flow account – the biophysical annual flow of ecosystem services from the natural capital stocks. This will have been completed in Step 3 of the natural capital assessment guide on page 6.
- A monetary flow account – the monetary value of these benefits calculated per annum, together with the overall discounted value of the stock(s) over its lifetime. This will have been completed in Step 3 of the natural capital assessment guide on page 6, and see the 'Valuing natural capital' section on page 8.
- The production and maintenance costs – the cost of current natural capital maintenance activities and production costs.

The aim of a natural capital account is to:

- Provide a snapshot of an organisation's impacts, both positive and negative, over the course of a financial year (a natural capital income statement) and/or
- Provide a future-looking view of the provision of natural capital benefits over time and the costs associated with maintaining these (a natural capital balance sheet).

Natural capital accounts can focus on an organisation's own operations and facilities or extend to include the value chain.

Figure 2

Example of the contents of a natural capital account balance sheet and income statement

Account	Scope 1	Scope 2
Natural capital balance sheet – accounting for the dependencies of the organisation and its value chain on natural capital assets **Natural capital income statement** – accounting for the positive and negative impacts of the operations of the organisation and its value chain on natural capital assets	Natural capital assets owned by the organisation or for which the organisation has a legal or voluntary responsibility[A] Impacts on any natural capital asset due to the organisation's own operations (e.g. land use, grid electricity, fuel, water)[C]	All other natural capital assets on which the organisation depends through its own operations or the operations of its value chain[B] Impacts on any natural capital asset attributed to the organisation through the operations of its value chain (supply chain upstream, consumer use and post-consumer waste downstream)[C]

Note: Assets that are not owned by anyone might be included in Scope 1 or Scope 2 depending on the organisation and materiality of its impacts and dependencies.

Source: Permission to reproduce extracts from British Standards is granted by BSI Standards Limited (BSI). No other use of this material is permitted. British Standards can be obtained from BSI Knowledge knowledge.bsigroup.com[22]

20 Adapted from BS 8632:2021 Natural Capital Accounting for Organizations

21 https://knowledge.bsigroup.com/products/natural-capital-accounting-for-organizations-specification?version=standard

22 https://linkprotect.cudasvc.com/url?a=https%3a%2f%2fknowledge.bsigroup.com%2fproducts%2fnatural-capital-accounting-for-organizations-specification%3fversion%3dstandard&c=E,1,I-nLpfWAOHp4zg98l06hSAc2nNeW7m8ijbQWie5dbuVQCPiO1_i2wXDjI0qAue0d1Ic6tehRysSJL-xSxrYG4TeAW3-KhNlKFm3dZi2_e4ER2Q,,&typo=1

What helps to make a successful natural capital assessment?

A successful natural assessment will have many aspects, but key ones include:

- Clear aims, objectives, and boundaries for the study area.
- A baseline quantifying the extent and perhaps condition of the natural capital stocks (habitats) of the area.
- Quantification of the physical flows of the ecosystem services, where possible.
- Valuation of the benefits or disbenefits using recommended methodologies, where possible.
- Details of the assumptions used and any caveats or limitations associated with the work.

Often, the most useful assessments are those that produce detailed spatial maps of the assets and the ecosystem services at a local level. From here, impacts and dependencies of an intervention or business actions can be identified and measured.

This sounds complicated – is a natural capital assessment attainable?

A basic natural capital assessment is attainable. Start by describing the natural capital stocks and identifying the potential ecosystem services provided. A qualitative assessment is a good place to start. Once an understanding of the aims and objectives of the assessment have crystalised, a more detailed and quantitative assessment can be taken forward from there.

Natural capital valuation and accounting are not always necessary, and if taken forward, natural capital accounts don't need to be perfect straight away – they can be built on over time. To attain deeper, more accurate analysis, work with professionals who have expertise in natural capital assessments and environmental economic valuation.

Taking a natural capital approach

Figure 3 shows an overview of the process of taking a natural capital approach.

Figure 3
Process overview

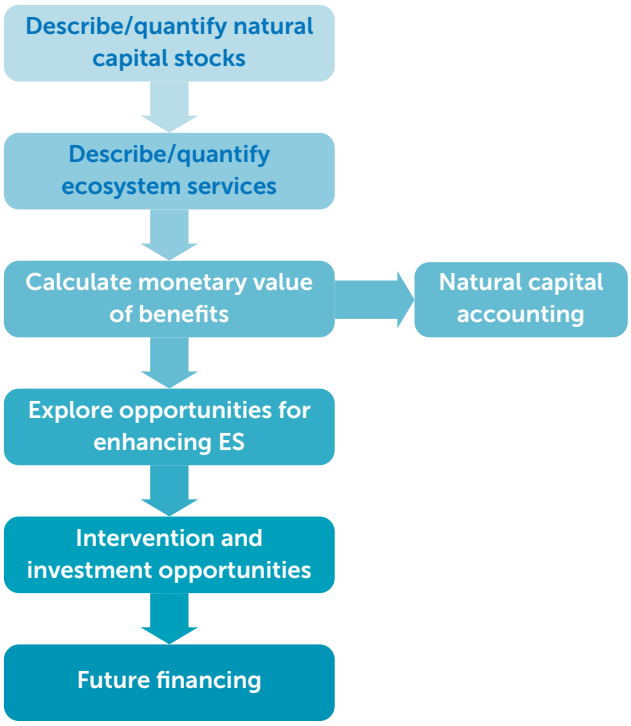

Figure 3 above provides an easy-to-understand flow of actions:

- 'Describe natural capital stocks' = Steps 1 and 2 of Defra's ENCA tool on page 6.
- 'Describe ecosystem services' and 'Calculate monetary value' = Step 3 on page 6.
- 'Explore opportunities for enhancing ES (ecosystem services)', 'Intervention and investment opportunities' and 'Future financing' = Step 4 onwards.

Tips for success

The following list of tips will help you in undertaking a natural capital assessment, but as with most similar technical exercises, it is best practice to seek the input of a competent professional to assist.

1. Be clear about why you are embarking on a natural capital assessment and what you would like to gain from it.
2. Follow an established assessment framework (as outlined above or from the others listed).
3. Establish a detailed and ground-truthed (information collected by direct observation, as much as is possible) baseline. (The more detailed the better! Work with a qualified professional or ecology group.)
4. Have your project site properly assessed and mapped to ensure all evaluations and assessments that follow are realistic and robust.
5. Finely mapped baselines will set you up for success. If this can't be done in-house, consider outsourcing to specialists that offer spatial mapping opportunities for natural capital assessments.
6. Identify data gaps early on (the sooner you know what data is missing or could be improved upon, the sooner you can implement a plan to attain or collect that data, and you'll build a better understanding of the limitations of your assessment).
7. Quantify the natural capital stocks of your site and the flow of ecosystem services whenever possible, especially if an aim of your assessment is to estimate the monetary value of benefits.
8. Focus on what is important in terms of benefits. There are multiple ecosystem services and therefore multiple benefits that the natural capital provides. You may want to focus on those most relevant for your organisation. The goal is not to cover all possible benefits but to provide the organisation with a useful information base to facilitate decision-making.
9. Even if it is not possible to quantify and value all of the ecosystem services and benefits provided by your study area, describe them and make sure they are included qualitatively in the assessment as they are still valuable and are often interlinked with other services which may be more quantifiable.
10. Economic values of ecosystem services, where a monetary value is attached to an environmental benefit, can be helpful to show the extent of the impacts. However, keep in mind that it is approximate and only partly captures the degree of those benefits.
11. If taking on a natural capital account, don't worry if there are gaps – it can take time to establish a full account. As with the rest of the natural capital assessment, specialist professionals can help set up a process to track business impacts.

Key terms

Here we list the key terms related to natural capital and their meanings.

Asset register An asset register provides information on the health of natural capital stocks at a site, and the site's capacity to provide flows of ecosystem services.

Baseline scenario The starting point or benchmark against which changes in natural capital attributed to your business' activities can be compared.[23]

Biodiversity Biodiversity refers to the variety of life. The UN Convention on Biological Diversity provides the following definition: "'Biological diversity' means the variability among living organisms from all sources including, interalia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems." Biodiversity is vital for humans because so much of what we require comes from nature – such as fuel, food and medicines. There are estimated to be 8.7 million species (give or take 1.3 million and excluding bacteria) on Earth.[24]

Biosphere A part of a planet's environment where life exists.[25]

Economic value Economic value is the importance or worth of something to people, including all relevant market and non-market values (goods and services not traded in the market).

Ecosystem The balance of species in an ecosystem depends on the natural features of the environment, such as the nutrient status, climatic conditions, water and light, as well as the relationship with other organisms including predators and agents of disease. An ecosystem is a dynamic complex of plant, animal and micro-organism communities and the non-living environment interacting as a function.

Ecosystem service The contributions of ecosystems to the benefits that are used in economic and other human activity. Examples include food and timber provision, climate regulation (carbon storage and sequestration, urban cooling), water purification and flow regulation, flood protection, recreation, tourism, and physical and mental health.[26]

Market value Financial value of natural capital stock in the marketplace. In natural capital, examples include minerals, timber and fresh water.

Nature The natural world, with an emphasis on the diversity of living organisms (including people) and their interactions among themselves and with their environment.[27]

Natural capital approach A natural capital approach integrates the concept of natural capital into decision-making. Thinking in 'capital' terms enables comparison of many changes and decisions at the same time. The natural capital approach uses information from, and provides input to, many existing environmental management and analytical approaches. It considers both stocks and flows.[28]

Natural capital Natural capital is the stock of renewable and non-renewable natural resources (for example, plants, animals, air, water, soil, minerals) that combine to yield a flow of benefits to people.[29]

Natural capital dependency An organisation's reliance on, or use of, natural capital.[30]

Natural capital account A record or statement relating to the stocks of natural capital, the flows of natural capital benefits they provide, and the positive and negative impacts of the operations of the organisation and those attributed to it through the operations of its value chain and prepared in accordance with the principles and requirements of this standard.[31]

Natural capital flow The provision of ecosystem services to people and organisations by nature over the accounting period of the assessment.

Natural capital stock[32] Quantity of natural capital existing at a point in time (sometimes called natural capital asset).

Non-market value Natural capital stock that does not have a value in the marketplace, for example, outdoor recreation or landscape amenity.

Total Economic Value Total Economic Value is a framework developed to characterise why and how individuals value the benefits received from the environment. Economic value can take several forms: direct use value, indirect use value, option value and non-use value.[33]

23 Natural Capital Protocol – Capitals Coalition
24 IEMA-Biodiversity-Buzzword-Buster-December-20221.pdf
25 BIOSPHERE | English meaning – Cambridge Dictionary
26 IEMA-Biodiversity-Buzzword-Buster-December-20221.pdf
27 IEMA-Biodiversity-Buzzword-Buster-December-20221.pdf
28 IEMA-Biodiversity-Buzzword-Buster-December-20221.pdf
29 IEMA-Biodiversity-Buzzword-Buster-December-20221.pdf
30 BS 8632
31 BS 8632
32 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/824604/ncc-terminology.pdf
33 Enabling a Natural Capital Approach guidance – GOV.UK (www.gov.uk)

Additional resources

There are a lot of online resources around natural capital, and we have attempted to list some of these below:

- The Natural Capital Protocol is a decision-making framework that helps businesses to identify, measure and value their impacts and dependencies on nature. https://capitalscoalition.org/capitals-approach/natural-capital-protocol/?fwp_filter_tabs=guide_supplement

  See also the Capitals Coalition natural capital case studies: https://capitalscoalition.org/impact/case-studies/?fwp_filter_tabs=case_study

- The UK natural capital accounts 2023 provide "estimates of the financial and societal value of natural resources to people in the UK". https://www.ons.gov.uk/economy/environmentalaccounts/bulletins/uknaturalcapitalaccounts/2023

- Defra's Enabling a Natural Capital Approach is a suite of resources for those who wish to learn about natural capital and to apply it to projects. https://www.gov.uk/government/publications/enabling-a-natural-capital-approach-enca-guidance/enabling-a-natural-capital-approach-guidance

- BS 8632:2021 Natural Capital Accounting for Organizations provides specifications and guidance for the process of preparing natural capital accounts for organisations, including minimum requirements for defining the scope of an account and the material impacts and dependencies, and documenting the data and process used to prepare the natural capital account.[34] https://knowledge.bsigroup.com/products/natural-capital-accounting-for-organizations-specification?version=standard

- We Value Nature has some examples of companies taking a natural capital approach. https://wevaluenature.eu/natural-capital-stories

- Natural Capital Committee: Natural Capital Workbook (2017) is a practical guide aimed at anyone who wants to use natural capital approaches in making decisions about the natural environment. It is intended to support decision-makers, including planners, communities and landowners, but has particular relevance for place-based decisions. https://www.gov.uk/government/publications/natural-capital-committee-natural-capital-workbook

  See also the Natural Capital Committee's publication on terminology (2019): https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/909202/ncc-terminology.pdf

34 ISO 14054 Natural Capital Accounting for Organizations, based on BS 8632 is at publication being developed and due to publish in 2025

Further information

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We are the Institute of Environmental Management and Assessment (IEMA).

We are the global professional body for over 22,000 individuals and 300 organisations working, studying or interested in the environment and sustainability.

We are the professional organisation at the centre of the sustainability agenda, connecting business and individuals across industries, sectors and borders.

We also help and support public and private sector organisations, governments and regulators to do the right thing when it comes to environment- and sustainability-related initiatives, challenges and opportunities.

We work to influence public policy on environment and sustainability matters. We do this by drawing on the insights and experience of our members to ensure that what happens in practice influences the development of government policy, legislation, regulations and standards.

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