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Biodiversity Net Gain Regulations
Opportunities and Challenges

FULL REPORT

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This Programme supports the IPF's wider goals of enhancing the understanding and efficiency of property as an investment. The initiative provides the UK property investment market with the ability to deliver substantial, objective and high-quality analysis on a structured basis. It encourages the whole industry to engage with other financial markets, the wider business community and government on a range of complementary issues.

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Biodiversity Net Gain Regulations

Report

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1 Biodiversity Net Gain Regulations: Opportunities and Challenges

INTRODUCTION

This report is designed to help investors understand Biodiversity Net Gain (BNG) both in terms of statutory compliance for new developments and reporting against sustainability targets. It provides answers to the following questions:

- Which sites and projects are covered by the legislation on BNG?
- When does BNG need to be considered in the development process?
- What are the reporting requirements once a scheme is completed?
- What does good BNG practice look like?
- What is the impact of BNG on development costs and values?
- What are the opportunities for investors?
- How might the BNG regime change in future?

This report concludes that BNG is a material consideration for UK real estate investors. Proactive integration of BNG into development and investment strategies can mitigate risk, enhance ESG performance, and unlock new revenue streams.

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EXECUTIVE SUMMARY

The Biodiversity Net Gain (BNG) regime, introduced under the Environment Act 2021 and effective from February 2024, requires most new developments in England to deliver a minimum 10% net gain in biodiversity. This regulatory shift is reshaping the development landscape and carries direct implications for institutional real estate investors.

BNG is not purely a compliance obligation—it is a strategic consideration that can influence planning risk, enhance Environmental, Social and Governance (ESG) performance, and potentially improve exit values. Developments that successfully integrate BNG may benefit from more streamlined planning approvals, stronger alignment with ESG frameworks, and increased appeal in urban markets where access to greenspace is limited.[1]

In parallel, BNG is creating new opportunities for nature-based investment, including habitat banks and biodiversity unit markets. These assets offer co-benefits such as carbon sequestration, flood resilience, and enhanced amenity value—supporting both environmental and financial outcomes.

Institutional investors who proactively embed BNG into land acquisition, development design, and delivery strategies will be better positioned to mitigate risk, meet regulatory expectations, and capitalise on emerging nature-positive investment trends.

Two-thirds of recent planning applications were able to fully achieve a 10% BNG on-site.[2] In general, smaller development sites were more likely to need to secure off-site units, whereas larger sites had more flexibility to accommodate BNG schemes on-site. The evidence also suggests that higher value developments are more likely to secure off-site units, highlighting the trade-off between accommodating BNG on-site and maximising density and value.

The cost of delivering BNG varies from site to site depending upon the type of habitats which require offsetting and the extent to which BNG can be accommodated on-site. The case studies suggest that in most instances the costs of delivering 10% BNG are relatively small as a function of total site acquisition and construction costs (0.5% to 3% development cost excluding land value). Furthermore, many developments intending to provide green and blue spaces regardless of the BNG policy do not experience additional costs for the physical delivery of habitats as the BNG falls within the general landscape maintenance. In general, the premium for creating green and blue spaces appears to be small and largely derives from their amenity and recreation value, rather than biodiversity.

BNG represents both a regulatory requirement and a strategic opportunity for institutional investors. As the policy landscape evolves, investors should monitor local authority targets, engage early in the planning process, and consider partnerships with biodiversity unit suppliers. Significant investments in vehicles delivering BNG have been observed where in general the vehicles hold assets for the long term. Additionally, where developers have a pipeline of developments with off-site BNG requirements, there is merit in considering the establishment of their own habitat bank. Context-sensitive approaches, education and stakeholder engagement will be key to successful BNG implementation.

1 Examples of ESG frameworks include:
- Taskforce on Nature-related Financial Disclosures (TNFD): A set of disclosure recommendations and guidance for business and finance to assess, report and act on nature-related dependencies, impacts, risks and opportunities.
- Global Real Estate Sustainability Benchmark (GRESB): Used by investors and managers to measure, benchmark, and improve the sustainability performance of their portfolios and assets.
- Building Research Establishment Environmental Assessment (BREEAM): A framework to deliver newly built assets which are high performing and sustainable.
- Leadership in Energy and Environmental Design (LEED): A green building rating system which assesses and certifies buildings based on their environmental performance and sustainable practices.

2 BNG500. (2025). What lessons can we learn from analysis of 500 BNG-compliant planning applications made in 2024?

1. LEGISLATION ON BIODIVERSITY

Intensive farming and urbanisation have resulted in the UK being one of the most nature depleted countries in the world and climate change is adding further stress (Appendix 1). The UK is legally obliged to protect its biodiversity under the terms of the UN's international Convention on Biological Diversity (CBD) (Appendix 2) and has adopted the Kunming-Montreal Global Biodiversity Framework (GBF).[3]

The Environment Act 2021 includes a requirement for most developments in England to deliver at least 10% Biodiversity Net Gain (BNG) which must be evidenced as part of the planning application process.[4] This came into force on 12 February 2024 for major developments (10+ houses, or >0.5 hectares) and 2 April 2024 for non-major developments (one – nine houses, or <0.5 hectares). The only exemptions from the 10% BNG requirement are for developments which impact less than 25m^2 of non-priority habitat (e.g. modified grassland) and less than five metres of non-priority linear habitat (e.g. hedgerow). That means that some city centre sites and refurbishment schemes with little, or no habitat are exempt.[5]

The main new policies on biodiversity in the 2021 Act are:

- A 10% BNG requirement for developments.
- A target on species abundance for 2030.
- A requirement for Local Nature Recovery Strategies (LNRS) led by local authorities and the creation of a Nature Recovery Network (NRN) (Appendix 5).

The Planning and Infrastructure Bill 2024-2025 is not expected to significantly change the legislation on BNG. There is currently a consultation focused mainly on small and medium-sized (SME) developers, which includes options around extending exemptions, simplifying the small sites metric and increasing ease of access to the off-site market to make it easier, quicker and cheaper for SME developers to deliver their BNG requirements. It also addresses specific challenges for brownfield developments.

3 United Nations. (2022). *Kunming-Montreal Global Biodiversity Framework*.
4 Environment Act. (2021). Retrieved from legislation.gov.uk: https://www.legislation.gov.uk/ukpga/2021/30/contents
5 DEFRA. (2024). *Biodiversity Net Gain - what are the exemptions?*

2. BNG AND INVESTORS

The BNG policy outlined above presents both compliance obligations and strategic opportunities for institutional real estate investors. BNG is increasingly relevant to ESG performance, planning risk mitigation, and long-term asset value.

2.1 BNG for Statutory Compliance

As detailed in Section 1, statutory BNG is only required for developments in England, therefore it will impact some classes of investor and not others, and the considerations will differ depending on the investor's interest and the nature of their exposure to the development process. Those investors undertaking development activity directly will need to address BNG in the process. BNG therefore affects developers directly, while asset managers and financiers may also need to consider it.

Habitat that exists within a development's redline boundary, whether it is preserved, lost, or degraded, will be subject to the BNG policy.[6] As mentioned in Section 1, the only exemptions from the 10% BNG requirement are for developments which impact less than 25m^2 of non-priority habitat and less than five metres of non-priority linear habitat. Thus, constrained sites in city centres are likely to be exempt from the BNG policy.

Examples of habitat include vegetation on brownfield and greenfield sites, and green/blue infrastructure (including green roofs/walls, landscaping, Sustainable Urban Drainage Systems (SUDS), gardens, hedgerows, watercourses etc.). Whether a development is retaining habitat, clearing vegetation or reducing the pre-development extent of habitat within the redline boundary, they will need to not only offset any habitat loss, but also achieve a 10% net gain. It is less likely that BNG will be a requirement in retrofit developments – if no habitat is being impacted then no BNG is required; also note the minimum area/length thresholds for the BNG policy to be required stated above. More information on measuring biodiversity is provided in Section 5.1 and Appendix 3.

The developer will need to understand the likely impact, requirements, cost implications, etc. of achieving BNG within the development site and off-site, if required.

Investors acquiring property with ongoing BNG liabilities (i.e. property subject to extant planning conditions or obligations pertaining to the management and/or monitoring of habitats) should seek to understand:

- the current compliance status of those habitats;
- the responsibilities they would be assuming;
- the outcomes that are required (to establish how realistic the commitments are);
- the implications of non-compliance;
- the costs and funding arrangements; and
- the proposed management regime.

Investors funding development undertaken by third parties should scrutinise the developer's BNG process to mitigate financial and reputational risks.

6 The redline boundary is shown on a plan to define the extent of the land included in the proposed development.

2. BNG AND INVESTORS

2.2 BNG for Corporate Targets and Third-party Accreditation

Many investors will have established targets for their portfolio and assets which are likely to include environmental outputs, such as reducing carbon emissions by retrofitting buildings to be more sustainable and improving biodiversity and climate resilience by planting appropriate species of flora and altering how greenspace within assets is managed. This may include achieving and maintaining third-party accreditation, for example:

- the Land Use and Ecology module of Building Research Establishment Environmental Assessment (BREEAM) includes use of the Biodiversity Metric for quantifying impacts on ecology;
- the Sustainable Sites module of Leadership in Energy and Environmental Design (LEED) addresses biodiversity by assessing environmental impact and promoting ecological enhancement; and
- the Environmental Stewardship and Circularity module of B Corporations (B Corp) encourages companies to develop a biodiversity transition plan and evaluate its effectiveness.

This is discussed further in Appendix 2.

Global Real Estate Sustainability Benchmark (GRESB) is used by investors and managers to measure, benchmark, and improve the sustainability performance of their portfolios and assets.[7] The Natural England Biodiversity Metric presents a tool that can be used when conducting GRESB reporting as it provides a quantifiable way of assessing the biodiversity value of an asset, including assessing where biodiversity losses and gains are occurring. This can inform natural capital accounting for a portfolio as the habitats will contribute to ecosystem services (e.g. carbon sequestration; air, water and soil quality improvement; amenity value), which in turn informs its sustainability. More information on measuring biodiversity is provided in Section 5.1 and Appendix 3.

7 GRESB (2025). https://www.gresb.com/nl-en/

3. WHEN TO CONSIDER BNG IN THE DEVELOPMENT PROCESS

In England, BNG is legally required under a statutory framework introduced by the Environment Act 2021, where at least a 10% increase in biodiversity value must be delivered relative to the pre-development biodiversity value of the on-site habitats.

Where investors are providing development finance, it is important for them to assess how prepared the developer is for the implementation of BNG, often evidenced by reviewing the strategies and processes companies have in place for dealing with this new policy.

There is a wide variation among developers in their approach to BNG, with some committing significant time and resource to develop BNG strategies since 2020 and others dealing with it on a project-by-project basis. Considering the following BNG milestones will help to minimise surprises, manage short- and long-term risks and ensure a more streamlined planning process. These are considered below:

- **Land acquisition:** Depending on the point at which site value is being established and the transaction structure under which its being acquired, developers may try to offset the cost of BNG solutions by negotiating lower land prices. However, that relies on an accurate assessment of the number of BNG units which will be required and a knowledge of BNG unit prices, assuming a choice between on-site and off-site. BNG therefore introduces an additional risk that developers may underestimate the costs involved.
- **High-level baseline assessment:** An early indication of a site's biodiversity baseline value can be quickly determined by drone survey and imagery analysis, with several companies now offering this service. It may help with decision making when looking to acquire land for development, or to inform options for development footprints and areas for habitat retention and enhancement. Some companies are conducting such high-level baseline assessments across their entire asset portfolios to inform decision making.
- **Detailed baseline assessment:** When a site is shortlisted for development, a comprehensive baseline assessment needs to be conducted by a suitably qualified ecologist to accurately determine the condition status of habitat types and the BNG options available.
- **Planning:** During the planning application process for a development, BNG should be considered from the outset when designing a scheme. As a scheme evolves during this process, the implications of design change on BNG outputs should be monitored. The Local Planning Authority (LPA) will review the development's Biodiversity Gain Plan and when approved discharges the BNG planning condition.
- **Landscape design:** The Local Nature Recovery Strategy (LNRS) or, where LNRS is yet to be published, local Biodiversity Action Plans and green infrastructure strategies should be reviewed early in the development design process to identify opportunities to tailor landscape proposals to contribute to local biodiversity goals. It is worthwhile engaging with ecologists early in the design process to ensure BNG opportunities are considered from the outset. Section 6.1 discusses what good on-site BNG looks like.
- **Greenspace for mitigation and compensation:** Mitigation and compensation actions (e.g. nutrient mitigation, EIA compensation, Suitable Alternative Natural Greenspaces (SANG)) can count towards a development's BNG, but at least 10% of the gain must be delivered through separate activities (i.e. those not required to mitigate or compensate for protected species/sites impacts).[8]

8 DEFRA. (2024). *What you can count towards a development's biodiversity net gain.*

3. WHEN TO CONSIDER BNG IN THE DEVELOPMENT PROCESS

- **Grounds maintenance:** To ensure quality and cost-effective delivery, it is worth identifying appropriate grounds maintenance provider for conducting the physical habitat works for on-site BNG delivery, which will depend on the habitat types proposed. Section 6.6 discusses this further.
- **BNG frameworks:** Developers such as Lidl, Amazon and National Grid are establishing BNG frameworks that include a list of vetted biodiversity unit suppliers, enabling them to go directly to these suppliers for meeting off-site BNG needs when required. These frameworks seek to minimise delays in securing off-site BNG and can provide some level of certainty of biodiversity unit availability and price.
- **Developer-owned habitat banks:** Developers may choose to establish their own habitat bank where they have sight of a pipeline of developments in a region each expecting to have off-site BNG requirements. Section 8.2 discusses this further.

In summary, it is recommended to integrate BNG into site acquisition and design strategies to reduce planning risk and optimise land value, engage early with ecologists and biodiversity unit suppliers to secure delivery routes and cost certainty, and monitor evolving policy, including potential increases in BNG targets and changes for small and medium sites.

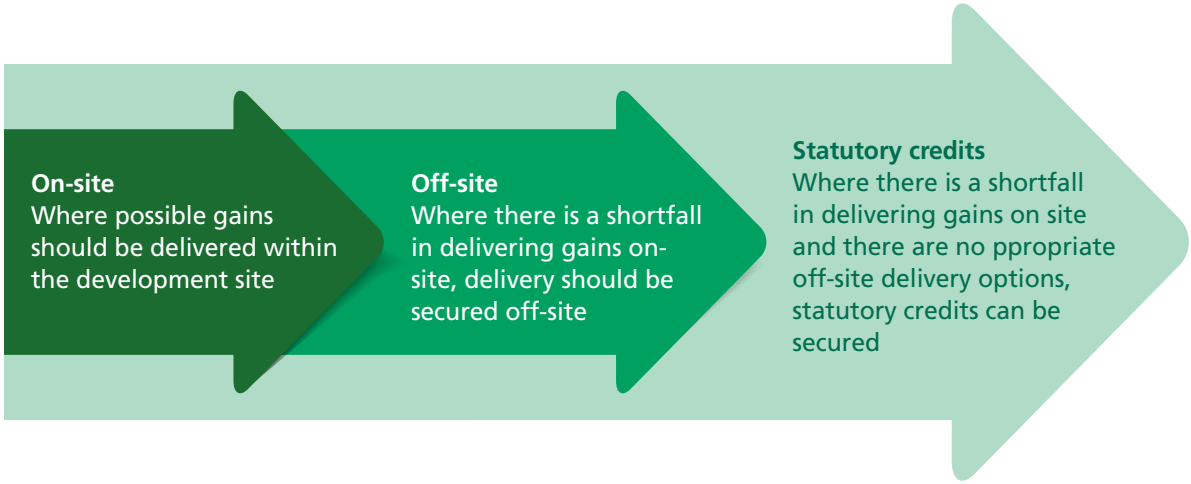
4. THE PLANNING PROCESS AND BNG

This section outlines the procedural framework and delivery mechanisms for BNG within the planning system, detailing the prioritisation of delivery options. Section 6.4 provides an overview of BNG across the asset lifecycle, including the roles of key stakeholders.

4.1 BNG Delivery Prioritisation

The Environment Act 2021 promotes BNG delivery on-site as far as possible with any shortfall that cannot be achieved on-site, to be delivered off-site within the private market. As a last resort, statutory credits can be bought from the government where there are no appropriate off-site delivery options. This order of prioritisation is set out in Figure 1.

Figure 1: BNG Delivery Prioritisation



4.2 Priority 1: On-site BNG

An ecologist should be involved early in the development design process to determine options for delivering BNG on-site. Completion of the Biodiversity Metric will demonstrate if 10% BNG has been achieved on-site.

To satisfy the BNG planning condition, a Biodiversity Gain Plan needs to be submitted to the LPA for approval; this should include details of any off-site BNG secured.

4.3 Priority 2: Securing Off-site BNG

Where on-site BNG results in a deficit, there are several options for securing off-site BNG:

- Secure biodiversity units from an established habitat bank (Appendix 5) – once the units are secured, the liability for delivering the BNG falls to the habitat bank provider.
- Create biodiversity units on developer-owned land (Section 8.2) – the liability for delivering the BNG sits with the landowner or can be placed with a delivery body (e.g. environmental non-governmental organisation (eNGO), conservation contractor).
- Secure a bespoke deal with a local landowner for the delivery of the BNG – depending on the contractual structure, the liability for delivering BNG is likely to sit with the landowner or can be placed with a delivery body (e.g. eNGO, conservation contractor).

4. THE PLANNING PROCESS AND BNG

The process for securing off-site biodiversity units to meet a development's BNG requirements is set out in Figure 2. Further detail, including what to look for when securing off-site BNG is provided in Appendix 5.

Figure 2: Process of Securing Off-site Biodiversity Units

4.4 Priority 3: Statutory Credits

The statutory credits scheme allows the UK government to sell credits to developers and invest in habitat creation. The price of statutory credits has been set higher than prices for equivalent biodiversity units on the market to ensure they do not compete with the development of the private market.

Note that if statutory credits are used, for every one biodiversity unit required two statutory credits need to be secured. In the first year of operation (February 2024 – February 2025), the total value of credit payments received was £206,180.[9] The low level of receipts is due to the early stage of the policy's implementation and suggests that the credits are being used as a backstop for the market.

9. DEFRA (2025) Biodiversity net gain statutory credits: annual report 2024 to 2025. https://www.gov.uk/government/publications/biodiversity-net-gain-statutory-credits-annual-report-2024-to-2025/biodiversity-net-gain-statutory-credits-annual-report-2024-to-2025

5. DATA AND REPORTING

Measuring and reporting BNG is a statutory requirement introduced to ensure that development projects leave the natural environment in a measurably better state than before. By quantifying biodiversity impacts and gains, planning authorities and developers can transparently assess whether proposals meet legal obligations under the Environment Act 2021. This process supports informed decision-making, promotes ecological accountability, and helps embed nature recovery into the heart of land use planning.

5.1 Measuring Biodiversity

For developments to evidence the delivery of 10% BNG, the biodiversity needs to have a quantifiable value. Natural England has developed the Biodiversity Metric which is an assessment tool that uses habitats as a proxy for determining the likely biodiversity an area can support and assigning a value as 'biodiversity units' to a particular site. The Biodiversity Metric can also be used to quantify the biodiversity value of an investors' portfolio and assets (discussed in Section 2.2).

A developer should hire a competent person such as an ecologist to use the Metric tool and advise on its outputs. Small developments may use the Small Sites Metric (SSM) which is a simpler version of the Biodiversity Metric tool and does not require an ecologist to complete the assessment, though you may still choose to seek ecological advice.[10]

The LPA will review the completed Metric as part of the development's planning application process.

Early and repeated use of the Metric tool can help:

- assess a site to find the number of biodiversity units an existing habitat has – its biodiversity value;
- compare BNG proposals for a site – such as creating or enhancing habitat on- or off-site; and
- plan habitat management decisions that promote biodiversity.[11]

The Department of Environment, Food and Rural Affairs (DEFRA) has advised that the Metric is expected to undergo review and possible revision every three to five years, although revisions are expected to be minor. Investors who use the Biodiversity Metric for annual reporting against sustainability targets will need to be alert to changes in its methodology because they will complicate year-on-year comparisons.

More information on the application of the Biodiversity Metric and habitat trading rules are detailed in Appendix 3.

5.2 Statutory Compliance

5.2.1 Biodiversity Gain Plan

A biodiversity gain plan must be submitted to the LPA after the development's planning application has been approved to show how the development will achieve BNG and satisfy the BNG planning condition. The biodiversity gain plan relates to the BNG within the development redline boundary, and information on any off-site BNG secured must also be provided. The specific reporting requirements are provided in Appendix 4.

Phased development requires an overall biodiversity gain plan and a phase biodiversity gain plan.

10. A small development means:
    - residential development where the number of dwellings is between 1 and 9 on a site of an area 1 hectare or less, or if the number of dwellings is unknown, the site area is less than 0.5 hectares
    - commercial development where floor space created is less than 1,000 square metres or total site area is less than 1 hectare
    - development that is not the winning and working of minerals or the use of land for mineral-working deposits
    - development that is not waste development
11. DEFRA (2024) Calculate biodiversity value with the statutory biodiversity metric.
https://www.gov.uk/guidance/biodiversity-metric-calculate-the-biodiversity-net-gain-of-a-project-or-development

5. DATA AND REPORTING

The development cannot start until the LPA approves the biodiversity gain plan and biodiversity Metric tool calculation. The LPA has eight weeks to approve or refuse a submitted biodiversity gain plan.

Aligning the biodiversity gain plan with local planning policies can help tailor proposals to meet local requirements, making planning approval smoother. Reviewing LNRS (or, where LNRS are yet to be published, local Biodiversity Action Plans and green infrastructure strategies), developers can demonstrate how their landscape plan contributes to local biodiversity goals.

5.2.2 Significant On-site BNG

Where a significant increase in on-site habitat biodiversity value is proposed (for example a development including the creation of a country park), the habitat enhancement must be subject to a legal agreement requiring the habitat enhancement to be maintained for at least 30 years after the development is completed.[12] Also, a legal agreement (i.e. s106 with an LPA, or conservation covenant with a responsible body) will be required if on-site gains are not significant but contribute to locally important species or ecological networks. The latter may be experienced on land constrained sites with high biodiversity baselines that sit within the LNRS, for example.

In these cases, there will be additional costs involved in the planning process to cover the development of a Habitat Management and Monitoring Plan (HMMP) and legal agreement (c. £7k - £20k), as well as ecologist monitoring and LPA/responsible body auditing of habitat establishment over the 30-year period (c. £50k - £150k), that was not required prior to BNG legislation.

This is discussed further in Appendix 4.

5.2.3 Monitoring

Developers generally do not have any monitoring requirements in relation to on-site BNG delivery, except where the landscaping is subject to a legal agreement (i.e. developments delivering significant on-site gains).

Once biodiversity units are secured off-site the BNG planning obligation for the development is satisfied and the developer has no further liability on the off-site BNG delivery. It is the responsibility of the biodiversity unit provider (e.g. private landowner, or habitat bank provider) to implement the HMMP and submit monitoring reports to the LPA/responsible body over the course of the 30-year period (similar to developments with significant on-site gains).

Only off-site BNG is reported on the public Biodiversity Gain Sites Register, which is discussed further in Appendix 5.

12. DEFRA. (2024). Enter a legal agreement for biodiversity net gain. https://www.gov.uk/guidance/legal-agreements-to-secure-your-biodiversity-net-gain

5. DATA AND REPORTING

5.3 Corporate Targets and Third-party Accreditation

Around 30 real estate organisations, primarily in Asia-Pacific, have so far adopted the Taskforce on Nature-related Financial Disclosures (TNFD) framework, a set of disclosure recommendations and guidance that encourage and enable business and finance to assess, report and act on their nature-related dependencies, impacts, risks and opportunities.[13]

The only current UK participant is LandSec, who has set separate targets for its standing investments and new developments and the latter are divided between those sites which have existing greening and those that do not.[14] Other real estate asset owners and investors such as The Crown Estate and British Land have indicated they are adopting the TNFD guidance or considering doing so.[15] Both British Land and The Crown Estate have set BNG targets of 15% for new developments where they are the developer.[16] Three UK contractors – Costain, Keir and Laing O'Rourke – have also committed to TNFD.

The TNFD framework is discussed further in Appendix 6.

13. TNFD Adopters – TNFD
14. LandSec. (2024). *Sustainability Performance and Data Report 2024.*
15. The Crown Estate (2024). *Integrated Annual Report and Accounts 2023/24 Creating lasting and shared prosperity for the nation;* British Land (2024). *Annual Report and Accounts 2024*.
16. British Land: '*Nature*' available from: Environmental Sustainability | British Land | British Land; The Crown Estate (2025): £20m Rural Environment Fund available to Crown Estate farmers to support new biodiversity targets for Nature Recovery.

6. BNG IN PRACTICE

Delivering BNG requires careful consideration of site-specific conditions, planning constraints, and long-term management responsibilities. This section examines what constitutes effective BNG delivery, the challenges associated with on-site provision, and emerging patterns in on-site and off-site BNG implementation. Key considerations across the asset lifecycle are also outlined.

Furthermore, this section explores the contractual and financial structures underpinning habitat creation and maintenance, offering guidance on how developers can manage risk, ensure compliance, and optimise ecological outcomes across different delivery pathways.

6.1 What does Good BNG Look Like?

Successful on-site BNG requires a context-sensitive approach that considers:

- public open space (POS) needs;
- local demographics and inequalities;
- built and landscape character;
- management requirements;
- community wellbeing;
- opportunities for multifunctional landscape spaces – BNG to deliver SANG, SUDS, blue infrastructure, policy compliant POS, Urban Greening Factor, etc.; and
- climate resilience.

BNG should be a core design principle integrated from the outset, not an afterthought. Good on-site delivery robustly examines the overlapping considerations outlined above, alongside viability, to determine an appropriate site-specific response. This will vary based on the type of habitats impacted by the development, local need for greenspace and the degree of disturbance expected due to proximity to areas for recreation, in addition to the site size, and ability to designate space specifically for nature restoration. As a result, good on-site BNG will vary between sites.

The provision of greenspace in built-up areas provides numerous benefits to wildlife and society and ecologists involved in the landscape design process should identify appropriate habitat types to be delivered. On-site habitats may be limited to those of low and medium distinctiveness where there is expected to be human disturbance, e.g. recreational areas.

The case study in Box 1 showcases how onsite greenspace can deliver BNG as part of a public realm development. The habitats created were compatible with the recreational use of the greenspace, targeting trees, shrubs and lawns that can tolerate heavy footfall. The significant biodiversity uplift achieved highlights the potential of creating public realm spaces as part of a wider development where the public realm can serve to offset surrounding biodiversity loss. This approach may be preferable in urban areas where individual development sites are land constrained but there is potential to collaborate locally to deliver a dedicated greenspace that can serve surrounding developments.

Stakeholders consulted during this research identified that there is a need to educate occupiers and community members on what spaces dedicated for nature look like, having a more rugged and less manicured appearance, and the need to minimise disturbance by keeping to footpaths and keeping dogs on leads in areas zoned for nature restoration.

When properly implemented with ongoing stakeholder engagement, on-site BNG can not only benefit nature but also significantly enhance placemaking and development attractiveness.

6. BNG IN PRACTICE

Exchange Square, London

Sector: Mixed use office, retail and leisure campus
Developer: British Land
Location: Broadgate, London EC2
Planning submitted: 2018 (pre mandatory BNG)
BNG delivery: On-site (600% biodiversity gain)
BNG cost as a percentage of development cost: c. 14%
BNG cost as percentage of total Broadgate scheme value: <1%

Broadgate is a 32-acre mixed use campus of office, retail and leisure buildings in the City of London and includes Exchange Square which is a 1.5-acre park above the railway lines into Liverpool Street Station. The main aims of the project were to increase biodiversity and to create places where visitors could interact while engaging with nature. The environmental impact and financial costs were reduced by re-using some existing materials. The revitalisation of the public realm has helped to attract new occupiers to Broadgate and has won awards for its landscaping.

The baseline consisted of a single lawn and some individual trees totalling less than 25m^2, thus this scheme would be exempt from BNG if going through planning now. Habitat creation included individual trees, introduced shrub and lawns and functions as an intensive green roof. British Land chose to quantify the biodiversity enhancement using Metric 3.0, which resulted in 600% BNG being delivered due to the significant increase in greenspace delivered. Note that the uplift would be slightly reduced under the statutory metric due to the change in how individual trees are valued compared to metric 3.0.

The estate management team at Broadgate has taken on the maintenance of Exchange Square.

6. BNG IN PRACTICE

6.2 Challenges to Delivering On-site BNG

There are significant market implications to the delivery of BNG. Despite a reasonable lead time into statutory changes, the adaptation of pre-existing land deals for development to incorporate BNG requirements creates viability and delivery risks, particularly where local authorities may increase BNG targets through local plans. Table 1 sets out key challenges to the implementation of on-site BNG and the implications of these.

Table 1: Challenges to implementing on-site BNG

CHALLENGE	DESCRIPTION	IMPLICATION
Scale disparity	Larger sites typically offer more flexibility for designated BNG areas compared to small or infill developments.	Development viability might be affected due to an inability to achieve BNG without compromising on developable space. There is a trade-off between delivering on-site BNG that reduces developable space and thus reduces development value, versus the cost of delivering a component of the BNG off-site to maximise the developable space and maintain the development value.
Public perception	Occupiers will often have an expectation that greenspace should be manicured, while managing habitats to increase biodiversity tends to rely on having more unkempt grass and scrub areas, etc. Thus, clear stakeholder communication is essential to distinguish intentional biodiversity features which may appear to be unmanaged from neglected spaces.	Occupiers may dispute why areas of greenspace are not being maintained to the same degree as amenity grassland. This may be aggravated where there is a ground rent applied. Therefore, it is important to clearly explain the management approach for greenspace to occupiers to avoid such dispute.
Long-term management	BNG requires a different type of management to amenity greenspaces and some management companies now combine traditional responsibilities with BNG maintenance requirements.	There are unproven risks when appointing management companies that deliver BNG maintenance due to the novelty of targeting biodiversity enhancements, rather than purely amenity, on development sites. For example, there is a lack of track-record with many management companies in delivering this type of habitat, which is a concern when a site needs to achieve set habitat targets. The success of on-site BNG delivery may be under increased scrutiny from the LPA and other stakeholders. There is also likely to be an additional cost due to the need to monitor habitat establishment success, which would not have been required prior to BNG legislation.
Ecological assessment variation	Baseline biodiversity assessments of the same site can vary between ecologists as the assessment criteria is not so robust as to avoid subjectivity.	This can have a significant impact on what it may take to achieve BNG on-site which can affect development cost and viability. For example, if an ecologist identifies open mosaic habitat within the development footprint this can be particularly challenging to offset elsewhere on-site and such habitat units are in scarce supply off-site (discussed above), while another ecologist may determine that the habitat is other neutral grassland which is easier to deliver on-site; thus, a developer would be inclined to progress with the more favourable assessment result. Ultimately the LPA will review the biodiversity assessment during the planning application process and will scrutinise the baseline results, which may be a further area of subjectivity.
Design adaptation	Development design might require significant adaptation when considering BNG. Due to habitats being assigned a value of units, mitigating impacts can be significant in scale.	As mentioned above, there is a trade-off between the extent of BNG that can be delivered on-site without significantly impacting development value, and the cost of delivering BNG off-site.

6. BNG IN PRACTICE

Table 1: Challenges to implementing on-site BNG

CHALLENGE	DESCRIPTION	IMPLICATION
Site constraints	Land with easements (e.g. underground pipelines and overhead cables) can reduce land available for BNG due to the potential for such areas to be damaged during future maintenance of infrastructure.	This may result in the need to adapt the development design to accommodate BNG elsewhere on-site, or to deliver BNG off-site which has associated costs.
Planning delays	LPAs are often under resourced and lack capacity to deal with the BNG component of planning applications, which has led some regions to experience significant delays in the planning process.	There are often cost implications when the planning application process is delayed as this has a knock-on effect to the development timeline, delaying the commencement of construction, and ultimately delaying occupation when the returns will be received.
Outcomes for biodiversity	It is important to recognise that multifunctional greenspace is not principally delivering benefits for biodiversity due to the level of human disturbance experienced and the often fragmented and small-scale delivery of on-site greenspace. To truly maximise biodiversity the Lawton report emphasises the importance of more, bigger, better and joined up areas for nature with minimal human disturbance, and this is a key principle of the LNRS.[17]	Dedicated space for nature recovery should be achieved to maximise the outcomes for biodiversity. If this is not possible on-site then consideration should be made to providing a proportion of the BNG off-site within a habitat bank.

6.3 Early Planning Evidence on the Use of On-Site and Off-Site BNG Schemes

A study of 503 planning applications across England in April-October 2024 by BNG 500, found that two-thirds of projects were able to fully achieve a 10% BNG on-site and that one third required additional off-site biodiversity units (Table 2).[18] The survey was conducted over a period when relatively few habitat banks were registered and selling units, thus limiting the off-site option for developments during this period.

17. Lawton, J.H., et al. (2010). *Making Space for Nature: A Review of England's Wildlife Sites and Ecological Network. Report to Defra.* Available at http://webarchive.nationalarchives.gov.uk/20130402151656/http:/archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf. Accessed 14 August 2024.
18. BNG500. (2025). What lessons can we learn from analysis of 500 BNG-compliant planning applications made in 2024?

6. BNG IN PRACTICE

Table 2: Off-site BNG Requirements by Sector

	% of Projects in Sector Requiring Off-Site Units	Total Number of Off-Site Units Required	Average Number of Off-Site Units per Project
Major Residential (>1 ha, >10 units)	46	131	4.5
Community, Sports & Leisure	42	24	1.3
Infrastructure - Non-Energy	40	4	1.0
Minor Residential (<1ha)	38	45	0.6
Infrastructure - Energy ex. Solar	33	8	2.0
Minerals & Waste	30	8	2.8
Commercial	29	134	7.5
Strategic & Mixed-use Schemes	25	8	7.9
Education & Health	21	3	0.4
Rural, Agricultural and Equestrian	17	2	0.3
Other Developments	11	1	0.6
Solar Farms	0	0	0.0
Total / Average	33	370	-

Source: BNG 500. March 2025.

Key findings are as follows:

- The median estimated BNG gain was 13%.
- In most sectors, the need to secure off-site units varied between 30-50% of projects.
- Smaller development sites were more likely to need to secure off-site units.
- The data suggest that higher-priced developments are more likely to secure off-site units, with 46% of large residential schemes buying off-site units compared with 21% of education and health developments. This highlights the trade-off between accommodating BNG on-site and maximising the size of buildings and values.
- The average number of off-site units required by commercial and large residential schemes were 7.5 units and 4.5 units, respectively. Assuming an average unit price of £30,000 (see Section 7.2), that equates to costs of £225,000 for commercial schemes and £135,000 for large residential schemes.

6. BNG IN PRACTICE

6.4 BNG across the Asset Lifecycle

The key considerations when implementing BNG across the asset lifecycle are presented in Table 3, demonstrating the process involved in delivering on-site BNG and where off-site BNG comes into play.

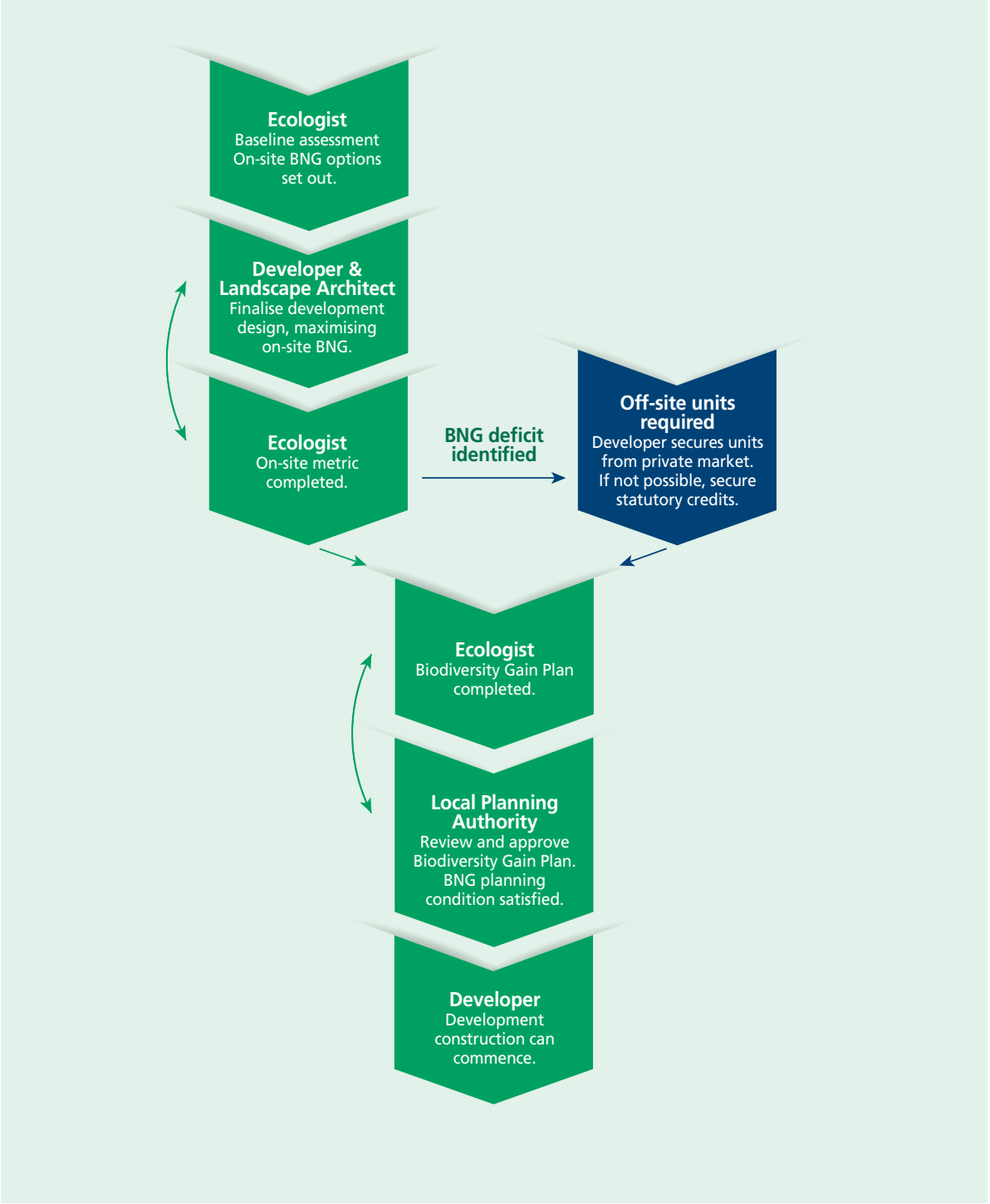
Figure 3 presents an overview of the roles and responsibilities of the BNG component of the planning process from design conception to development construction.

Table 3: Key BNG considerations across the asset lifecycle

ASSET LIFECYCLE	ON-SITE BNG	OFF-SITE BNG
Pre-land acquisition	• High level baseline survey to give an indication of a site's biodiversity value • Can inform decision making when looking to acquire land and the location of development footprints	• Initial baseline assessment on-site will provide an early indication of the potential need for any off-site BNG
Pre-planning	• Detailed baseline assessment to identify on-site BNG options • Land required to satisfy other policy requirements can cost-effectively be used for BNG (POS, SUDS, SANGS, etc.) • Consider the balance between maximising BNG delivery on-site and ensuring sufficient developable area to not impact financial return • Ensure future development is not constrained by the location of on-site BNG	• Any on-site BNG deficit is identified, enabling off-site BNG solutions to be sought • Opportunity to deliver habitat gains in an ecologically strategic location at landscape scale • Can target local environmental priorities • If off-site BNG solutions are not available in the same LPA/NCA as the development, there may be a higher cost for offsetting due needing more biodiversity units
Planning submission and detailed design	• The implications of design change on BNG outputs should be monitored • The LPA reviews the Biodiversity Gain Plan and when approved discharges the BNG planning condition	• Any off-site BNG requirement should be secured to satisfy the BNG planning condition
Construction	• Any necessary environmental mitigation measures should be in place during construction • On-site habitat creation should commence according to the timeline set out in the Biodiversity Gain Plan	• Delivery liability passed to habitat bank provider at the point of purchasing biodiversity units • Off-site habitat creation should commence either prior to biodiversity units being allocated to the development, or within 12 months of development construction
Operation and management	• An appropriate grounds maintenance provider should conduct the physical habitat works for on-site BNG delivery • Landscaping can contribute to placemaking, and high-quality greenspace may enhance development value • Development users benefit from on-site greenspace • Monitoring of on-site BNG is only required for schemes with a HMMP and legal agreement (discussed in Section 5.2.2)	• Off-site BNG should adhere to the robust legal commitment and HMMP for a minimum of 30 years
Demolition	• Demolition is a type of development that is subject to the BNG policy • Habitats impacted during demolition would require offsetting following the BNG policy	• Once the BNG obligation has elapsed, the landowner/habitat bank provider is not legally obligated to continue managing the site for biodiversity • There are several options to encourage continued environmental stewardship (discussed in Section 9.0)

6. BNG IN PRACTICE

Figure 3: Roles and Responsibilities of the BNG Component of the Planning Process



6. BNG IN PRACTICE

6.5 Managing BNG Risk

As BNG applies to the entire area within the redline boundary, careful consideration should be made to the redline application area. To prevent unnecessary negative impacts on achieving BNG, areas which are not required for the development footprint (i.e. retained habitats) and which give rise to additional BNG requirements that are unattainable on-site (e.g. trees or higher distinctiveness habitats) should be excluded from the redline area. This will avoid the need to deliver an additional 10% enhancement of these habitat areas, avoiding financial implications that would otherwise have been incurred either by having to reduce the developable area and subsequently reducing development value, or having to pay for off-site biodiversity units.

It is important that the ecologist and landscape architect collaborate to ensure that this approach to development design does not result in habitat fragmentation or adverse impacts on retained features outside the redline boundary.

Section 7.1 discusses the impact of BNG schemes on development costs and includes several case studies demonstrating how BNG has been delivered by various developments.

6.6 Contractual Structures of On-site Habitat Creation and Management

6.6.1 Managing Investor Liability

Depending on the nature of the investor's ongoing involvement with the property, it may be preferable to pass BNG liabilities on or have a clean structure with certainty over future costs to help preserve site value and liquidity.

Some developers or owners of commercial property may be able to implement and continue management of on-site BNG, funding maintenance through a service charge.

Residential developers, including master developers, typically have greater incentive to structure the BNG delivery for a scheme in a way as to be able to pass liability for management on once the last unit or plot is sold (e.g. transferring the freehold to a management company). Careful consideration must be given to long-term funding arrangements to ensure management requirements can be met.

6.6.2 Management Companies

Increasingly, as councils are less willing to adopt new public greenspaces, habitat management on residential developments tends to be passed to management companies which become liable for the delivery of the on-site BNG. Management companies often subcontract different elements of maintenance to different companies, which can make it more difficult to identify and improve poor practice on the ground.

As mentioned in Table 1, there are differences in the management prescriptions for maintaining greenspace for biodiversity enhancement as opposed to amenity, which requires a suitably skilled workforce to ensure BNG habitat targets are met. Typically, a more hands-off approach to management is required to enhance biodiversity, for example leaving areas uncut for longer periods of time, which can result in a reduced ongoing management cost in comparison to amenity greenspace which requires more frequent maintenance. Another example is brown roofs which require minimal ongoing maintenance once established, with the main requirement being to periodically check for invasive species and ensure the drainage system is functioning properly.

6. BNG IN PRACTICE

During our stakeholder consultation it was observed that there are new entrants to the grounds maintenance space, with service providers seeing a gap in the market for more nature-focused landscape management to support developments' on-site BNG. This may result in higher quality habitat creation and maintenance; however, concerns were raised about the level of trust developers can have in engaging in long-term contracts, with such new companies yet to evidence a strong track record.

6.6.3 Associated Costs

The capital costs of creating these habitats are typically hard to disaggregate from other development costs. Often the costs for maintaining green and blue infrastructure are covered by a service charge that the occupiers pay (in the case of most commercial and some residential developments) or through an endowment (in the case of some residential developments).

As discussed in Section 5.2.2, developments which have a separate legal agreement for the on-site BNG (e.g. large-scale habitat enhancement, or small-scale but affecting locally important species of ecological networks), the main ongoing costs unlikely to be encountered in the course of the management of traditional on-site green or blue infrastructure is the additional cost of habitat monitoring by a suitably qualified ecologist as set out in the 30-year HMMP.

7. IMPACT ON COSTS AND VALUES

As BNG is a statutory requirement, developers must factor its financial implications into early project planning. This section explores how BNG affects development costs across different site types, highlighting key variables, regional disparities, and emerging market trends that influence viability.

7.1 The Impact of BNG Schemes on Development Costs

The cost of achieving a 10% uplift in biodiversity varies significantly depending upon the type of habitats which are on site before the development starts. In general, the costs are higher on greenfield sites than on brownfield sites and the cost of achieving a 10% uplift on some city centre sites with very little existing biodiversity can be *de minimis*.

The case studies in this report (Box 1 to Box 5) show a variety of approaches to BNG delivery both on-site and off-site. Site-to-site variability in the cost of delivering BNG is due to the specific habitats and the extent to which that can be delivered on-site. For many, the costs of BNG are relatively small (0.5% to 3% development cost excluding land value) compared with the costs of site acquisition and construction; this is consistent with the impact assessment made by DEFRA before the legislation was introduced:[19]

- Commercial / non-residential development: <5% land value
- Brownfield residential development: 0.1% to 0.8% of build costs
- Greenfield residential development: 0.1% to 3.9% of build costs

However, some sites experience significant costs for BNG delivery where there is a high biodiversity baseline on-site and the developer has to purchase off-site units. For example, a Plc and medium sized house builder's 260-unit residential development site in Sussex covered c.16ha and had a baseline of predominantly medium distinctiveness grassland and scrub, as well as high distinctiveness woodland habitats. Due to the development footprint there was a limited area where habitat could be retained and enhanced, resulting in 45% of the BNG needing to be delivered off-site at the Wiston Estate habitat bank in the South Downs.

It is broadly found that large-scale developments are more able to adapt their development and landscape design to accommodate most, if not all BNG on-site. However, warehouses, for example, that seek to maximise the developable footprint and generally have minimal landscaping are more likely to secure a higher proportion of BNG off-site.

The costs are further exacerbated where there is no off-site BNG solution in the same region (LPA/NCA) meaning the developer needs more biodiversity units when secured further afield (the Metric's Spatial Risk Multiplier (SRM) is discussed in Appendix 5). This is currently the situation in several regions across England. However, if the growth of habitat bank establishment across the country continues as it has over the past two years then it is expected that there will be comprehensive coverage of off-site BNG solutions across England by the late 2020s. In the medium to long term, it is expected that the application of the SRM will only be required for developments with niche habitat offsetting requirements (e.g. lowland mixed deciduous woodland, open mosaic habitat) that are not commonly created in habitat banks.[20]

19. DEFRA. (2019). Biodiversity net gain and local nature recovery strategies – intervention and options.
20. Open mosaic habitat is a type of habitat found on previously developed land, characterised by a patchwork of different conditions, including bare ground and various vegetation types (e.g. grassland, scrub, wetland).

7. IMPACT ON COSTS AND VALUES

There is anecdotal evidence that developers have cut the prices they are prepared to pay for sites in order to compensate for the additional costs of BNG. However, that relies on an accurate assessment of the number of biodiversity units which will be delivered on-site and what will be required off-site, as well as a knowledge of biodiversity unit prices. BNG therefore increases the amount of due diligence required at the site acquisition and planning stage and introduces a risk, albeit small, that developers underestimate the costs involved.

One caveat to this conclusion is that it is based upon the current requirement to achieve a 10% BNG. However, it is possible the impact of BNG on development costs could become more significant if local authorities raise the target above 10%. That could have a particular impact on big schemes which are built in phases and where the space for on-site BNG in the masterplan is fixed. To date only four councils have set a BNG target above 10% (Guildford Borough Council, Maidstone Borough Council, Mole Valley Council and Worthing Borough Council), although another 26 are considering it.[21] Conversely, two councils which initially set a 20% target have since cut it to 10% (Birmingham and the London Borough of Richmond).

21. Wildlife & Countryside Link. (2025). Implementation of mandatory Biodiversity Net Gain – one year on.

7. IMPACT ON COSTS AND VALUES

Mixed Development at Cambridge North

Sector: Mixed
Developer: Brookgate Land Ltd
Location: Land north of Cambridge North Station, Cambridgeshire
Planning submitted: June 2022 (pre mandatory BNG)
BNG delivery: On-site (89% biodiversity gain)
BNG cost as a percentage of development cost: not yet known

This development consisted of a hybrid planning application for three new residential blocks providing for up to 425 units and two commercial buildings, as well as associated parking and infrastructure works. It also included a full application for three commercial buildings with associated parking, and construction of a multi-storey car park and cycle park building, and associated landscaping and infrastructure works.

The design was adapted at the ground level and roof level during the master planning process in consideration to BNG. All open spaces were designed to be dual or multi-purpose, so biodiversity was built into greenspace, SUDS and other design requirements, such as a main attenuation pond which is built into the 'Wild Park' design and a green roof and solar PV areas. The formal open space requirements resulted in BNG uplift being tempered in some places.

The habitats delivered on the development site focused on retaining and recreating open mosaic habitat, as well as creating scrub, grassland and open water habitats. As this planning application was submitted prior to the BNG legislation being in place, there was no off-site BNG requirement.

There is a site-wide Ecological Design Strategy setting out the vision. Maintenance of the open mosaic habitat is relatively light touch and the ecological maintenance will be incorporated into the management for the POS where this is applicable.

Maintaining the open mosaic habitat character in the Wild Park reflects the sites historical use which when built on should be a positive attribute for the site and is expected to be appreciated by residents and local workers.

7. IMPACT ON COSTS AND VALUES

182-202 Walworth Road

Sector: Student accommodation
Developer: Fabrix
Location: Elephant & Castle, London, SE17
Planning submitted: March 2024 (post mandatory BNG)
BNG delivery: On-site (42% biodiversity gain)
BNG cost as percentage of development cost: 1%

A 130,000 sq ft PBSA-led, mixed-use repurposing of a redundant 1980s office building to provide 283 student beds and 35% on-site social housing. At the heart of the scheme is a new 6,240 sq ft publicly accessible garden, previously a service yard. The development also incorporates 13,444 sq ft of green roofs and 8,364 sq ft of blue roofs.

Habitat creation and enhancement was part of the design brief from inception, incorporating BNG into the design from the outset. The garden, green and blue roofs will provide a variety of habitats including:

- Urban semi-natural woodland
- Biodiverse roof
- Courtyard garden
- Urban orchard / Edible landscape
- Sedum-dominated green roof

A key consideration was the species selected for the planting scheme to ensure their successful establishment and provision of ecosystem services. For example, the plants will tolerate some degree of drought and waterlogging conditions. Alongside biodiversity enhancement, additional benefits of this scheme include public realm amenity, climate resilience, aesthetics, edible fruit, attracting pollinators, urban cooling, air quality improvement and soil health improvement.

The scheme met its BNG requirements fully on-site, which included the provision of SUDS, and achieved an Urban Greening Factor of 0.472. The cost of delivering the green/blue spaces for this scheme would have been incurred regardless of the BNG requirement.

A detailed landscape maintenance plan has been built into the management plan. This includes daily litter picking, weekly hard landscape maintenance, regular weeding, seasonal mulching, upkeep and pruning of trees, shrubs, climbers and cutting back of biodiverse roofs. The BNG elements have not required a separate s106 agreement.

7. IMPACT ON COSTS AND VALUES

Cambridge Discovery Campus

Sector: Life Science/Innovation
Client: Bridgemere UK Ltd and Foundation Capital Ventures
Location: Hauxton, Cambridgeshire
Planning submitted: August 2023 (pre mandatory BNG)
BNG delivery: On- and off-site, achieving 10% biodiversity gain.
Estimated BNG cost as a percentage of development cost: <0.5%

The proposed scheme is an innovation campus consisting of flexible laboratory and office space with community amenity known as Cambridge Discovery Campus. The scheme is on the site of a derelict and highly contaminated water treatment works. The site covers 20.33 ha.

The treatment works was part of an old agrochemical facility, which was derelict and had become over-grown. The proposed scheme involves the clearance of the previously developed land which totals 9 ha, the driver for the clearance is to facilitate the remediation of the contaminated land and involves clearing structures and flora (trees and shrubs).

The campus will provide a new country park (c.11ha), urban landscaping and an amenity building which will include a café and kitchen, licensed bar and outside dining terrace, fully equipped gym, bike repair station, drying room, showers/changing facilities and meeting rooms, which will be open to the public.

Due to the site being derelict for over 10 years, nature had reclaimed the water treatment plant and significant shrub habitat had developed. To remediate the land, the shrub is required to be removed and as such the scheme cannot achieve a 10% BNG position on-site. To achieve 10% BNG, biodiversity units will need to be secured from an off-site habitat bank; this was not required as part of the planning application as at the time of submission there was no policy requirement to achieve 10% BNG, nevertheless the developer is seeking to achieve 10% BNG through on- and off-site delivery.

The BNG landscaping contributed to a Public Open Space planning requirement and a third party will be appointed to manage the landscaping.

www.cambridgediscoverycampus.com

7. IMPACT ON COSTS AND VALUES

Land at Grange Farm, Bovingdon

Sector: Residential
Developer: Taylor Wimpey
Location: Hemel Hempstead, Hertfordshire
Planning submitted: September 2023 (pre mandatory BNG)
BNG delivery: On-site (40%) and off-site (100%), achieving 40% biodiversity gain with surplus offsetting other developments
BNG cost as a percentage of development cost: 8.43% (not accounting for sale of surplus BNG)

The development at Grange Farm was for 57 dwellings, 59 units of Extra Care accommodation, means of access and landscaping. An outline planning application was also submitted for up to 129 dwellings, 1.15 ha community land for outdoor sport and recreation, scouts hut, community orchard, gardens and green space.

The baseline habitat at Grange Farm consisted of high-quality grassland which could not be retained or re-provided on-site, so required an off-site solution. The development at Grange Farm also fell within 12.6 km of the Impact Risk Zone for the Chiltern Beechwoods Special Area of Conservation (SAC) and therefore required an alternative recreational opportunity for residents.

An agreement was developed for Haresfoot Farm, located approx. 3.5 km from the development site, to act as the offset site. A high-quality landscaped environment was created here which not only served the legislative and functional requirements to deliver a SANG and BNG area, but also created an attractive, accessible environment for the benefit of the local community, whilst contributing to the protection of sensitive natural environments. The SANG was also able to be utilised by other local developments to unlock much needed sites for housing.

If BNG was delivered solely on-site the biodiversity units required to reach the minimum 10% BNG could have resulted in an on-site reduction of around 50% of the Gross Development Value (GDV) and would have rendered the residential development at Grange Farm undeliverable. In comparison, the costs associated with securing the off-site units at Haresfoot Farm including acquisition cost, habitat delivery and management represents an 8.43% share of GDV. It is worth noting that the BNG at Haresfoot Farm is also contributing to two other developments.

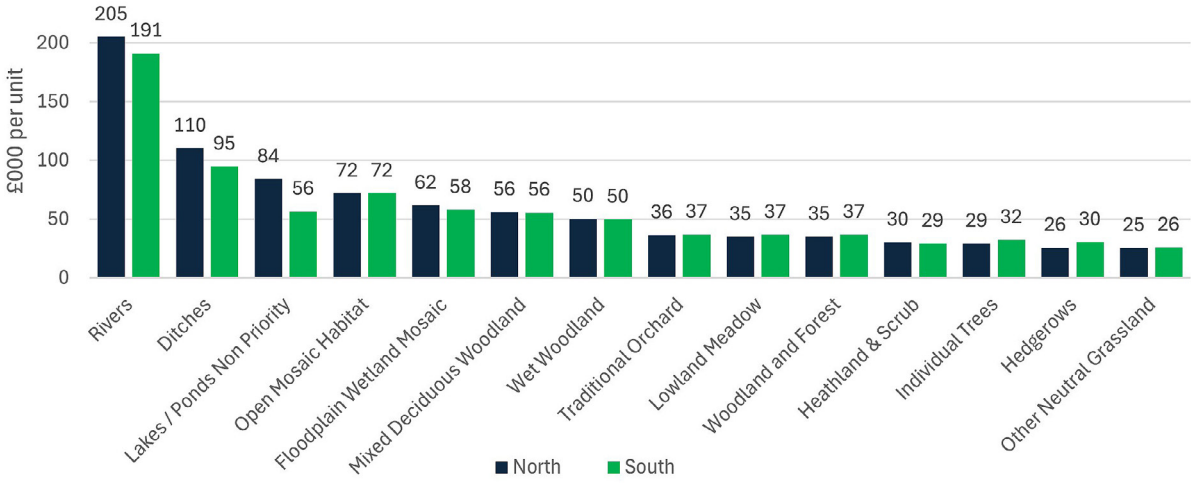
The BNG delivered off-site includes 68% very high distinctiveness habitat (lowland meadow) and 26% medium distinctiveness habitats (scrub, woodland, grassland, trees), in comparison to on-site which delivered 17% medium distinctiveness habitats and 32% low distinctiveness habitats (e.g. gardens, modified grassland, non-native ornamental hedgerow).

7. IMPACT ON COSTS AND VALUES

7.2 Biodiversity Unit Pricing

The BNG market is in its infancy and the limited number of biodiversity unit transactions to date means there is still significant uncertainty over pricing. At present the only publicly available source of information is Biodiversity Units UK, which publishes data on average prices every quarter.[22] The February 2025 report covered 65 habitat banks which are either listed on the Biodiversity Gain Sites Register or are soon to be registered (Figure 4). A few points worth noting are: prices are all-inclusive; they are quoted prices and do not reflect any negotiation with buyers; prices are for whole units and the price of fractional units may be different.

Figure 4: The Average Price of Biodiversity Units in June 2025



Source: Biodiversity Units UK, June 2025.

The data suggest that the price for most types of biodiversity unit vary between £25,000 to £40,000 per unit, although prices for habitat types which are in very short supply (e.g. watercourses) may exceed £100,000 per unit. Higher-distinctiveness and more niche habitat types (e.g. lowland mixed deciduous woodland) tend to command higher prices, but are in more limited demand. The most frequently impacted habitat types, such as moderate condition other neutral grassland and scrub, which can be created at relatively low cost, are in plentiful supply and priced competitively.

Perhaps surprisingly, the data show relatively little regional variation. In part, this may because of the sample size and that the figures are quoted prices and do not reflect any discounts which buyers may have negotiated. It may also be because the national split covers large areas of the country, so the averages smooth out any local variation in prices. The Metric penalises developers who buy units in habitat banks which are outside the LPA or NCA of their scheme (Appendix 5), and means that the market tends to operate at a local rather than a regional level.

22. Biodiversity Units UK

7. IMPACT ON COSTS AND VALUES

Looking ahead, we expect that unit prices will fall over the next one to two years, as the number of habitat banks which are registered increases, and the supply of units expands. Lower distinctiveness habitats that are common in habitat banks (e.g. other neutral grassland) are likely to experience the biggest fall in prices. Over the long term, we expect unit prices to vary with demand and the development cycle.

If prices do fall, off-site BNG solutions will become a more viable option for developers, potentially displacing a greater component of on-site delivery.

7.3 The Impact of BNG Schemes on Property Values

It is difficult to quantify the impact that BNG has on the value of completed developments. In part, this is because the legislation is still new and there is only a limited sample of schemes which achieved a 10% net gain in biodiversity. That said, a number of schemes which completed between 2020-2023 included elements which were designed to promote biodiversity. However, the real challenge is that new developments typically incorporate lots of other features that might command a premium in either the residential or commercial market (e.g. better energy efficiency, more efficient space, health & well-being) so isolating the impact of BNG is problematic. Moreover, some green amenities (e.g. roof gardens) provide multiple benefits.

A study by Oxford University looking at different amenities did not find a significant quantitative relationship between office rents in London and the outdoor space within buildings (e.g. courtyards, roof terraces).[23] The study concluded that office occupiers in London are primarily concerned with location, the flexibility of space and energy efficiency, rather than other factors which might affect staff well-being and productivity.

In practice, the value premium for accessible natural greenspace is likely to differ depending on the market and context of a specific development. The premium in a suburban or rural location with plenty of existing green or blue amenities could be marginal. By contrast, the premium in an urban location with poor existing provision could be up to 5%.[24] BNG can provide a measure for the quality of accessible natural greenspace, but the value premium probably arises from the recreation and amenity function of the greenspace rather than any increase in biodiversity.

23. Said Business School, University of Oxford. (2022). *Beyond Location: Value Drivers of Office Space*. Braesemann F. et al.
24. The International Journal of Urban Policy and Planning. (2024). *The Value of Green & Blue Space: Walkability and House Prices.* McCord M. et al.

8. BNG AS AN INVESTMENT PROPOSITION

As well as being a planning obligation for investors and developers, BNG presents emerging investment opportunities. We consider recent capital flows into BNG delivery vehicles and outline strategic considerations for developers and landowners seeking to establish or participate in habitat banking schemes.

8.1 Investment Vehicles

We have recently seen significant investments in vehicles delivering BNG with the following as key examples. While each vary, in general the vehicles hold assets for the long term.

- The Gresham House Biodiversity Co-Invest LP (GHBC) has invested in habitat banks created by the Environment Bank Ltd, a portfolio business within Gresham House's British Sustainable Infrastructure Fund (BSIF) Strategy. This investment of £289.2m ($380m) was pivotal to Environment Bank creating a network of habitat banks across England, aiming to create c.8,000 ha of habitat banks for delivering BNG by 2026. There is no exposure to the underlying property which is typically secured under leases for the duration of the BNG delivery period. Other similar operators are establishing BNG habitat banks on leased sites under a variety of arrangements.
- Nattergal, a nature restoration company, raised £40m ($52.2m) of seed equity from Aviva Ventures. Nattergal and Aviva will work together to leverage private finance in the natural capital markets including BNG. To date, Nattergal has acquired three freehold sites where it is delivering a range of natural capital products.
- Oxygen Conservation, a subsidiary of Oxygen House Group, is acquiring land across the UK and delivering a range of natural capital products and services to allow nature to pay to protect and improve itself. This includes the establishment of BNG and carbon credit schemes. The investments are underwritten by freehold land acquisitions.

8.2 Developer-owned Habitat Banks

Some larger developers may be able to justify establishing their own habitat bank in a region where they have a pipeline of developments that are each expected to have a BNG deficit on-site.

This approach may not be as commercially viable if the developments are located across the country as the Metric SRM (discussed in Appendix 5) will be applied. In that case, it is likely to cost less to secure units from local habitat banks.

Alternatively developers may create a surplus of BNG on a scheme, where land availability permits, for their own future use, or for sale.

The following components need to be considered when establishing a habitat bank:

- ecologist fees for developing the BNG baseline and HMMP;
- agent and Solicitors fees for developing the legal agreement;
- LPA/Responsible body fees for reviewing the BNG documents and legal agreement;
- LPA/Responsible body fees for auditing the BNG scheme;
- agent and Solicitors fees for developing the biodiversity unit allocation agreements;
- ecologist fees for habitat monitoring over 30 years; and
- physical habitat works.

8. BNG AS AN INVESTMENT PROPOSITION

The costs associated with scheme set up and ongoing administrative management and monitoring are estimated to be between £115k - £185k, in addition to the costs for the physical habitat works which vary depending on the nature of the works. Returns from such an initiative are highly variable and may be in-direct through the de-risking of future development schemes.

Another key consideration is where the liability sits for the habitat bank delivery. Good planning, demonstrable experience in delivering habitat creation, and resource capacity for project establishment and management are all factors that increase the likelihood of a project achieving its objectives and so increase the likelihood of a project being approved by the LPA/responsible body. Conservation organisations (such as a local Wildlife Trust, or the RSPB) have the resources and experience to deliver project objectives efficiently and cost-effectively and their involvement in a scheme provides assurance to the LPA/responsible body that biodiversity units will be delivered. The conservation organisation can take on some of the risk and liabilities involved in delivering a BNG scheme by being specified as the responsible habitat manager in the BNG contractual agreement. Another option is to use a landscape contractor; however, they are typically not able to assume long-term commitments and assume liability for the delivery risk in the way an environmental NGO can.

Table 4 outlines key features that make a good site for establishing a habitat bank.

Table 4: Key Habitat Bank Features

FEATURE	JUSTIFICATION
Low existing and alternative use value	• Does not compromise potential high value land uses (e.g. development) • Avoids displacing food production to less productive land • BNG expected to generate a financial return competitive with the existing/ alternative use
Tenure	• Agreement type affects landowner's level of influence and ability to implement a change in land use/management (or potential to recover possession of land from existing tenancy)
Low baseline biodiversity value	• Maximise biodiversity uplift • Increase biodiversity unit yield
Contributing to LNRS	• Potential to buffer and/or expand sites of high ecological value • Improves habitat connectivity • Support local priority species and habitats • Ecological strategic significance • Habitat enhancements may help to alleviate or mitigate local environmental issues (e.g. flooding)
Potential to create a range of habitats at landscape scale	• Maximise environmental benefit • Biodiversity unit variety to meet development BNG needs • Cost effective and efficient delivery
Proximity to development	• Minimise distance from area impacted by development • Preference to deliver off-site BNG within development LPA and NCA • Located where there is high demand for biodiversity units
Management resource	• Access to resource to manage the habitats • In-house management is expected to be more cost-effective than using sub-contractors

8. BNG AS AN INVESTMENT PROPOSITION

It is important to recognise that following a 30-year BNG scheme the land is expected to be of a higher ecological value than at the start of the scheme, which may make it difficult or not possible to change the land use in the future.

The impact of establishing a BNG scheme on land value is dependent on several factors specific to the scheme. If the site has low existing and alternative use value then the impact on land value is likely to be insignificant, particularly where the baseline is grassland. A diminution in land value may be experienced where productive arable land is taken out of production for the purpose of BNG. However, this is dependent on the location and site context.

If looking to trade a surplus of BNG delivered to other developers, the unit pricing should account for the capital costs (physical habitat creation, infrastructure installation) and management costs (ongoing habitat management and monitoring and LPA reporting) for scheme delivery for a minimum of 30 years, as well as income foregone/ diminution in capital value, and the transactional costs on the seller's side (legal and agents fees).

9. LOOKING FORWARD

The BNG policy and its implementation will continue to evolve. We consider the potential for higher BNG requirements, changes to exemption thresholds, Metric updates, and the importance of education.

9.1 Expected Developments in the Short to Medium Term

The following specific developments are expected in the next few years, and their potential implications are outlined.

The LPA role

- LPAs need to be adequately resourced to review the BNG component of planning applications and regulate its delivery. Many LPAs have assigned a BNG lead from within existing ecology teams, or are recruiting for this purpose. In the long term, this should enable a more efficient planning process and adequate enforcement of on-site BNG delivery.
- Four LPAs have increased the requirement to above 10% BNG and around 26 LPAs are considering doing the same.[25] This may have significant implications on phased developments leading to altered designs if local policies change before the full development is constructed. It may be particularly burdensome for smaller sites if an increase in the percentage in BNG does not account for development size (outside of the existing BNG exemptions).

Changes to thresholds

- The current consultation focused on SME developers and challenges for brownfield developments is considering extending exemptions, simplifying the small sites metric and increasing ease of access to the off-site market. This is expected to make it easier, quicker and cheaper for SME developers to deliver BNG requirements, and resolve the specific challenges for brownfield developments.

Metric updates

- The Statutory Biodiversity Metric will be reviewed by Natural England and may be updated between late 2026 and 2028. New versions of the Metric may alter the BNG calculations, though changes are expected to be minor and not result in significant changes to Metric outputs.

Education

- Government and developers need to do more to educate people on why BNG schemes are important and why they may need to be left undisturbed and less manicured. Fortunately, there is strong public interest in nature and a growing appreciation of the need to reduce human interference through campaigns such as No Mow May. At the planning stage, developers can consult with local communities on the different options for achieving BNG and demonstrating what a well-maintained scheme should look and feel like. Also, partnering with a conservation organisation to manage on-site BNG can help with public perception (discussed in Section 8.2).

25. Wildlife & Countryside Link. (2025). *Implementation of mandatory Biodiversity Net Gain – one year on.*

9. LOOKING FORWARD

9.2 Looking Beyond the BNG Time Horizon

There is also the question of what happens to land dedicated to BNG with a legal agreement once the 30 years have elapsed. Although in most cases the landowner is not legally obligated to continue managing the site for biodiversity, the following potential options may be available to encourage continued environmental stewardship after 30 years of BNG implementation.

- BNG schemes may be able to further enhance the habitats created and enter into another 30-year BNG scheme, generating further biodiversity units to support future developments' BNG requirements.
- Natural England and the University of Oxford in partnership with DEFRA is developing an Environmental Benefits for Nature (EBN) tool which quantifies the wider benefits a scheme delivers for people and nature. Similar to BNG, the tool uses a habitat-based approach to determine the direct impact of land use change across 18 ecosystem services, including flood protection, recreation and improved water and air quality. This tool may be used in the future to trade 'environmental credits/units' in relation to enhancing and managing the wider ecosystem services that a BNG site provides.
- Voluntary natural capital markets are developing, encouraged by legislation for businesses to achieve Net Zero and an increasing number of businesses setting ESG targets. These markets are supported by codes of practice which enable environmental credit/unit providers to create credible schemes – examples include the Woodland Carbon Code and Peatland Code for generating carbon credits, and the EBN tool as mentioned above. This presents an option for BNG sites to gain future funding for habitat enhancement and management.
- Environmental stewardship schemes where public money is used to fund ecosystem services (also referred to as public goods), such as the Countryside Stewardship Scheme, have existed since the 1990s and it is expected that some form of government grant will be available in 30 years' time to support positive environmental outcomes, including maintaining habitats for nature.

9.3 Potential Implications of International Policy

The UK's National Biodiversity Strategy and Action Plan for 2030 published in February 2025 confirms the UK government is "working to align global financial flows with the GBF…[and] recognises the TNFD as a leading mechanism through which to operationalise Target 15 of the GBF and has encouraged closer integration between the TNFD and the International Sustainability Standards Board's (ISSB) emerging global baseline on sustainability reporting".[26] This indicates that while not currently mandatory, given the UK government is anticipated to adopt the ISSB standards as the basis of the UK Sustainability Reporting Standards (SRS) later this year, nature-related financial disclosures may be introduced in the UK for certain entities in the future.[27] Therefore, while not probable in the near term, larger organisations likely to be captured by the UK SRS may want to start considering TNFD guidance and preparing a pathway towards disclosing nature dependencies.

26. Department of Agriculture, Environment and Rural Affairs (DAERA), Scottish Government, Welsh Government and UK Government (2025). *Blueprint for Halting and Reversing Biodiversity Loss: the UK's National Biodiversity Strategy and Action Plan for 2030.*
27. Department for Business and Trade (2024). *UK Sustainability Reporting Standards.* Available from: https://www.gov.uk/guidance/uk-sustainability-reporting-standards

ACRONYMS

Table 5: Key Habitat Bank Features

ACRONYM	DEFINITION
BNG	Biodiversity Net Gain
BREEAM	Building Research Establishment Environmental Assessment
CBD	Convention on Biological Diversity
DEFRA	Department for Environment, Food and Rural Affairs
EBN	Environmental Benefits for Nature
eNGO	Environmental non-governmental organisation
ESG	Environmental, Social and Governance
GBF	Global Biodiversity Framework
GDP	Gross Domestic Product
GDV	Gross Development Value
GRESB	Global Real Estate Sustainability Benchmark
GRI	Global Reporting Initiative
HBF	Home Builders Federation
HMMP	Habitat Management and Monitoring Plan
ISSB	International Sustainability Standards Board
LEED	Leadership in Energy and Environmental Design
LNRS	Local Nature Recovery Strategies
LPA	Local Planning Authority
LSCE	Laboratoire des Sciences du Climat et de l'Environnement
MPA	Marine Protected Area
NCA	National Character Area
NGO	Non-Governmental Organisation
NCP	Natural Capital Protocol
NGFS	Network for Greening the Financial System
NGO	Non-Governmental Organisation
NPI	Nature Positive Initiative
NRN	Nature Recovery Network

ACRONYMS

ACRONYM	DEFINITION
NSIP	Nationally Significant Infrastructure Project
OEP	Office for Environmental Protection
PRI	Principles of Responsible Investment
SANG	Suitable Alternative Natural Greenspaces
SAC	Special Area of Conservation
SEEA-EA	System of Environmental Economic-Accounting – Ecosystem Accounting
SME	Small and medium sized
SRM	Spatial Risk Multiplier
SRS	Sustainability Reporting Standards
SSM	Small Sites Metric
SSSI	Sites of Special Scientific Interest
SBTN	Science Based Targets Network
SUDS	Sustainable Drainage Systems
TCFD	Taskforce on Climate-related Financial Disclosures
TNFD	Taskforce on Nature-related Financial Disclosures
UKHab	UK Habitat Classification system
WBCSD	World Business Council for Sustainable Development
WEF	World Economic Forum
WWF	World Wildlife Fund for Nature

APPENDIX 1

BACKGROUND INFORMATION

Definitions: Nature, Ecosystem, Biodiversity.

Although the terms nature, ecosystems and biodiversity are often used interchangeably, technically they are different.

Nature is defined as:

- The whole of the natural world including all living species, physical resources and inanimate objects (plains, mountains, geology, minerals) on Earth.

An **ecosystem** is defined as:

- A distinct, dynamic, self-regulating system of living species (animals, fungi, micro-organisms, plants) and physical resources (climate, water, soil, light).

Some ecosystems include thousands of different species. The number of species in an ecosystem will depend upon the resources available including water, light and temperature.

An example is woodland where fallen leaves prevent rain from washing away the nutrients in the soil and provide food and shelter for insects and animals. The fallen leaves are gradually broken down by insects, worms, fungi and bacteria and the resulting minerals and nutrients are carried into the soil where they enrich the trees and other plants.[28]

Biodiversity measures the health of an ecosystem and is defined as:

- The variety and abundance of living species in an ecosystem.

Variety is important because each species in an ecosystem fulfils a particular function and relies upon the other animals, plants, fungi and bacteria to play their part and keep the ecosystem working. Abundance refers to the number of individual organisms per species. If a species goes into decline, or disappears then, like a house of cards, an ecosystem is at risk of collapsing and being replaced by a poorer, more sterile ecosystem.

Certain species known as **keystone** species play an outsize role in maintaining the balance of their ecosystem. Keystone species in the UK include bees, common reeds, lob worms, moths, oak, salmon and sphagnum mosses. For example, salmon carry key ocean nutrients up river as they return to their spawning grounds and support numerous predators and scavengers including freshwater pearls, seals and orcas.[29]

28. Royal Botanic Gardens, Kew. (2018). 6 Surprising Relationships between Trees, Fungi and Animals.
29. Wildlife and Countryside Link. (2022). 10 Species that can Help Save the World.

APPENDIX 1

The Importance of Nature

Nature and biological ecosystems are fundamental to our existence. They provide us with everything required for survival including fresh water, clean air, food and medicines and help to sequester carbon, prevent flooding and ameliorate high temperatures. Nature also has a proven, positive impact on peoples' physical and mental health.[30]

- Two-thirds of Britain's fresh water comes from lakes and rivers, with the rest supplied by rainwater stored in underground aquifers.
- Agriculture relies on micro-organisms in soil and pollinators (e.g. bees, hoverflies, moths).
- Gardens, parks and blue-green roofs can reduce flash flooding in urban areas by storing rainwater. Saltmarshes, mudflats and oyster beds can limit coastal flooding and erosion.
- Trees can reduce temperatures by 2-3°C by absorbing water from the soil and releasing it as water vapour through their leaves.
- 40% of pharmaceutical formulations are derived from natural products.
- Several studies have found that people living close to trees and green spaces are less likely to require anti-depressants.[31]

Although difficult to quantify, the government's Natural Capital Accounts attempts to put a value on the contribution which nature and ecosystems make to the economy and society.[32] The latest data available suggest that nature contributed £87 billion to the economy and society in 2022. The figure is an under-estimate because it does not include some benefits, such as the role nature plays in reducing flooding.

The total asset value of ecosystem services in the UK was around £1.8 trillion in 2022, an increase of 11% since 2018. Figure 5 breaks down the contribution made by nature into three main categories: goods extracted from, or produced by nature; natural processes which help to maintain the quality of the environment; and third, recreation, tourism and associated benefits.

30. World Economic Forum. (2023). This is How Biodiversity Loss Impacts Medicine and Human Health.
31. Landscape & Urban Planning. (2015). Urban Street Tree Density and Antidepressant Prescription Rates – A Cross-sectional study in London, UK. Mark S. Taylor et al.
32. Office for National Statistics. (2024). UK Natural Capital Accounts: 2024

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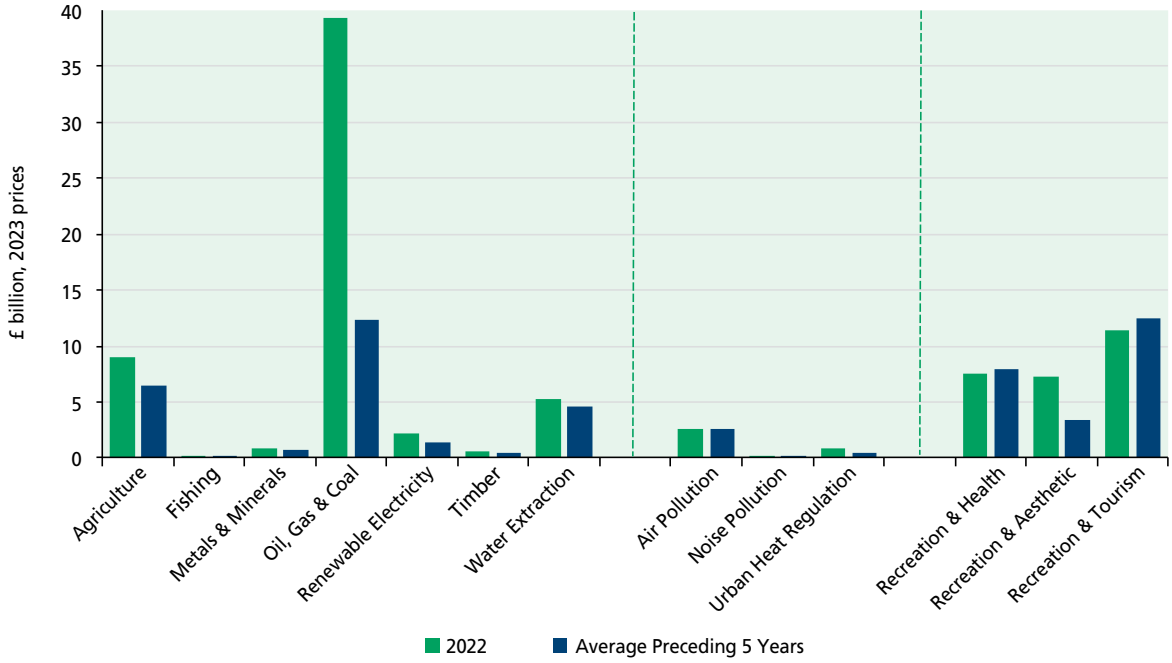
Figure 5: The Value of Nature to UK Economy & Society



Source: ONS UK Natural Capital Accounts. 2024.

If we ignore the spike in oil and gas prices in 2022 caused by the start of the war in Ukraine and focus on the average for the five years to 2021:

- Collectively, recreation, health and tourism account for 45% of the value which nature contributes to the economy and society.
- Fossil fuels account for around a quarter of the value provided by nature. Renewables account for less than 5%, although the transition to low carbon energy means their share is growing rapidly and fossil fuels will decline.
- Agriculture and water extraction both account for around 10%.
- The net annual value of greenhouse gas regulating services was estimated to be negative £212 million in 2022; this is likely to be because some habitats such as degraded peatland, emitted more greenhouse gases than they removed, which emphasises the importance of nature restoration and policies for delivering net positive gains in nature and biodiversity.

Other studies which include imported food, other imported goods and all the economic activities which depend indirectly upon nature suggest that its contribution to the economy is significantly bigger than the Natural Capital Accounts suggest. The World Economic Forum (WEF) estimated in 2020 that half of global GDP is moderately, or highly dependent on nature.[33] At a sector level, PwC has identified five industries - agriculture, fishing, forestry, food and construction - where all direct operations (as distinct from their supply chains) are highly dependent on nature. Collectively these five industries account for 12% of global GDP.[34]

33. World Economic Forum. (2020). Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy.
34. PwC. (2023). Managing Nature Risks: From Understanding to Action.

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An internal analysis by the Bank of England in 2022 reached a similar conclusion to the WEF, indicating that 52% of UK GDP (£1,200 billion) and 72% of outstanding loans by value depend upon nature and ecosystems.[35] Given these dependencies, the 2023 revision of the Financial Services and Markets Act requires financial regulators in the UK to give "due regard" to nature. The Bank of England is working with the government (via the Department for Environment, Food and Rural Affairs), as well as the Network for Greening the Financial System (NGFS) and the TNFD to build a "clearer picture of the nature-related financial risks facing the UK".

The Health of Nature in the UK

Despite its vital importance, nature in the UK appears to be getting weaker. The most comprehensive source of information is the State of Nature (SoN) report which is published periodically and pulls together data from conservation bodies, research institutes and government.[36] The report presents data on both the distribution (i.e. presence) of native species in different locations across the UK and their abundance (i.e. number of individual organisms in each species) in those locations. In general, changes in abundance happen before changes in distribution and provide a more timely guide to the health of ecosystems in the UK. Most of the data comes from structured surveys collected by volunteers (e.g. Rothamsted Insect Survey, RSPB).

- On average, the abundance of land and freshwater native species in the UK has fallen by 19% since 1970 (Figure 6).
- 16% of species in Great Britain are threatened with extinction. Although extinction is a natural process as some species are out-competed by others, the rate of extinction has accelerated over the last 200 years.
- The average change in abundance masks big variations in the experience of different species. Moths and farmland birds have been hit particularly hard with declines in abundance since 1970 of 31% and 58%, respectively. By contrast, bats and birds of prey have recorded increases, helped by legal protection and conservation measures.
- Although the rate of decline in abundance appears to have slowed since 2015, the data from one survey to the next can be volatile and scientists are reluctant to conclude that biodiversity is stabilising.

35. Bank of England. (2022). The Nature of Risk – speech by Sarah Breeden.
36. State of Nature Partnership. (2023). State of Nature.

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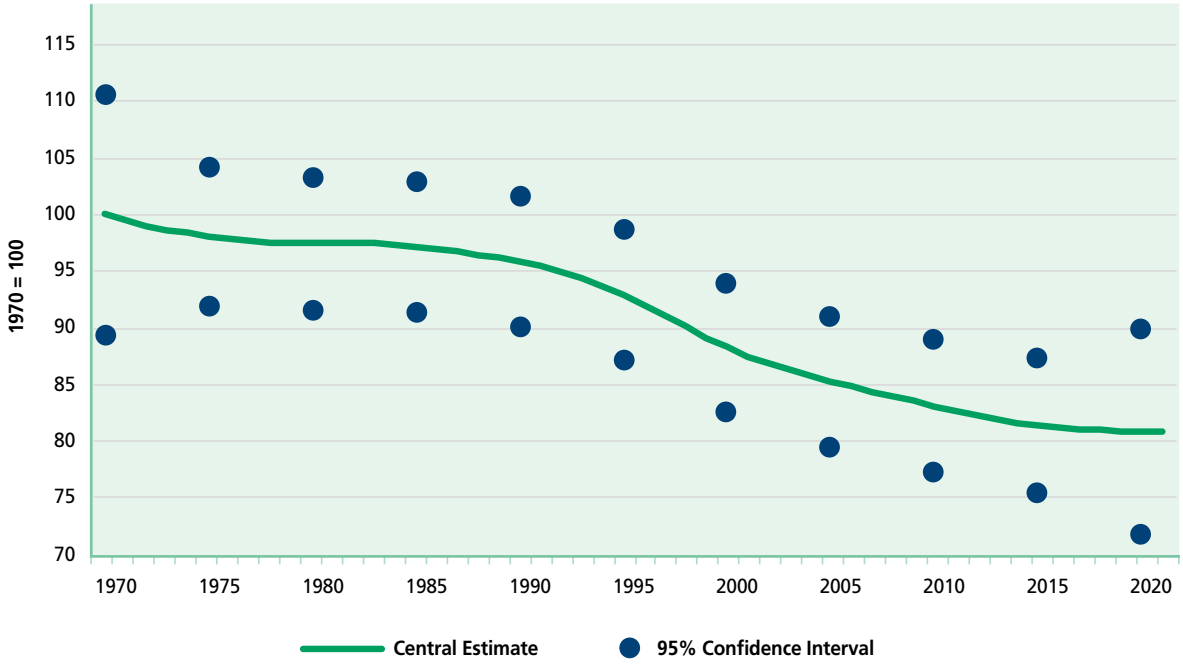
Figure 6: Average Abundance of UK Native Species



Source: State of Nature. 2023

International studies suggest that the decline in biodiversity seen in the UK has been repeated in most other countries. The most recent World Wide Fund for Nature (WWF) Living Planet Report found that the average size of monitored wildlife populations shrank by 73% between 1970-2020, as measured by the Living Planet Index (LPI).[37] The LPI highlights the global decline in nature is fast approaching a potentially irreversible change that would lead to catastrophic consequences – a tipping point.

While declines have been less dramatic in the UK over the last 50 years, this masks the fact that large-scale impacts on nature had already occurred before 1970. According to the Biodiversity Intact Index published by the Natural History Museum, the UK is one of the most nature depleted countries in the world ranking 189 out of 240 countries.[38] Although that can partly be explained by the UK's high population density and limited amount of undisturbed wilderness compared with countries like Finland or Norway, the UK ranks below other neighbouring countries which are also densely populated (e.g. Belgium, Netherlands). That is despite having some of the toughest legislation on protecting the environment, according to the Environmental Performance Index 2024.[39]

37. World Wildlife Fund. (2024). Living Planet Report.
38. Natural History Museum. (2021). Biodiversity Intactness Index.
39. Yale University. (2024). Environmental Performance Index.

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Why is Biodiversity in Decline?

The decline in biodiversity is inextricably linked to food security and climate change.[40] The two main causes have been the intensification of agriculture in order to produce more food for a growing population and global warming. Intensive farming has reduced biodiversity by destroying habitats such as hedgerows and by the extensive use of pesticides and artificial fertilisers.[41] Around 90% of lowland meadow and pasture in Britain was converted to either arable farmland or agriculturally improved grassland between the mid-1930s and 2007.[42] Development and urbanisation also contributed, although its impact was modest, given that the area built on only increased by one percentage point.

While the distributions of some native birds and insects have started to move northwards in the UK in response to higher temperatures, the plants and fungi they rely on are less mobile, meaning that food webs are becoming more fragile.[43] Likewise, the rise in sea temperatures is changing the distribution of microscopic algae (phytoplankton) and animals (zooplankton) and the fish and other marine life that feed on them. Unfortunately, there is also a negative feedback loop between biodiversity loss and climate change, creating a vicious circle. The Laboratoire des Sciences du Climat et de l'Environnement (LSCE) estimates that the destruction caused by drought and wildfires in 2023 meant that globally, on balance, no carbon dioxide was absorbed by forests, plants, wetlands and soil.[44]

In addition to intensive agriculture and climate change native species are also under attack from increased urbanisation, pollution, the introduction of invasive species (e.g. Asian hornet, Japanese knotweed, rhododendrons) and past over-exploitation (e.g. commercial fishing), which appears to have permanently weakened some populations.[45]

40. State of Nature Partnership. (2023). State of Nature.
41. UK Parliament. (2024).The Future of Fertiliser Use.
42. Northumbria University. (2023). Our new map reveals the effects of 20th century land-use and climate change on Britain's wild species.
43. State of Nature Partnership. (2023). State of Nature.
44. The Guardian. (2024). Trees and Land Absorbed Almost no CO2 Last Year.
45. State of Nature Partnership. (2023). State of Nature.

APPENDIX 2

GLOBAL INITIATIVES, FRAMEWORKS, METRICS AND CERTIFICATIONS ADDRESSING NATURE & BIODIVERSITY

Why Biodiversity Matters to Real Estate and is a Material Risk

Research confirms all sectors and half of the world's GDP is dependent on nature, and the construction sector is one of five highly exposed industries with 100% of the sectors direct operations being highly dependent. This risk spans the real estate capital markets with nearly 100% of real estate direct GVA being at medium risk while still exposed to "hidden" high dependencies through the supply chain. The GVA of direct customers of the construction and real estate sector that encompass real estate developers and investors also exhibits significant exposure to ecosystem disruptions.[46]

As nature-dependencies present a material risk to businesses and the health of people and planet, there are increasing global initiatives and legislation aimed at halting and reversing the decline in biodiversity and nature.

Several complementary frameworks and benchmarking tools have emerged to support real estate investors and other stakeholders to identify and manage nature-related risks, and establish benchmarks, set targets, and monitor progress towards nature and biodiversity restoration.

Global Goals for Biodiversity and Nature

The UN's international Convention on Biological Diversity

The UN's international Convention on Biological Diversity (CBD) came into force in 1993. It has been ratified by all major countries except the USA.[47] This adopts the Kunming-Montreal GBF, which was agreed at COP15 of the CBD in Montreal in December 2022.[48] The GBF is also sometimes referred to as the Biodiversity Plan for Life on Earth.

The GBF set out four long-term goals for 2050: a) restoring and increasing the size of natural habitats starting with 2020 as a base; b) the sustainable use of nature: c) the equitable sharing of the monetary and non-monetary benefits from genetic resources; and d) advanced economies should increase funding for biodiversity schemes in emerging economies. COP16 of the CBD in Columbia in 2024 and a follow-up meeting in Rome in February 2025 made some progress on these issues but failed to agree on creating a dedicated fund for nature. COP17 of the CBD will be in Armenia in 2026.

The GBF also includes a set of 23 intermediate targets for 2030. These include:

- extending conservation schemes to cover 30% of land and sea by 2030 – the so-called 30 by 30 commitment;
- restoring 30% of degraded land, inland waterway and marine ecosystems by 2030; and
- halting the net loss of those ecosystems which are most intact.

46. WEF & PWC. (January 2020). Nature Risk Rising: *Why The Crisis Engulfing Nature Matters For Business And The Economy*; PWC. (2025). *Where nature is in peril, these industries are too.* Where nature is in peril, these industries are too; PWC. (2025). *Managing nature risks: From understanding to action.* Managing nature risks: From understanding to action | PwC.
47. United Nations. (2024). *International Day for Biological Diversity 22 May - Convention on Biological Diversity.*
48. United Nations. (2022). *Kunming-Montreal Global Biodiversity Framework.*

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Global Roadmap for a Nature-Positive Economy and Financial Reform Agenda to meet Nature and Climate Goals

In a recent discussion, Global Roadmap For A Nature-Positive Economy An Economic And Financial Reform Agenda To Meet Nature And Climate Goals, the WWF acknowledge the fundamental drivers of nature loss are embedded in the global economic and financial systems that incentivise and externalise the unsustainable exploitation of natural resources and environmental harmful activities for short-term profit.[49] The paper sets out a roadmap to confront these challenges and puts forward an agenda for action on reforming the economic 'rules of the game'. The roadmap comprises five key pillars for reform:

1. **Nature-positive transition pathways –** to guide actors on what the transition to nature-positive economy looks like. Work led by Business for Nature and the World Business Council for Sustainable Development (WBCSD) have made progress in this area including a foundational roadmap to nature-positive for the built environment system.
2. **Data and metrics –** with disclosure guidelines by the TNFD and national natural capital accounting frameworks. More government-endorsed frameworks and enabling policies are necessary to incentivise the private sector to transition to a nature-positive economy. BNG policy requirements in England is a good example of government progress in this area.
3. **Shifting private capital –** to close the financing gap for biodiversity and nature investment.
4. **International financial institutions and development financing institutions –** to better support countries in shaping nature-positive development strategies.
5. **Trade and the global commons –** reform trade rules that may directly or indirectly punish countries for setting higher environmental standards to avoid inequitable economic and social impacts.

Decision Making, Risk Management Frameworks and Disclosure Regimes

Taskforce on Nature-related Financial Disclosures

With growing emphasis on businesses' dependence on nature, and the crucial role of financial systems and market participants in mitigating and ultimately reversing environmental degradation and biodiversity loss, the TNFD was launched in 2021. This strategic risk management framework and disclosure tool aims to support a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes, aligned with the GBF. The TNFD published a set of 14 disclosure recommendations and supporting guidance that enable business and finance to assess, report and act on their nature-related dependencies, impacts, risks and opportunities using the 'LEAP' approach (Local, Evaluate, Assess, and Prepare).[50] It is analogous to the Taskforce on Climate-related Financial Disclosure (TCFD) and has been designed to be consistent with the ISSB's IFRS Standards, and the nature-related policy and disclosure landscape and in doing so meets the material information needs of capital providers.[51]

49. World Wildlife Fund. (2024). *Global Roadmap for a Nature-Positive Economy.*
50. Taskforce on Nature-related Financial Disclosures. (2023). *Recommendations of the Taskforce on Nature-related Financial Disclosures*; Taskforce on Nature-related Financial Disclosures. (2023). *Assessment Guidance*; Taskforce on Nature-related Financial Disclosures. (2023). *Guidance on the identification and assessment of nature-related issues: the LEAP approach.*
51. IFRS. (2023). IFRS - IFRS Sustainability Standards Navigator

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TNFD is not currently mandatory for UK companies, although UK government is a strong supporter and many large companies have voluntarily started to adopt it, including real estate investors and developers.[52] In January 2025, the TNFD published sector-specific guidance on applying TNFD and integrating nature into decision making for engineering, construction and real estate.[53] It accompanies other guidance for construction materials and financial institutions.[54] The Better Buildings Partnership has also produced TNFD guidance for commercial real estate.[55]

Natural Capital Protocol

With business and financial flows heavily reliant on nature, the Capitals Coalition aim to align finance and commercial activity with nature dependence to foster equitable and resilient economies by taking a 'capitals approach' and better understanding natural capital, social capital, human capital and produced capital.[56]

As part of this integrated approach, the Natural Capital Protocol (NCP) is an internationally standardised decision-making framework that enables organisations to identify, measure and value their direct and indirect impacts and dependencies on natural capital. The objective is to improve the quantity and quality of business-relevant information available to decision makers. The protocol is a complementary tool for undertaking impact and dependency analysis as part of applying the TNFD LEAP approach.[57]

It is acknowledged that evaluating evolving nature-related issues is more complex compared to accounting for climate-related impacts, for example using the universally adopted Greenhouse Gas (GHG) Protocol. Nature-related targets, metrics and data are required at global, local and national levels to measure progress towards global nature-positive goals such as the GBF. Disclosure metrics are split into 'Global metrics', which are relevant to all sectors, and 'Sector metrics', which are relevant to specific sectors only.

The UK's natural capital accounts produced by the Office of National Statistics are compiled in line with the guidelines recommended by the United Nations' (UN) System of Environmental Economic-Accounting – Ecosystem Accounting (SEEA-EA), and the UN SEEA Experimental Ecosystem Accounting, as aligned with Figure 7.[58]

52. Green Finance Institute. UK Policy on TNFD
53. Taskforce on Nature-related Financial Disclosures. (2025). *Additional sector guidance: Engineering, construction and real estate.*
54. Taskforce on Nature-related Financial Disclosures. (2025). *Additional sector guidance: Construction materials*; Taskforce on Nature-related Financial Disclosures. (2024). *Sector guidance: Additional guidance for financial institutions.*
55. Better Buildings Partnership. (2024). *TNFD for Commercial Real Estate.*
56. Capitals Coalition. (2025). *The Beta Framework for Integrated Decision-making.* Capitals Coalition – building a resilient economy that values what matters
57. Taskforce on Nature-related Financial Disclosures. (2023). *Recommendations of the Taskforce on Nature-related Financial Disclosures.*
58. Office for National Statistics (ONS), released 8 November 2024, ONS website, methodology, UK natural capital accounts methodology guide: 2024

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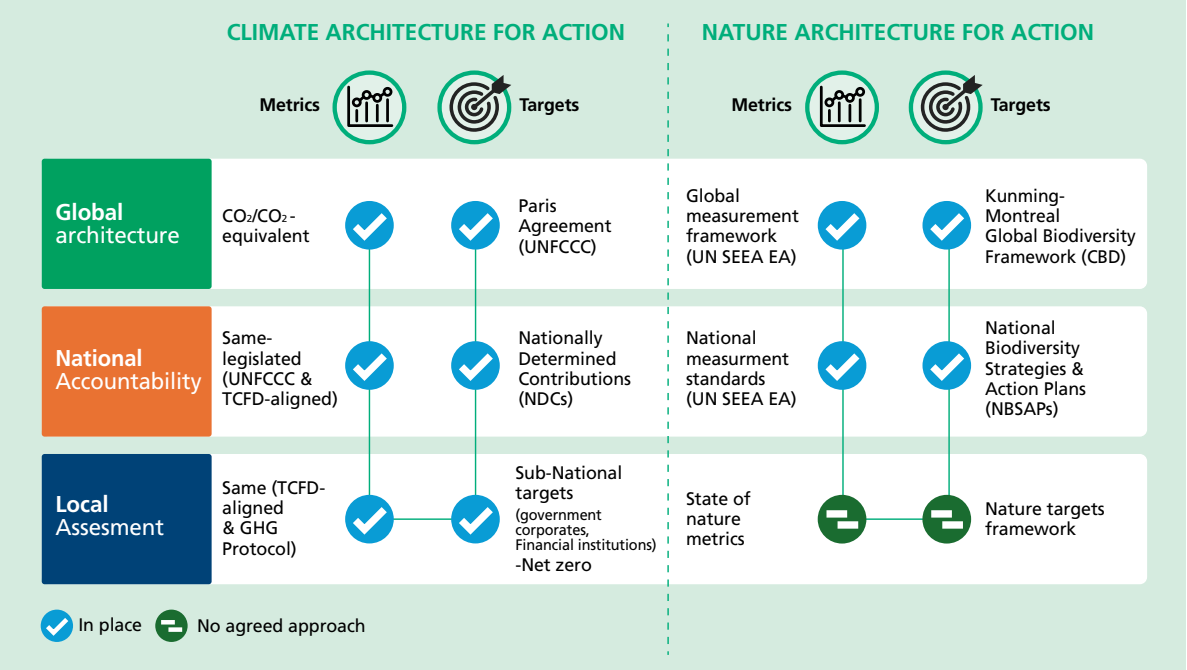
Figure 7: The Architecture for Measurement and Target Setting - Climate and Nature



Source: TNFD Recommendations.

International Sustainability Standards Board

The ISSB is a global body established by the IFRS Foundation to develop comprehensive sustainability disclosure standards. Its goal is to provide a consistent and comparable global baseline for sustainability reporting, established in 2021 under the International Financial Reporting Standards (IFRS) Foundation. The framework aims to improve transparency around sustainability-related risks and opportunities by developing disclosure standards that meet investor needs and are designed to be integrated with financial reporting.

In June 2023, the ISSB issued its inaugural Standards for Sustainability Disclosures, encompassing IFRS S1 and S2. IFRS S1 focuses on the general requirements for disclosure of 'all sustainability-related risks and opportunities'. IFRS S2 focuses specifically on climate-related disclosures and is designed to be used in tandem with IFRS S1.

While the IFRS do not explicitly reference biodiversity and nature-related risks, these are implicitly covered under IFRS S1 if they are material to a company's financial performance and prospects.

There are strong signals that nature-related disclosures under the ISSB will follow. The ISSB is currently researching the market need for disclosure of biodiversity, ecosystems and ecosystem services-related information, and potential ways to address that need, which will then support the ISSB in decision making around future standard-setting.[59] In April 2025, the ISSB also announced a formal collaboration signalling both parties' commitment to build upon the TNFD recommendations in this ongoing research by the ISSB to enable nature-related financial disclosures for use by capital markets.[60]

59. ISSB. (March 2025). AGENDA ITEM: Biodiversity, Ecosystems and Ecosystem Services IFRS - International Sustainability Standards Board
60. TNFD. (April 2025). IFRS Foundation and TNFD formalise collaboration to provide capital markets with high-quality nature-related information. IFRS Foundation and TNFD formalise collaboration to provide capital markets with high-quality nature-related information

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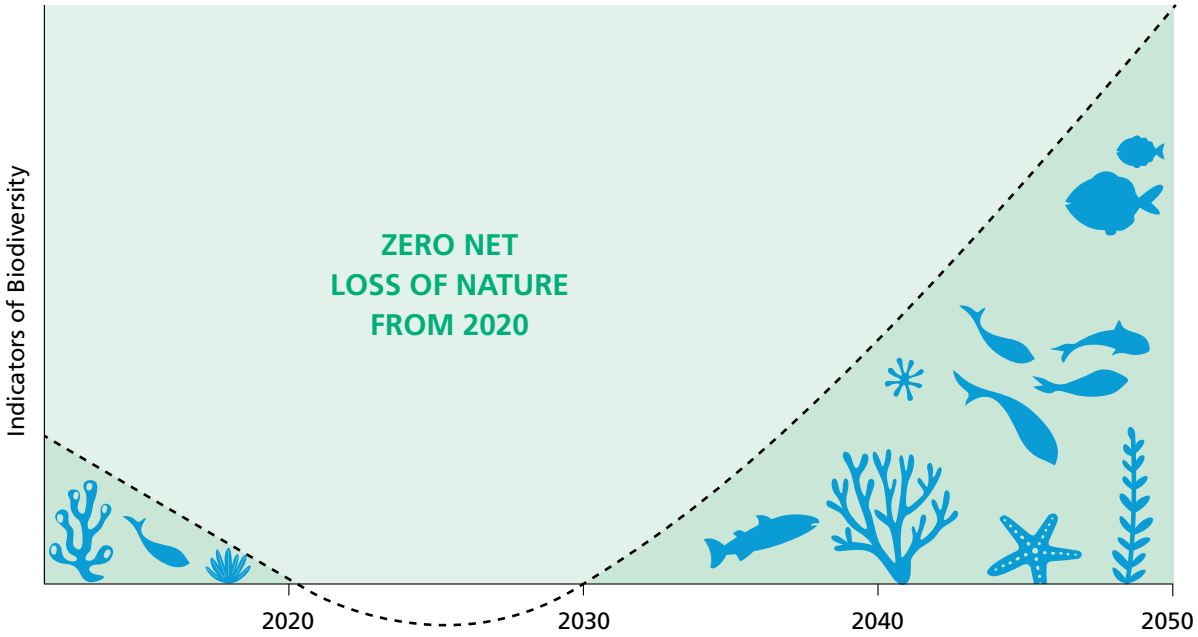
As of May 2025, the ISSB standards are not yet mandatory in the UK, but the government is in the process of endorsing IFRS S1 and S2 standards under the new UK Sustainability Reporting Standards (UK SRS), following which the FCA will amend rules for in-scope firms to move from TCFD to UK-endorsed ISSB standards.[61]

Nature-related Targets, Metrics and Data Initiatives

The Nature Positive Initiative and the State of Nature (SoN) Metrics

The Nature Positive Initiative (NPI) is a coalition of 27 of the world's largest nature conservation organisations, institutes, and business and finance organisations including the Capitals Coalition, Global Reporting Initiative (GRI), TNFD, WBCSD, the Word Resources Institute (WRI), WWF, Principles of Responsible Investment (PRI), and Race to Zero.[62] It promotes nature-positive as a concept, with the aim of reversing nature loss by 2030 and achieving a full recovery of nature by 2050 (Figure 8), aligned with the UN's Kunming-Montreal GBF – see above. According to the WWF, which is part of the coalition, the aim is to achieve this through "measurable gains in the health, abundance, diversity, and resilience of species ecosystems, and natural processes". The global goal of nature-positive by 2030 is seen as equivalent and complementary to achieving global ambitions to limit global warming to 1.5°C.

Figure 8: The Goal of Nature Positive



Source: Nature Positive, WWF. 2023

The NPI advocates for credible, practical metrics for universal adoption to measure the 'state of nature' (SoN) metrics and help work toward nature-positive outcomes. At the time of writing, the SoN metrics are in draft stage and piloting throughout 2025 will test applicability and develop guidance for embedding them across existing frameworks and standards such as TNFD, GRI, the Science Based Targets Network (SBTN). The aim is to finalise SoN metrics and guidance in 2026.[63]

61. Financial Conduct Authority (FCA). (March 2025). Sustainability-related reporting requirements.
62. Nature Positive - A Global Goal for Nature
63. Nature Positive Initiative. (2025). *State of Nature Metrics for Piloting.*

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Science Based Targets Network

In response to scientific consensus that achieving the 1.5°C climate goal cannot be achieved without preventing and reversing nature loss, and that both these issues must be addressed together, the Science Based Targets Network (SBTN) has introduced science-based targets for nature. Given the exposure risk of construction and real estate from nature and biodiversity decline, as noted above, the business imperative to establish science-based targets for both nature and climate into business strategies has never been clearer.

Early adopters in the build environment sector include Holcim, who have committed to "measurable positive impact on biodiversity by 2030" and developed the Biodiversity Indicator and Reporting System (BIRS) in collaboration with the International Union for Conservation of Nature (IUCN) to baseline and measure biodiversity improvement across their active and non-active quarries.[64]

Green Building Councils

WorldGBC

Given the dependence of the real estate sector and its supply chain on nature, as noted above, Green Building Councils are developing guidance for the sector to better account for sustainable building practices.

The World Green Building Council, a network of individual, company and national members, promotes nature-positive development globally through its "Sustainable Buildings for Everyone, Everywhere" strategy.[65] The WorldGBC's ambitions align with the Sustainable Development Goals and publicly reports progress as a member of the UN Global Compact. It encourages national councils to adopt frameworks that protect and restore ecosystems, in-line with the UN's Post-2020 Global Biodiversity Framework.

UKGBC

The UK Green Building Council (UKGBC) is a national member of the World Green Building Council (WorldGBC) and implements WorldGBC's global goals locally, adapting them to UK policy, market conditions, and stakeholder needs.

The UKGBC has been a pioneer in biodiversity net gain and embodied carbon strategies, which influence global best practices. UKGBC's 2030 ambition is that all buildings and infrastructure will be climate-resilient and deliver environmental net gains, with biodiversity as a core component. It positions BNG not just as a compliance issue, but as a value-adding opportunity for healthier, more resilient places. To further reduce the global biodiversity loss, the UKGBC launched its Embodied Ecological Impact Initiative (EEI) in 2023 to reduce the ecological impacts that result from material extraction and within supply chains.[66]

Green Building Certifications and Real Estate Benchmarking Tools

GRESB

There are real estate sustainability certifications that are now incorporating nature risks and impacts, adopting BNG as a metric for measuring performance of real estate assets. GRESB, for example, has taken significant steps toward integrating biodiversity into its assessment framework.

64. Holcim. (2025). A Strong Commitment To Protect And Restore Biodiversity. Biodiversity | Holcim
65. UKGBC. (2020). *Sustainable Buildings for Everyone, Everywhere*. UKGBC, Sustainable Buildings
66. UKGBC. (2023). Embodied Ecological Impacts Knowledge Hub

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Whilst it does not yet have a formal, dedicated scoring mechanism specifically recognising the BNG metric, it is increasingly recognising biodiversity as a material ESG issue, especially in light of regulatory changes within the UK. For the first time in 2025, it has introduced a new mandatory category indicator (RM7) on Biodiversity and Nature Related Strategy, whereby 'participants must describe their biodiversity and nature-related strategies and how they consider dependencies, impacts, risks, and opportunities'.[67] Whilst it is unscored in 2025, the indicator aims to gain intelligence on how participants consider biodiversity and nature-related issues.[68]

Currently, having a biodiversity strategy can contribute positively to your GRESB score, under the Management (PO1), Risk Management (RM4), and Development (DRE1) indicators. Participants can also report on biodiversity initiatives, including BNG, under GRESB's open text fields or custom indicators, through voluntary disclosures.

As TNFD and potential nature-related disclosures under the ISSB gains further traction, it is likely that future GRESB assessments will include more explicit biodiversity-related indicators. The TNFD and the NCP (see above) are two frameworks that can help real estate investors produce a Biodiversity and Nature Related Strategy that addresses their dependencies, impacts, risks, and opportunities.

BREEAM

The current BREEAM Version 6 awards credits for recognition of steps taken to avoid impacts and enhance existing site ecology under Land Use and Ecology Category, specifically for Managing Impacts on Ecology (LE03) and Ecological Change and Enhancement (LE 04).[69]

The new BREEAM Version 7 framework has been updated to explicitly align with the UK's mandatory BNG legislation and will provide clearer pathways for demonstrating compliance with the BNG metric, supporting use of the DEFRA Biodiversity Metric (not the Small Sites Metric) and offering enhanced credit opportunities for projects that exceed the 10% threshold. Therefore, projects that deliver on site BNG will secure credits under the BREEAM V7 standard.

LEED

Other green building certification such as LEED, do not explicitly award credits aligned with the BNG metric, but its principles are supported through habitat protection, restoration, and sustainable land use credits.[70] It is also possible to gain Innovation points by encouraging projects to achieve exceptional or innovative performance that exceeds LEED's baseline requirements which can include biodiversity related initiatives.[71]

Wellbeing Certifications

Health and Wellbeing certifications such as WELL and Fitwel, while rewarding the provision of green spaces and connection with nature, do not currently use BNG as a performance metric. Focused on enhancing human wellbeing, these certifications can help ensure that BNG efforts are accessible, inclusive, and beneficial to occupants and communities.

67. GRESB. (2024). *2025 Updates Summary Table*, GRESB Real Estate Standard. GRESB Real Estate Standard, 2025 Updates
68. Ivanova, A. GRESB (2025). *From climate to nature: GRESB's evolving focus on biodiversity and natural capital*, Articles
69. BREEAM. (2023). *BREEAM UK New Construction*, Version 6.1. BRE Global.
70. LEED. (2024). How LEED v5 promotes ecological conservation and restoration.
71. LEED. (2013). *LEED BD+C: New Constructionv4 - LEED v4*

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Table 5: Summary of global initiatives addressing nature and biodiversity

INITIATIVE	DESCRIPTION	TYPE	GOV/ENTITY/ ASSET	SECTOR	METRIC OR MEASUREMENT APPROACH	PERFORMANCE BASED	COMPARABILITY	RELATION TO BNG
Kunming-Montreal Global Biodiversity Framework (GBF)	Global biodiversity strategy to halt and reverse biodiversity loss by 2050	Policy Framework	Global - government policy	All	Headline, binary, component, and complementary indicators (e.g., Red List Index, ecosystem extent)	Yes – targets include measurable outcomes (e.g., 30% conservation by 2030)	High – standardised indicators for national reporting	GBF underpins UK's biodiversity strategy; BNG is a domestic implementation tool to meet GBF targets, especially on ecosystem restoration and sustainable land use
SEEA-EA (System of Environmental Economic Accounting – Ecosystem Accounting)	SEEA-EA is a UN framework integrating ecosystem services and environmental assets into national economic accounts	Environmental accounting framework	Global - government	All	Ecosystem extent, condition, services, monetary valuation	No but the guidelines are used in the methodology to calculate the UK's natural capital ecosystem service accounts	High – standardised indicators for national reporting	SEEA-EA provides national-level natural capital data and ecosystem baselines that can contextualize and potentially validate Biodiversity Net Gain (BNG) outcomes, supporting alignment between site-level interventions and national environmental objectives
Global Roadmap for a Nature-Positive Economy	A strategic framework guiding global economic transformation toward nature-positive, sustainable development	Financial Framework	Global - financial markets	All	Policy reforms, investment flows, nature-positive metrics	It is performance based in principle, but it doesn't prescribe a single metric, but recognises those that are standardised (e.g. Natural Capital Accounting)	Medium - no standardised indicators but recognises widely used metrics	Aligned in shared objectives and policy integration as it supports reforms that embed nature-positive principles into national policy, which complements BNG's legal requirement
Business for Nature	A global coalition of businesses and conservation organisations advocating for policies that reverse nature loss and promote sustainable business practices	Coalition	Global - entities	All	Sector-specific sustainability platform	No but it mobilises and aligns business action around emerging performance-based standards	Medium - no standardised indicators but recognises widely used metrics	Supports policies like BNG as part of a broader push for mandatory nature-related disclosures and actions
World Business Council for Sustainable Development (WBCSD)	A CEO-led global business coalition driving sustainable development through sector-specific metrics and nature-positive strategies	Coalition	Global - entities	All	Sector-specific sustainability platform	Yes – supports in measuring sustainability through metrics and frameworks (e.g. Circular Transition Indicators and sector specific metrics)	High – standardized indicators for corporate sustainability reporting and benchmarking	As well as shared principles, WBCSD provides corporate-level strategy and tools, such as the Nature Action and Metrics Portal, to help track and report biodiversity impacts, which can support or validate BNG compliance in development projects

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Table 5: Summary of global initiatives addressing nature and biodiversity

INITIATIVE	DESCRIPTION	TYPE	GOV/ENTITY/ ASSET	SECTOR	METRIC OR MEASUREMENT APPROACH	PERFORMANCE BASED	COMPARABILITY	RELATION TO BNG
Taskforce on Nature-related Financial Disclosures (TNFD)	A global framework helping organisations disclose nature-related risks and opportunities using the LEAP approach and aligned with GBF and ISSB	Disclosure and reporting framework	Global - entities	All	LEAP approach, risk/opportunity metrics	Yes - encourages assessment and disclosure using a structured set of metrics (e.g. Risk and Opportunity Metrics)	Med – standardized LEAP approach for reporting but specific reporting may different depending on the entity and sector	Optional to use BNG as metric to benchmark and set improvement targets for nature across real estate portfolios and assets, with performance aggregated and disclosed at the entity level under this disclosure framework
EU Corporate Sustainability Reporting Directive (CSRD)	EU regulation requiring large companies to report sustainability impacts using ESRS, aligned with ISSB and GBF	Reporting	Global	Large Companies	Include ESRS (European Sustainability Reporting Standards)	Yes - requires sustainability impact reporting	High - standardized indicators for corporate reporting	Complementary - supports sustainability reporting which can include BNG outcomes
International Sustainability Standards Board (ISSB)	Develops global sustainability disclosure standards (IFRS S1 & S2), aligned with TCFD and with a Memorandum of Understanding with the TNFD	Disclosure and reporting framework	Global - entities	All	IFRS S1 & S2 (climate-related metrics). Signal that nature-related metrics coming in future	Yes - encourages assessment and disclosure using a structured set of metrics (e.g. Scope 1, 2 & 3 GHG emissions)	High – standardised indicators for investor-focused reporting	Optional to use BNG as metric to benchmark and set improvement targets for nature across real estate portfolios and assets, with performance aggregated and disclosed at the entity level under this disclosure framework
World Green Building Council (World)	A global network promoting sustainable building practices and environmental performance in the built environment sector	Coalition	Global - entities	Built Environment Sector	BNG, Environmental Net Gain	Performance based and promotes quantifiable performance outcomes with evolving metrics and frameworks	Medium - no standardised indicators but recognises widely used metrics	Complementary but distinct initiatives that align in practice and aim to enhance environmental outcomes
UN Global Compact	A UN initiative encouraging businesses worldwide to adopt sustainable and socially responsible policies	Coalition	Global - governments and entities	All	Sustainability principles, SDG alignment	Primarily a principles-based voluntary initiative, but has some performance indicators (e.g. environmental impact)	Low - principle based with limited standardisation	Complementary but distinct initiatives that align in practice and aim to enhance environmental outcomes
UK Natural Capital Accounts	UK framework integrating ecosystem service valuation and land use into public sector economic accounting	Environmental accounting framework	UK - government	All	Ecosystem service valuation, land use	Yes - the UK natural capital accounts estimates annual habitat extent, ecosystem services and asset value in the UK	High – standardized indicators for national reporting	Complementary - BNG can be integrated into natural capital accounts to reflect the biodiversity uplift from a project. Natural Capital Accounts can evaluate financial benefits of BNG schemes

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Table 5: Summary of global initiatives addressing nature and biodiversity

INITIATIVE	DESCRIPTION	TYPE	GOV/ENTITY/ ASSET	SECTOR	METRIC OR MEASUREMENT APPROACH	PERFORMANCE BASED	COMPARABILITY	RELATION TO BNG
UK Green Building Council (UKGBC)	A UK-based industry network driving sustainability in the built environment through advocacy, innovation, and best practices	Coalition	UK - entities and assets	Built Environment Sector	BNG, Environmental Net Gain	Yes – targets include measurable outcomes e.g., Whole Life Carbon and the BNG metric	Medium - consistent frameworks but not fully standardised for reporting	Advocates the use of BNG for performance benchmarking and setting improvement targets
Embodied Ecological Impact Initiative (EEI)	Aims to measure and reduce ecological impacts embedded in materials and construction across the built environment	Framework	Asset	Developer / Asset Owner	Include ecological impact metrics	Yes - aims to measure and reduce ecological impacts	Medium - evolving metrics for ecological impact	Complementary - supports ecological impact reduction which aligns with BNG
GRESB (Global Real Estate Sustainability Benchmark)	ESG benchmark for real assets, assessing performance of real estate portfolios	Sustainability benchmark	Global - Portfolios and Assets	Built Environment Sector	Environmental, social, governance performance	Yes – standardised ESG metrics and also more quantitative criteria such as the provision of a Biodiversity and Nature Related Strategy	High – standardised benchmarks for real estate portfolios	Mandatory category indicator that requires participants to describe biodiversity and nature-related strategies and how they consider dependencies, impacts, risks and opportunities
BREEAM (Building Research Establishment Environmental Assessment Methodology)	A leading sustainability assessment method for buildings, focusing on energy, health, and environmental performance	Certification	Global - Assets	Built Environment Sector	Includes habitat protection, enhancement and uses the BNG metric	Yes – structured framework quantitative and qualitative metrics	High – standardized indicators at the asset level	BREEAM V7 awards credits using the BNG metric
LEED (Leadership in Energy and Environmental Design)	A globally recognised green building certification system promoting energy efficiency and sustainable design	Certification	Global - Assets	Built Environment Sector	Includes habitat protection, enhancement and the provision of green space	Yes – structured framework quantitative and qualitative metrics	High – standardized indicators at the asset level	Recognises investment into conserving and enhancing natural habitats
WELL	Focuses on health and well-being in buildings through air, water, light, fitness, and comfort standards	Certification	Global - Assets	Built Environment Sector	Includes provision of green space and access to nature	Yes – structured framework quantitative and qualitative metrics	High – standardized indicators at the asset level	Recognises investment into provision of green space
Fitwel	A building certification system promoting occupant health and productivity through evidence-based design and operational strategies	Certification	Asset	Built Environment Sector	Includes provision of green space and access to nature	Yes – structured framework quantitative and qualitative metrics	High – standardized indicators at the asset level	Recognises investment into provision of green space

APPENDIX 3

MEASURING BIODIVERSITY

Metric Versions

At the time of writing, the current Metric is DEFRA's Statutory Biodiversity Metric[9] (hereafter referred to as the 'Metric') which was released in February 2024. The same version of the Metric is to be used to calculate both on- and off-site BNG.

As mentioned above, small developments can use the Statutory Biodiversity Metric or the simpler SSM. However, the SSM cannot be used on sites where priority habitats or protected species are present.

Biodiversity Metric Formula

The Biodiversity Metric quantifies the biodiversity value of area, hedgerow and watercourse habitats. Examples include:

- Area habitats: cropland, grassland, heathland and shrub.
- Hedgerow habitats: species-rich native hedgerow, hedgerow associated with bank or ditch and line of trees.
- Watercourse habitats: range from ditches and canals to culverts.

The tool considers the following factors to value the site in terms of biodiversity units.

- Habitat condition: how well the habitat is functioning.
- Habitat distinctiveness: how rare the habitat is and its importance to nature conservation.
- Strategic significance: whether the habitat is a local priority or located in a priority area for habitat creation/enhancement.
- Spatial risk: the location of habitat creation/enhancement in relation to the development site.
- Temporal risk: the time taken between beginning habitat creation or enhancement and the habitat reaching the target condition and/or distinctiveness.
- Difficulty: the uncertainty in the effectiveness of the habitat creation and management techniques used to reach target conditions.

Calculating Biodiversity Unit Change

The UK Habitat Classification system (UKHab) informs the data entered in the Metric. The baseline and projected post-intervention scenarios within the development boundary should be completed within the appropriate sections of the Metric to calculate the biodiversity gain/loss. Biodiversity unit change is calculated by subtracting the baseline from projected post-intervention units. The Metric will determine if a 10% gain will be achieved on-site, or if there is a deficit that needs to be offset.

Note that losses and deterioration of irreplaceable or very high distinctiveness habitats, such as lowland fens and blanket bogs, cannot be accounted for through the Metric.

The delivery of Suitable Alternative Natural Greenspaces (SANG) may be counted towards a BNG calculation but should not make up all of a development's BNG.

APPENDIX 3

Trading Rules

The Metric sets minimum creation and enhancement requirements based on habitat type (area, hedgerow and watercourse) and habitat distinctiveness (ranging from very low to very high), with a general principal of delivering 'like for like' or 'like for better'. The purpose is to minimise the loss of habitats and ensure offsetting is delivered through habitats of equal or higher distinctiveness. This is demonstrated in Table 7 below which presents the options for compensating different baseline habitat distinctiveness losses.

Table 7: Trading Rules to Compensate for Losses

Baseline habitat distinctiveness	Area	Hedgerow	Watercourse
Very high	Priority should be given to replacing losses with area habitat units of the same habitat type (see below notes on trading)	Losses must be replaced with hedgerow units of the same habitat type	Priority should be given to replacing losses with watercourse units of the same habitat type (see below notes on trading)
High	Losses must be replaced with area habitat units of the same habitat type	Losses must be replaced with hedgerow units of the same habitat type or of a higher band	Losses must be replaced with watercourse units of the same habitat type
Medium	Losses must be replaced by area habitat units of either medium band habitats within the same broad habitat type or, any habitat from a higher band from any broad habitat type	Losses must be replaced with hedgerow units of the same or of a higher band	Losses must be replaced with watercourse units of the same habitat type
Low	Losses must be replaced with area habitat units of the same or higher band	Losses must be replaced with hedgerow units of the same or of a higher band	Losses must be replaced with watercourse units of a higher band
Very low	Not applicable	Losses must be replaced with hedgerow units of the same or of a higher band	Not applicable

Source: DEFRA The Statutory Metric User Guide. 2024

APPENDIX 4

DATA AND REPORTING

Biodiversity Gain Plan

The biodiversity gain plan should include the following information:[72]

- Completed Metric tool calculation.
- Pre-development and post-development plans (showing the location of on-site habitats).

Developers must also provide the following where appropriate:

- A compensation plan if the development affects irreplaceable habitats.
- BNG register reference numbers if using off-site biodiversity units.
- Proof of purchase if buying statutory biodiversity credits.
- Description of how any significant on-site gains will be managed and monitored (discussed in Section 5.2).

For developments which do not include significant on-site gains and those that do not contribute to locally important species or ecological networks, there is no reporting requirement following LPA approval of the biodiversity gain plan.

Legal Agreement

The most cost-effective approach is expected to be a s106 agreement for the BNG site and it may also be more streamlined to develop as the LPA is already engaged in the development's planning application. However, some LPAs do not have sufficient experience or capacity to be party to a BNG agreement where they would need to take on the responsibility of auditing the habitat delivery, in which case a conservation covenant with a responsible body may be a better option. We may see the cost of conservation covenants reducing as they gain in popularity, and the ease of developing this to support a planning application is likely to improve as LPAs become more familiar with this process.

The planning application should include detailed proposals of the habitat enhancements as part of the plans, drawings and supporting information accompanying the application. For outline planning applications, details of landscaping and layouts may be reserved for later approval.[73]

72. DEFRA. (2024). *Submit a biodiversity gain plan.*
https://www.gov.uk/guidance/submit-a-biodiversity-gain-plan
73. DEFRA. (2024). *Biodiversity net gain.*
https://www.gov.uk/guidance/biodiversity-net-gain#biodiversity-net-gain-submitting-a-planning-application

APPENDIX 4

Habitat Management and Monitoring Plan

For developments requiring a legal agreement in relation to on-site BNG (e.g. developments with significant on-site gains), a HMMP should be provided as part of the legal agreement. The HMMP provides a detailed schedule of management and monitoring requirements for the on-site habitat enhancement. The developer can sub-contract the implementation of the HMMP to a third party.

The monitoring schedule should be agreed with the LPA/responsible body and will cover the 30-year agreement period. This will typically consist of approximately 10 monitoring events where a third-party ecologist will survey on-site habitats and complete monitoring reports. The monitoring reports will detail the following:

- Survey details.
- Site wide successes and challenges.
- Progress towards habitat condition targets.
- Key future actions or management prescriptions.
- Any adaptive management.
- A register of habitat works activities including.

The developer is responsible for submitting the monitoring reports to the LPA/responsible body following each monitoring event.

APPENDIX 5

SECURING OFF-SITE BNG

Allocation Agreement

Where a development has a BNG deficit, off-site biodiversity units will need to be secured.

Developers can secure an option on biodiversity units that can be presented to the LPA during the planning application review process. Once planning consent is granted, the option is called and the biodiversity units are allocated to that development, satisfying the BNG requirements. Alternatively, a straightforward allocation can be provided where BNG has been conditioned to a planning consent via a sale agreement.

Option agreements can also be beneficial for developments that are phased, which seek to meet their BNG requirements in equivalent phases over the period of the scheme construction. An option agreement enables developers to have surety that the biodiversity units will be available and at an agreed price when needed.

Biodiversity Gain Sites Register

The supply of off-site biodiversity units to developments must be recorded on the Biodiversity Gain Site Register managed by Natural England.[74] This is a public register that will be used to check where biodiversity gain sites are and what habitats are to be enhanced, as well as what type, and how many, off-site biodiversity enhancements will be allocated to a particular development.

The following details are required to register the allocation of biodiversity units:

- Biodiversity Gain Site reference number (generated when a BNG scheme is registered).
- Development project name.
- Development LPA.
- Planning application reference.
- Planning decision notice.
- Development Metric with on- and off-site inputs completed.

The Register is operated by Natural England who require a payment of £639 to register land (i.e. BNG scheme) plus £45 per allocation of biodiversity units to a development.

An overview of the roles and responsibilities of the off-site BNG component in relation to satisfying a development's BNG requirement is presented in the flowchart below.

74. DEFRA. (2024). *Search the biodiversity gain sites register.*

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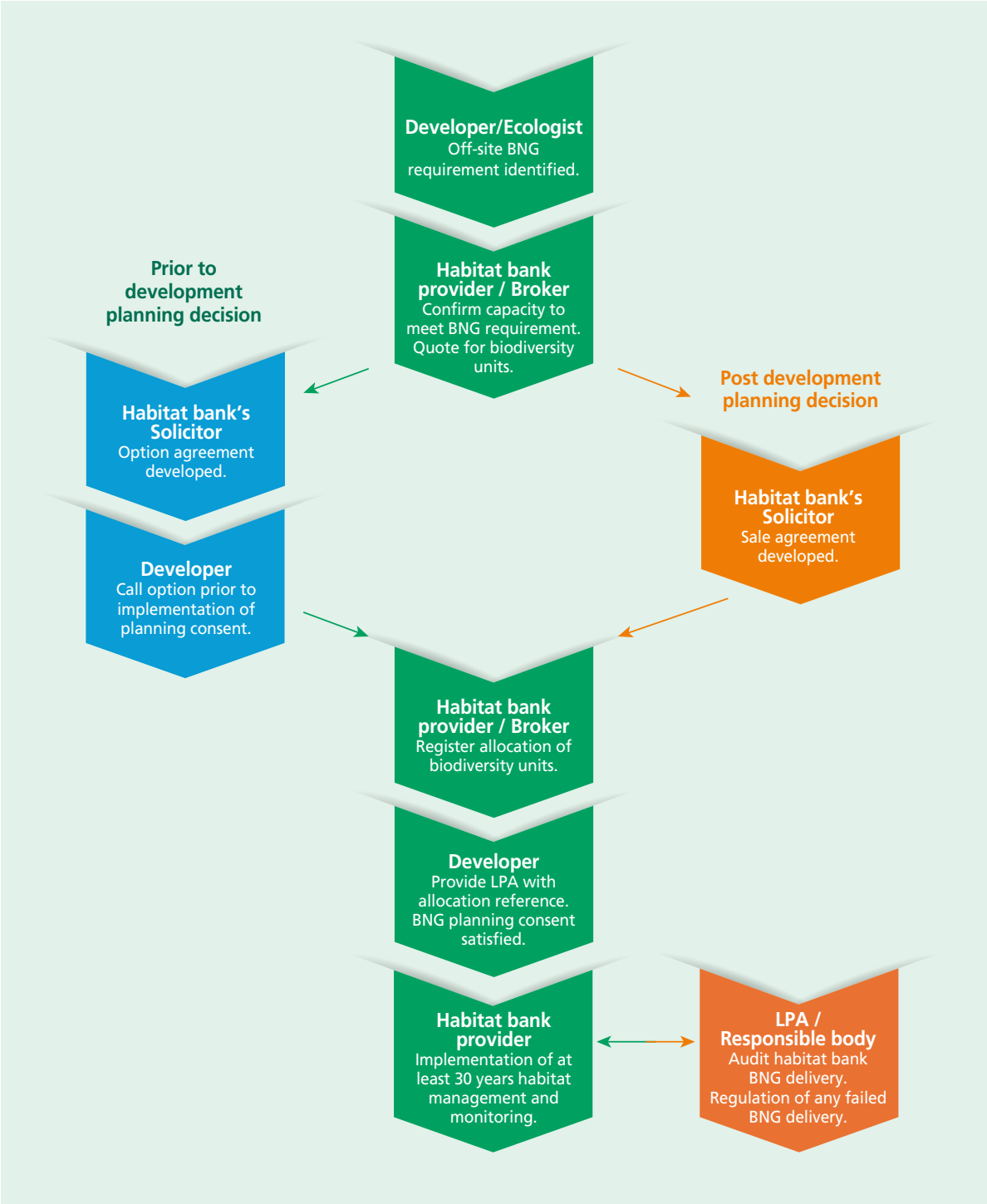
Figure 9: Roles and responsibilities relating to off-site BNG



APPENDIX 5

What to Look for When Securing Off-site BNG

When a development has a BNG deficit on-site and is looking for off-site BNG solutions, the following factors are important to consider:

- Legal agreement – The off-site BNG scheme should have a legal agreement in place prior to securing the biodiversity units.
- Proximity – There is a trade-off between delivering off-site BNG close to the development site where the users can benefit from the greenspace and delivering it in ecologically significant locations (e.g. within LNRS) that truly maximise biodiversity benefits. There is also a preference for securing off-site BNG within the same LPA or National Character Area (NCA) as the development (discussed below).
- Strategic significance – Is the BNG scheme of high strategic significance in the context of BNG (i.e. contributing to the Local Nature Recovery Strategy (LNRS), discussed below)?
- Credibility – The credibility of the habitat bank provider to deliver the habitat enhancements. Some habitat bank providers aim to maintain the habitats far beyond the requisite 30 years.
- Cost-effective – Price of the biodiversity units in the context of what the BNG scheme will be delivering (e.g. landscape scale nature restoration, wider benefits).
- Wider benefits – Some BNG schemes will deliver wider environmental and social benefits (e.g. new footpaths, educational signage, fauna surveys).

Due to the infancy of the BNG market, certain regions do not yet have a registered off-site habitat bank. This may result in some developments being delayed while they wait for a local habitat bank to be established, rather than paying a higher cost for units further afield, or resorting to the government's statutory credits.

Also, certain habitats may prove particularly challenging to offset. One example is open mosaic habitat which can be found in brownfield or disused quarry sites and can be difficult to match off-site. Another example is individual tree habitats, which require planting of around 80 scattered trees to generate one biodiversity unit and needs a large area so as not to form woodland. The lack of habitat banks providing such habitats may result in habitat trading-up occurring in these instances, which could be a higher cost unit type in comparison to lower distinctiveness habitat types.

The case study presented below provides an example of off-site BNG delivery.

APPENDIX 5

Lower Valley Farm Habitat Bank

Location: Fulbourn, South Cambridgeshire
Size: 70 ha

Cambridgeshire County Council are the landowners of a BNG scheme that is delivering landscape-scale nature restoration and generating over 600 biodiversity units. The scheme is creating species-rich grassland, native woodland and hedgerows, and scrub habitats across 70 ha that will predominantly be managed through conservation grazing.

The scheme is of high strategic significance in the context of BNG due to being within the Cambridge Nature Network project and lying adjacent to the Roman Road Site of Special Scientific Interest (SSSI). The Council are providing additional environmental and social outcomes by increasing the footpath network and partnering with Anglia Ruskin University to provide research opportunities at this site.

Bidwells are the broker for the biodiversity units generated here and are overseeing the implementation of the HMMP, including sub-contracting the physical habitat enhancement work and developing a grazing agreement.

To date, over £1.2m in biodiversity units have been sold from this scheme, including allocations to the following developments:

- Network Rail: Cambridge South station infrastructure enhancement scheme (pre mandatory BNG). Achieved 110% habitat units (29% delivered off-site), 206% hedgerow units, and 10% river units.
- Austin Drive Developments: Eight residential dwellings and associated infrastructure and landscaping (pre mandatory BNG). Achieved 110% habitat units (43% delivered off-site).
- Blues Property: Nine residential dwellings and associated infrastructure and landscaping (pre mandatory BNG). Achieved 110% habitat units (36% delivered off-site).
- Marshall Motor Group: replacement car storage compound and Pre-Delivery Inspection facility (pre mandatory BNG). Achieved 110% habitat units (100% delivered off-site).

APPENDIX 5

Spatial Risk

The Metric includes a Spatial Risk Multiplier (SRM) which reflects the relationship between the location of the on-site biodiversity loss and the location of the off-site habitat compensation.

The SRM reduces the value (in terms of biodiversity units) when BNG is delivered further from the development site. This is demonstrated in Table 8 which shows how the biodiversity unit trading basis changes for each habitat type in relation to the locations of the development site and offset site.

An example is presented in Figure 9 for a development site in Epping, which sits within Epping Forest LPA and Northern Thames Basin NCA, meaning this development site can secure area habitat and hedgerow units on a 1:1 trading basis from habitat banks within this catchment, while units secured further afield are subject to a higher trading basis and thus the area of habitat required for offsetting is increased accordingly.

Table 8: Biodiversity Unit Trading Basis

AREA HABITATS AND HEDGEROWS	**INTERTIDAL HABITATS**	**WATERCOURSE HABITATS**	**TRADING BASIS**
Compensation inside the same LPA or NCA areas	Compensation inside the same Marine Plan Area	Compensation within the same waterbody catchment	1:1
Compensation in the neighbouring LPA or NCA areas	Compensation in the neighbouring Marine Plan Area	Compensation within the same operational catchment, but outside the waterbody catchment	1:1.3
Compensation outside of the above areas	Compensation outside the above areas	Compensation outside the above areas	1:2

Source: DEFRA The Statutory Biodiversity Metric User Guide. 2024

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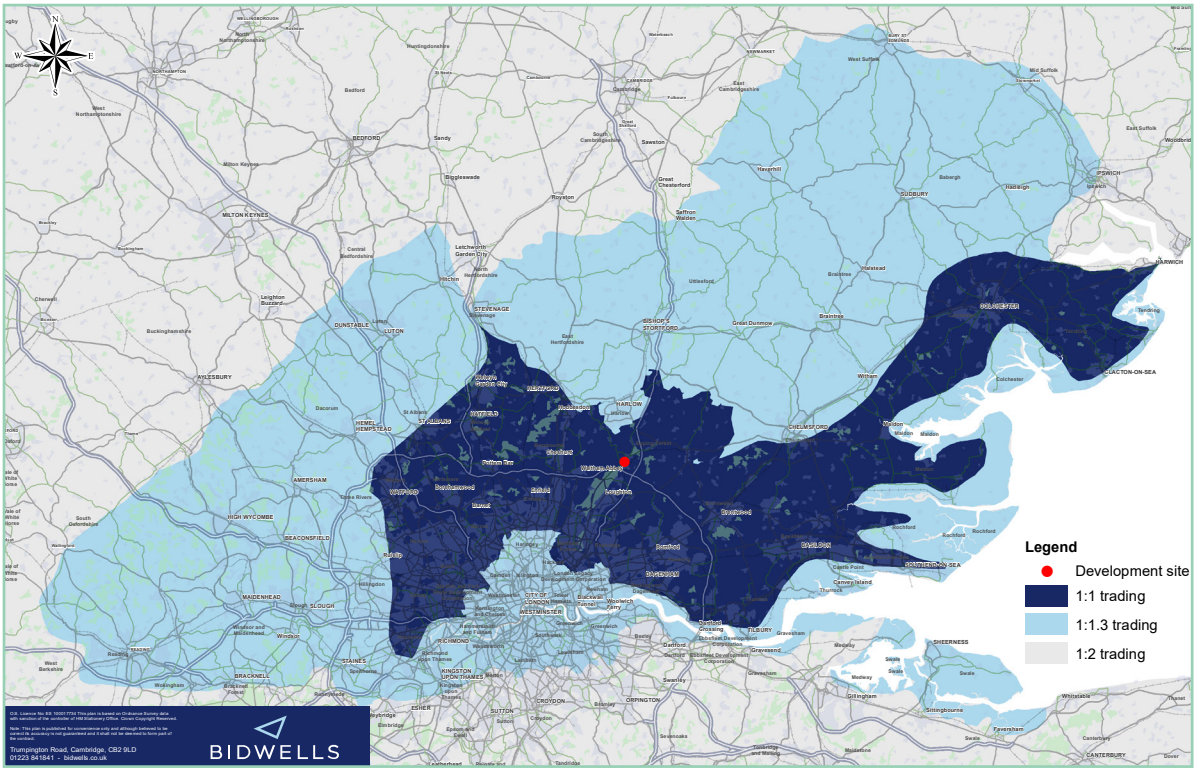
Figure 10: Biodiversity Unit Trading Basis for an Example Development Site



Local Nature Recovery Strategy

Local Nature Recovery Strategies (LNRS) are developed by responsible authorities, working with Natural England and other LPAs in a strategy area.[75] Other stakeholders such as county councils and local nature Non-Governmental Organisations (NGOs) may also be involved in the strategy preparation.

The LNRS will enable informed decisions to be made on the type and location of environmental initiatives across the region to maximise environmental outcomes in the most ecologically strategic locations. This links to the delivery of BNG, particularly when deciding where off-site BNG should be delivered.

When developing local plans, LPAs can identify or allocate areas for nature recovery and set a criteria-based policy which leads developers towards delivering any off-site BNG within these areas. This presents a significant opportunity to meet the objectives of the LNRS by prioritising offsetting in the nature recovery areas mapped within the LNRS.

75. DEFRA. (2023, June 30). Local nature recovery strategies. Retrieved from GOV.UK: https://www.gov.uk/government/publications/local-nature-recovery-strategies/local-nature-recovery-strategies

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LNRS are expected to include environmental priorities for the LPA area – such as priority habitats and species for conservation and key issues where nature-based solutions can exist (e.g. flooding, pollution and poor air quality). LNRS are also expected to include local nature recovery maps which identify areas across the LPA which should be prioritised, ultimately contributing to the NRN.

The Biodiversity Metric is designed to disincentivise development in areas of high ecological value or potential; this includes sites with habitats of high distinctiveness and condition, and areas of high strategic significance in an ecological context. In the context of offsetting a development's environmental impacts, the Metric is designed to encourage habitat creation and enhancement in areas of high strategic significance which will contribute to the NRN. Habitats of high strategic significance score 15% more biodiversity units in the Metric than those of low strategic significance.[76]

76. Nature Positive Initiative. (2025). *State of Nature Metrics for Piloting.*

APPENDIX 6

TNFD METRICS FOR REAL ESTATE

The Taskforce on Nature-related Financial Disclosures (TNFD) framework provides a mechanism for business and finance to assess and report on their nature-related dependencies, impacts, risks and opportunities. This can include a review of biodiversity impacts and enhancements.

The metrics for TNFD are designed to be: based upon science; aligned to global and national policies (e.g. BNG); relevant to companies and their stakeholders; and lend themselves to independent verification.[77] Importantly, the TNFD recognises that most companies will not have all the data they require when they first make a disclosure, particularly measures of their indirect exposure to nature through supply chains and that reporting will be an iterative process, with each successive report providing more information and leaving fewer gaps.

The metrics for TNFD reporting split into three types:

- **Core metrics.** All companies must report these metrics in order to enable comparison with their peers. Core metrics subdivide into global metrics which apply across all industries and sector metrics which are specific to a certain industry.[78] Core metrics for real estate companies include:
  - Total area of land occupied.
  - Amount of land which has been conserved, or restored.
  - Consumption of water in areas where it is scarce.
  - Waste generated and its disposal.
  - Air pollution excluding greenhouse gases.
  - Us of high-risk natural commodities resources (e.g. timber).

- **Additional metrics.** These are metrics which are recommended by TNFD but are not mandatory. Companies may also develop and disclose other metrics, provided they are precise and material to their business. Additional metrics include:
  - Creation of greenspaces.
  - Noise and light pollution.
  - Materials covered by environmental certificates.

- **Assessment metrics.** These metrics are internal management indicators designed to help a company measure its exposure to nature but are not published in disclosures.

77. TNFD. (2022). *An introduction to the TNFD's metrics architecture.*
78. Taskforce on Nature-related Financial Disclosures. (2025). *Additional sector guidance: Engineering, construction and real estate.*

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A more comprehensive set of core and additional metrics for UK real estate companies compiled by the Better Buildings Partnership is provided below.

Table 9: Environmental metrics for UK real estate companies

C/A/N	Indicator	Metric
C	Extent of land/ freshwater/ocean-use change	C1.0 - Total spatial footprint (sum of):[xiv] Total surface area controlled/ managed by the organisation, where the organisation has control (km^2) Total disturbed area (km^2) Total rehabilitated/restored area (km^2)
C	Extent of land/ freshwater/ocean-use change	C1.1 - Extent of land/freshwater/ocean ecosystem conserved or restored (km^2), split into: Voluntary; and Required by statutes or regulations.
C	Extent of land/ freshwater/ocean-use change	C1.1 - Extent of land/ freshwater/ ocean use change Extent of land/freshwater/ocean ecosystem use change (km^2) by:[xv] Type of ecosystem Type of business activity
C	Pollutants released to soil split by type	Pollutants released to soil (tonnes) by type, referring to sector-specific guidance on types of pollutants.
C	Wastewater discharged	C2.1 - Volume of water discharged (m^3), split into: Total Freshwater; and Other Including: Concentrations of key pollutants in the wastewater discharged, by type of pollutant, referring to sector-specific guidance for types of pollutants; and Temperature of water discharged, where relevant.
C	Waste generation and disposal	C2.2 - Weight of hazardous and non-hazardous waste generated by type (tonnes), referring to sector specific guidance for types of waste. Weight of hazardous and non-hazardous waste (tonnes) disposed of, split into: Waste incinerated (with and without energy recovery); Waste sent to landfill; and Other disposal methods. Weight of hazardous and non-hazardous waste (tonnes) diverted from landfill, split into waste: Reused; Recycled; and Other recovery operations.
C	Plastic pollution	C2.3 - Plastic footprint as measured by total weight (tonnes) of plastics (polymers, durable goods and packaging) used or sold broken down into raw material content. For plastic packaging, percentage of plastics that is: Reusable; Compostable; Technically recyclable; and Recyclable in practice and at scale.

C = Core PA = Proposed Additional PUK = Proposed for UK

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C	Non-GHG air pollutants	C2.4 - Non-GHG air pollutants (tonnes) by type: Particulate matter PM2.5 and/or PM10); Nitrogen oxides (NO_2, NO and NO_3); Volatile organic compounds (VOC or NMVOC); Sulphur oxides (SO_2, SO, SO_3, SOx); and Ammonia (NH_3).
C	Water withdrawal and consumption from areas of water scarcity	C3.0 - Water withdrawal and consumption25 (m^3) from areas of water scarcity, including identification of water source.
C	Quantity of high-risk natural commodities sourced from land/ ocean/freshwater	C3.1 - Quantity of high-risk natural commodities (tonnes) sourced from land/ocean/ freshwater, split into types, including proportion of total natural commodities.
C	Quantity of high-risk natural commodities sourced from land/ ocean/freshwater	C3.1 - Quantity of high-risk natural commodities (tonnes) sourced from land/ocean/ freshwater, split into types, including proportion of total natural commodities.
C	Placeholder indicator: Measures against unintentional introduction of invasive alien species (IAS)	C4.0 - Proportion of high-risk activities operated under appropriate measures to prevent unintentional introduction of IAS, or low risk designed activities.
C	Placeholder indicator: Ecosystem condition	C5.0 - For those organisations that choose to report on state of nature metrics, the TNFD encourages them to report the following indicators, and to refer to the TNFD additional guidance on measurement of the state of nature in Annex 2 of the LEAP approach: Level of ecosystem condition by type of ecosystem and business activity; and Species extinction risk. There are a number of different measurement options for these indicators. The TNFD does not currently specify one metric as there is no single metric that will capture all relevant dimensions of changes to the state of nature and a consensus is still developing. The TNFD will continue to work with knowledge partners to increase alignment.
PA	Change in fragmentation due to linear infrastructure	Length (km), footprint (km^2), number of lanes, planned traffic volume, and surface or material type of upgraded and/or new linear infrastructure (e.g. roads, rails, powerlines, canals, pipelines, fences) built: in sensitive locations, by sensitive location criteria met, stating the ecosystem type; and in other areas, stating the ecosystem type(s). Number of completed wildlife crossing structures or other fragmentation mitigation methods per kilometre of linear infrastructure, including: Number with verified wildlife use; and Length, width and/or height (underpasses only) of crossing structures. Crossing structures include underpasses, overpasses, canopy bridges. Other fragmentation mitigation efforts may include retrofits of existing culverts, fencing and jump-outs.

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PA	Spills	Volume of spills of diesel, paints, solvents, and toxic chemicals, and wastewater discharges that exceed local regulatory or international standards (m^3), by national or company spill classification scheme, where relevant, and by type of ecosystem affected, with reference to the standard adhered to.
PA	Manure and compost use	Manure and compost input to landscaped area (t).
PA	Green space creation	Green space created. Potential measures could include: Green plot ratio; Urban greening factor; Area of green space created (m^2); Planted area (m^2); Area of tree planting (m^2); Number of trees planted; Surface area of a building on which plants are planted, including vertical area (m^2); and Share of area above threshold for normalised difference vegetation index. Reports of greenspace created should include: Proportion (%) of plant species that are native to the ecoregion (number of specimens as a proportion of total); and Proportion (%) of green space created that overlaps with national or local ecosystem connectivity plans, where such plans exist, with reference to the plan adhered to.
PA	Light pollution	Contribution to light pollution, measured, for example, by: Number and proportion (%) of outdoor lights by backlight, uplight and glare (BUG) rating; Number and proportion (%) of outdoor lights above 2700K; Total outdoor lighting (lumen and lumen/ha); Total (m^2) and proportion (%) of area with nighttime lighting; and/or Number and proportion (%) of outdoor lights that are kept on at night; and number and proportion (%) of outdoor lights that are and are not dimmed at night, by degree of dimming.
PA	Noise pollution	Contribution to noise pollution, measured, for example, by: Average noise level and/or frequency (dB, Hz) across the 2-hour periods centred on sunrise and sunset before the construction period started (baseline), and during the construction project, on-site and/or in the nearest noise-sensitive habitat to the most significant noise source; and/or Average noise level and/or frequency across the day (dB, Hz), before the construction period started (baseline), and during the construction project, on-site and/or in the noise-sensitive habitat nearest the most significant noise source; and/or Average noise level and/or frequency (dB, Hz) before the construction period started (baseline), and at the noisiest period of the day during the construction project, on-site and/or in the noise-sensitive habitat nearest the most significant noise source; and/or Number of incidents where noise level exceeded local regulatory or international standards.

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PA	Invasive alien species management	Area of land owned, controlled, managed or leased with invasive alien species present during reporting period (km^2). Proportion (%) of this area with the invasive alien species under effective management. Area of land owned, controlled, managed or leased cleared of invasive alien species during reporting period (km^2).
PA	Circularity of material use	Proportion of materials used that are recycled and reused input materials by significant categories of raw materials, renewable materials and manufactured products (%); or Share of total mass of materials, products and components/systems for the new build/refurbishment/fit-out that have been reused, repurposed or remanufactured, either from the building undergoing demolition, refurbishment, fit-out or from other buildings, third parties etc. (%).
PA	Value chain certification	The proportion (%) of materials used that are covered by environmental product declarations and other credible environmental labels, by material and environmental product declaration or label standard.
PUK	Biodiversity protection and enhancement	Biodiversity Net Gain, measured by: Total On-Site Net % Change (for planning) Total Off-Site Net % Change (for planning) Total Net Habitat Units (HU) delivered (for planning) Total Net Hedgerow Units (HeU) delivered (for planning) Total Watercourse Units (WU) delivered (for planning) Biodiversity Net Gain, measured by: Total On-Site Net % Change (outside of planning) Total Off-Site Net % Change (outside of planning) Total Net Habitat Units (HU) delivered (outside of planning) Total Net Hedgerow Units (HeU) delivered (outside of planning) Total Watercourse Units (WU) delivered (outside of planning)
PUK	Biodiversity protection and enhancement	Proportion (%) of land/ assets owned, controlled, managed or leased that has an active Nature Action Plan in place.
PUK	Value chain transparency	The proportion (%) of materials used that: Have undergone lifecycle assessment Have materials passports Have supply chain data beyond Tier 1 suppliers.

C = Core PA = Proposed Additional PUK = Proposed for UK
Source: TNFD for UK Commercial Real Estate. Better Buildings Partnership. October 2024.

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