# **BNG in Practice:**

One year on from mandatory implementation

February 2025









3	
4	
6	
9	
12	
12	
17	
21	
24	
26	
32	
35	
38	
40	

### **Contents**

Acknowledgements

**Executive Summary** 

Recommendations

Introduction

Our findings

- 1. A systems approach
- 2. Tightening exemptions
- 3. Good BNG data
- 4. Support for small developers
- 5. Biodiversity market
- 6. 21st century habitat monitoring
- 7. A BNG regulator

References

Image credits



# Acknowledgements

Author: Ellie Savage

Design: Bea Gilbert & Lucy Rowland

**Acknowledgements:** This project was supported by a working group of ALGE and IES members, including:

- Matthew Beacon, BNG Technical Lead, Mott MacDonald
- Dr Iain Boulton, Vice-Chair, Association of Local Government Ecologists
- Ethny Childs, Communities & Partnerships Lead, IES
- Ian Smith MRTPI MIEnvSc CEnv, Senior Planning Manager, Wilson Bowden Developments
- Nivedita Singh, Fellow, Royal Anthropological Institute, Royal Society of Arts and Royal Asiatic Society
- Steve Birkinshaw, Head of Planning and Regeneration, Erewash Borough Council
- Dr Dan Carpenter, CEnv, Director, Digital Ecology
- · William Wilson, Barrister, Wyeside Consulting

#### Our thanks also to:

- Dr Tom Raven, Biodiversity and Naturebased Solutions Lead, Eunomia Research & Consulting
- Vanessa Thorpe MSc CEnv, Partner, Trium Environmental Consulting
- Patrick Dillon AMIEnvSc, Senior Analyst, Knight Frank Research
- Paul Aujla, Environmental Manager, Morgan Sindall

- All of the interview, workshop and survey participants
- All EPIC, EIA and ALGE members who gave feedback on a draft version of this report

#### **About the Institution of Environmental Sciences**

The Institution of Environmental Sciences (the IES) is at the forefront of uniting the environmental sciences around a shared goal: to work with speed, vision and expertise to solve the world's most pressing environmental challenges, together. As the global professional membership body for environmental scientists, we support a diverse network of professionals all over the world – and at every stage of their education and careers – to connect, develop, progress and inspire.

Registered charity no. 277611

#### **About ALGE**

The Association of Local Government Ecologists (ALGE) is the only organisation supporting professional officers with responsibility for, and an interest in, biodiversity and nature conservation in local authorities and National Parks across all four countries of the United Kingdom.

Established in 1994, ALGE has over 300 members, and ALGE's aims for them and their authorities include contributing to the conservation of the UK's biodiversity in the interest of the community and to further public education, understanding and enjoyment of this resource, and to promote and develop good principles and practice of nature conservation and improve professional standards in local government, including National Parks.

# **Executive Summary**

One year on from the implementation of mandatory biodiversity net gain, it is an open secret amongst practitioners that all is not well. Many Local Planning Authorities (LPAs) are struggling with the increased burden, while developers and providers are frustrated at the slow and sometimes unworkable system.

Mandatory BNG was a radical and world-leading change to England's planning system and we are still in the early stages of implementation. In some cases it is working well, with LPAs, developers and others working together to take innovative and effective action. But while we can expect speed and confidence in the system to increase as we move past the one year mark, the issues detailed in this report will not disappear with time. Without intervention existing frustrations with BNG risk growing rapidly and dangerously.

This report provides a comprehensive examination of the spectrum of challenges faced in the implementation of BNG one year after it came into force for major sites. It makes over 20 recommendations to government, delivery organisations and supporting bodies. Our findings are drawn from practitioner evidence, including a

survey, workshop and interviews with local authority ecologists, consultants, planners, developers and brokers. We hope this report will complement and inform Natural England's evaluation due to be published later this year.

As the membership bodies for environmental scientists and local government ecologists, the IES and ALGE recognise our role in supporting practitioners and raising standards for BNG, and we are committed to supporting and working in partnership with Defra, Natural England and the wider sector to deliver the changes that are required.

Our key findings and recommendations include:

 Take a systems approach. Links with wider environmental policies, such as Environmental Land Management Schemes (ELMs) and Local Nature Recovery Strategies (LNRS), need to be strengthened and clarified to ensure that BNG supports high quality and sustainable habitat delivery in the right places.



- Close loopholes in exemptions. The
  potential for exemptions to BNG to be
  applied incorrectly is causing
  unnecessary tension and bureaucracy for
  planners and developers. The customand self-build exemptions should be
  removed.
- Modern data standards. From the beginning to the end of the BNG process, what information is collected and how it is collected, should be standardised across the country, and made easily accessible in a centralised, digital format.
- Support for small developers. The BNG requirements for small sites are placing a disproportionate burden on small developers, slowing down development and increasing costs. A levy should be introduced for small sites.
- Invest in LPAs. A radical investment in LPA legal and ecological capacity is required to address the delays to securing BNG legal agreements that are seizing up the planning system.
- 21st century habitat monitoring. Under the current system, monitoring of BNG is at risk of not taking place in practice, especially for on-site gains. New and innovative ways of monitoring habitats, including remote sensing and citizen science, need to be fully explored and enabled.

 A BNG regulator is essential. A BNG regulator is needed to set positive standards, regulate the private biodiversity market, and take action against landowners who do not deliver gains.

Many of these themes – unclear links to wider policy, local authority capacity, lack of regulation, poor data collection, monitoring and enforcement – will not be new to anyone involved in or familiar with the challenges of environmental policy implementation.

Difficulties with delivery – making things happen – means that whether on nature recovery, climate action or environmental pollution, we are struggling to move the dial.

The window of opportunity is closing, and urgent action must be taken if BNG is to mean something in practice and deliver biodiverse woodland, meadows, heathland and urban green spaces around us in the years and decades to come.



### Recommendations

#### 1. A systems approach

- **1.1** Defra should use BNG statutory credits to fund strategic nature recovery at scale, for instance, funding priorities indentified in LNRSs.
- **1.2** Defra should commission Natural England to review and make recommendations on the long-term strategic value of the biodiversity gain hierarchy, considering other competing principles to be taken into account.
- **1.3** Defra should commission Natural England to review the effectiveness of the strategic significance multiplier and pilot a strategic significance multiplier of between 5-10 with an LPA in order to inform any wider changes that Defra might wish to make.
- **1.4** Defra, Natural England, professional bodies and others should raise awareness and promote the wider use of the Environmental Benefits from Nature Tool by LPAs.

#### 2. Tightening exemptions

- **2.1** Defra should remove the custom- and self-build exemptions for BNG (the increased burden on small developers can be offset by our proposed changes to small sites).
- **2.2** Defra should continue regular monitoring of the proportion of planning applications subject to BNG, and publish this information by LPA every year, enabling progress to be monitored by the Office for Environmental Protection (OEP) and others.
- **2.3** Professional bodies representing ecologists should increase awareness of reporting of bad practice amongst local authorities, and continue to develop BNG professional standards.



#### 3. Good BNG data

- **3.1** LPAs should give clear guidance on what pre-determination information they require.
- **3.2** Working with professional bodies and others, Natural England should produce a pre-application BNG information template.
- 3.3 Defra should publish accompanying guidance for the biodiversity gain plan template.
- **3.4** Defra should make the biodiversity gain plan template fully digitalised. The option to share data with Local Environmental Record Centres (LERCs) should be made mandatory (Question 10).

#### 4. Support for small developers

**4.1** Defra should introduce a small sites levy to unlock the development of small sites, with the funds ringfenced for strategic nature recovery at scale, for instance funding priorities identified in LNRSs.

#### 5. Biodiversity market

- **5.1** Defra should scale up existing plans to boost LPA capacity, providing additional funding for an increased target of 2,200 new planning staff, with a focus on recruiting staff with legal and ecological expertise.
- **5.2** Professional bodies and other supporting organisations should create a best practice off-site provider checklist for LPAs.
- **5.3** LPAs should consider using planning policy to encourage the use of high quality off-site providers.
- **5.4** Defra, Natural England, professional bodies and others should support LPAs to create match making services, similar to the Gloucestershire Climate and Nature Fund, through promotion, and setting and sharing of best practice.
- **5.5** Defra, Natural England, LPAs, professional bodies and others should support LERCs to create comprehensive data services for their area, through promotion and setting and sharing of best practice. Any data services should comply with national standards (as set by Natural England) to ensure consistency across the country.

www.the-ies.org



#### 6. 21st century habitat monitoring

- **6.1** Defra should commission Natural England to work with LPAs and LERCs to develop a pilot scheme assessing the potential of an early BNG monitoring system using remote sensing.
- **6.2** Professional bodies should provide training and capacity building to LPAs in using geospatial data and remote sensing technologies.
- **6.3** Defra should commission Natural England to work with LPAs and LERCs, to develop a pilot scheme assessing the potential of an early BNG monitoring system using citizen science.
- **6.4** LPAs should make it mandatory for developers to share on-site monitoring data with LERCs through planning application or supplementary planning guidance requirements.

#### 7. A BNG regulator

**7.1** Defra should establish a BNG regulator, to act as an arbitrator and set positive standards, to regulate the biodiversity market, and to take action against landowners who fail to deliver promised gains.

www.the-ies.org

### Introduction

Mandatory biodiversity net gain (BNG) came into force in England on 12 February 2024 for major developments and on 2 April 2024 for small sites. It requires a 10 per cent increase in biodiversity post-development, meaning that natural habitats are left in a better state than before development.

BNG is an ambitious and world-leading piece of legislation that has the potential to transform the planning system in England to work for, instead of against, nature enhancement and recovery. One year after the legislation came into force, this report uses practitioner evidence to reveal what is happening in practice, analyse the barriers to successful implementation and make recommendations to key stakeholders. In doing so it builds on the emerging body of evidence on BNG, including reports from the National Audit Office (NAO), the Green Finance Insitute (GFI) and the Chartered Institute of Ecology and Environmental Management (CIEEM).<sup>2,3,4</sup>

This report is intended to support the work of Defra, Natural England, Local Planning Authorities (LPAs), professional bodies and other organisations engaged in BNG.

The results might also be of interest to those in the devolved administrations and further afield who may be considering a similar statutory BNG policy.

#### What we did

From July 2024 to January 2025 the IES Environmental Policy Implementation Community (see Box 2), Environmental Impact Assessment Community (see Box 3) and Association of Local Government Ecologists (ALGE) explored how BNG is working for practitioners through a member survey, workshop and series of interviews.

The IES and ALGE launched a survey of practitioners on early experiences of BNG in August 2024, around six months after

# Box 1. Key issues highlighted in the survey

- The biodiversity information being received by LPAs at the planning application stage.
- The risk of some on-site BNG not achieving environmental gains.
- Delays with legal agreements.
- LPA capacity for monitoring and enforcement.



becoming mandatory. The survey was live for 25 days and was promoted to IES and ALGE members through email and social media channels. A total of 142 responses were received and the results were published in the environmental SCIENTIST journal in September 2024.<sup>5</sup>

The second phase of the project saw the issues raised in the survey being explored in more detail through a workshop and series of interviews. The practitioner workshop took place in October with 60 participants. 12 semi-structured interviews took place from November 2024 to January 2025 with a variety of BNG practitioners, including

local government ecologists, planning and ecological consultants, developers, habitat banks, BNG brokers and LERCs.

Figure 1. Evidence-gathering process





#### Box 2. About EPIC

The Environmental Policy Implementation Community (EPIC) at the IES works together to understand environmental delivery challenges, share good practice and advocate for implementation-minded policy. EPIC members are local authority officers and other environmental professionals delivering environmental protection, climate action and nature recovery on the ground. Membership is open to all local authority environmental professionals as well as IES members.

#### Box 3. About the EIA Community

The Environmental Impact
Assessment (EIA) Community at the
IES connects and supports
environmental scientists and
practitioners working across a range
of specialisms involved in the EIA
process. The Community champions
the ethos of utilising EIA as a tool to
support decision-making which leads
to better environmental impacts from
developments and is focussed on
providing environmental professionals
involved in EIAs with the knowledge
and skills to support this.

www.the-ies.org

# Our findings

# 1. A systems approach

The biodiversity crisis is deeply and inextricably linked with the crises of climate change and environmental pollution. These challenges must not be addressed in isolation; environmental policy must explicitly recognise and take into account the complex and interconnected systems it operates within.<sup>6</sup>

A systems approach to tackling biodiversity loss recognises the need for biodiversity policies to be designed with mitigation and resilience to climate change and environmental pollution in mind. Looked at in isolation, BNG simply requires the achievement of a minimum 10 per cent biodiversity gain. Instead of an ecological and holistic approach that supports habitat delivery in the right place, viewed this way BNG could lead to a rapid production of low-quality and unsuitable units.

A systems approach would require BNG to be clearly and purposefully integrated with wider environmental policy, but the interconnections between BNG and other environmental schemes, such as Local Nature Recovery Strategies (LNRSs) and Environmental Land Management Schemes (ELMs) are currently weak and unclear (see Figure 2).

This is exacerbated by, and is partly the result of, a period of mixed and ambiguous messaging on nature from successive governments. At the time of writing, key documents such as the Land Use Framework and MHCLG guidance on integrating LNRSs with local planning systems are still outstanding. BNG and ELMs have experienced multiple delays. The uncertainty this causes is especially difficult for landowners who are having to make decisions about their land that are locked in for decades.

#### Box 4. Local Nature Recovery Strategies

LNRSs identify and map local priorities and opportunities for nature recovery. At the time of writing, many are in the final stages of being produced by 48 responsible authorities across England.



"We need to design biodiversity net gain in ways that tackle climate change, strengthen resilience and support communities, not just achieve the 10 per cent."

**Interviewee K**BNG Consultant



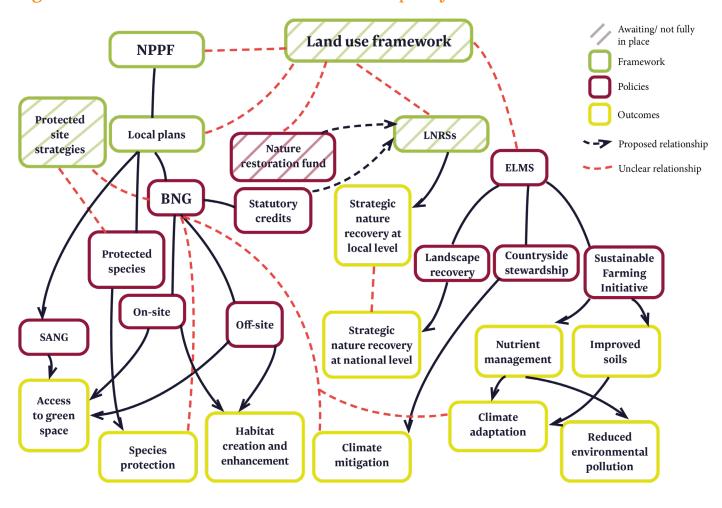


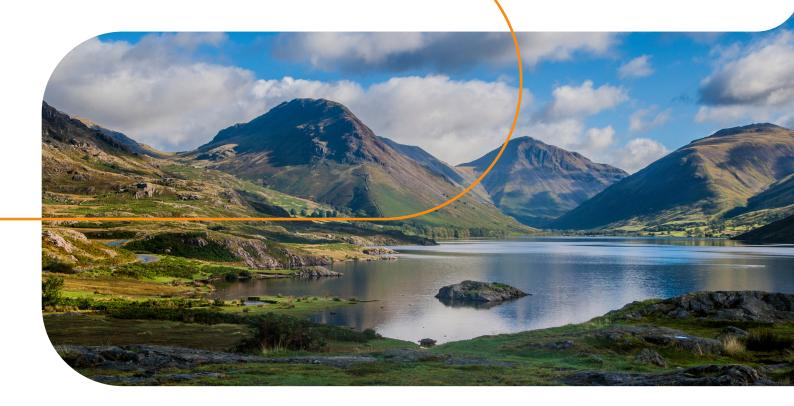
Mechanisms through which BNG can interact with other environmental schemes include:<sup>7</sup>

- Priority areas identified in the LNRS get a 'strategic significance multiplier' in the metric, meaning they are able to create 1.15x more units than they would otherwise create.
- Ability to stack biodiversity units with credits from nutrient neutrality, Suitable Alternative Natural Greenspace and protected species habitat (e.g. the Great Crested Newt licensing scheme).

- Inability to stack biodiversity units with carbon credits and most agrienvironmental agreements.
- The use of funds raised by statutory credits have not yet been specified.
- The Environmental Benefits from Nature
  Tool can be used alongside the
  biodiversity metric to enable
  stakeholders to achieve wider benefits
  for people and nature from biodiversity
  net gain.

Figure 2. BNG's connections to environmental policy





#### Mitigation hierarchy

Following the biodiversity gain hierarchy, BNG should always be delivered on-site if possible. Habitat creation on the development site is more likely to achieve additional benefits for residents and the local economy, including improved air quality, landscaping and access to green space. If gains need to be delivered off-site, then units in the local area are also prioritised. We were told that some local authorities are stating that all off-site delivery must be achieved within their local area, although this can only be enforced if a policy is included in the Local Plan.

Yet the biodiversity gain hierarchy (itself based on the mitigation hierarchy) is sometimes at odds with aspects of the Lawton Principles of bigger, better and more joined up spaces for nature. On-site gains often are delivered on small or randomly situated pockets of land, with limited opportunity to link up with a wider network of sites (though this could be improved through better mapping, see Section 6). The strictness of the biodiversity hierarchy can also cause difficulties if the on-site area is very small or difficult to work on; the developer may have to pay

disproportionately more to deliver on-site for a limited environmental benefit.

Statutory credits are a clear area where the funds raised by BNG could be used more strategically and in line with the Lawton Principles. At the time of writing, Defra has not announced how the statutory credits funding pot will be used. This could be ringfenced for delivering nature recovery at scale, similarly to the recently announced nature restoration fund (See Box 5).8 This system could also be applied to the proposed small sites levy (see Section 4). One approach would be to fund the local authority in the area experiencing development to deliver the priorities identified in their LNRS.



#### 1. Recommendations

- **1.1** Defra should use BNG statutory credits to fund strategic nature recovery at scale, for instance funding priorities indentified in LNRSs.
- **1.2** Defra should commission Natural England to review and make recommendations on the long-term strategic value of the biodiversity gain hierarchy, considering other competing principles to be taken into account.
- **1.3** Defra should commission Natural England to review the effectiveness of the strategic significance multiplier and pilot a strategic significance multiplier of between 5-10 with an LPA in order to inform any wider changes that Defra might wish to make.
- **1.4** Defra, Natural England, professional bodies and others should raise awareness and promote the wider use of the Environmental Benefits from Nature Tool by LPAs.

#### Box 5. Nature restoration fund

Defra and the MHCLG have announced a Nature Restoration Fund will be legislated for in the Planning and Infrastructure Bill later this year. The Fund will allow developers to pay a contribution instead of taking action to meet their environmental obligations in some cases. These contributions will be pooled to fund larger strategic interventions for nature. This does not apply to developer's BNG requirements.

# 2. Tightening exemptions

Not all planning applications are subject to BNG. Householder applications are exempt from BNG and make up the majority of planning applications. There are other exemptions, including for small scale developments that are considered to have a negligible environmental impact (the de minimus exemption), and for small scale custom- and self-build developments.

No official data has been released on the planning applications subject to BNG. The Green Finance Institute's BNG Roadmap report, published in August 2024, cited early analysis by BDP Pitmans that only 0.5% of total planning applications had been subject to BNG since the legislation came into force.<sup>3</sup> It has also been reported that Defra's impact assessments calculated that 10,000 planning applications a month should be subject to BNG, however the impact assessment does not directly provide a clear estimation.<sup>9</sup>

Knight Frank's analysis estimates that only 227 planning applications a month were subject to BNG in its first six months. However these figures cannot be directly compared to the reported impact assessment figure, or other analysis, as different filters have been applied to the dataset to get significantly different total planning applications. The difficulties caused by a lack of transparent and detailed planning data

means it is challenging to evaluate whether the legislation is working as expected.

In response to the concerns raised about low levels of applications subject to BNG Defra stated in November 2024 that 'early indications are that the system is working as intended', although they are 'collecting more data on the details.'11

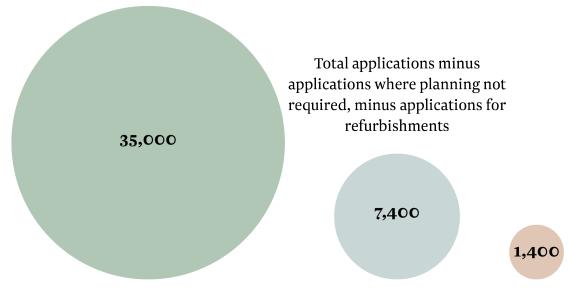
# Box 6. Knight Frank Planning application analysis

Knight Frank Research analysed the first 6 months of planning application data after mandatory BNG came into force.<sup>10</sup> They found that:

- Applying a filter to the 35,000 total applications that removed applications where planning was not required and applications for refurbishments left 7,400 applications.
- Based on a manual review of 20% of the filtered dataset, 1,400 applications over the 6 month period were subject to BNG.



Figure 3. Knight Frank planning applications analysis. Source: IES based on Knight Frank Research<sup>10</sup>



Total applications

Applications subject to BNG (extrapolated)

Natural England also stated in their written evidence to the Environmental Audit Committee that following an initial spike in exemptions it appears that applications are now 'running close to forecast levels'.12

The proportion of applications subject to BNG will have increased over the last year as planning officers and developers have had time to get used to the system. However, it seems extremely unlikely that the proportion of applications has yet reached the levels previously expected by Defra. Regular publication of this data would provide much needed clarity, and enable progress to be routinely monitored by the OEP and others.

# In practice: exemptions are being exploited

The low levels of applications subject to BNG strongly suggest that exemptions are being exploited by some developers. Of particular concern is the custom- and self-build exemption, with practitioners reporting a significant increase in custom- and self-builds since BNG came into force. While it is appreciated that this exemption was put in place to support self-builders who may not have the resources or expertise to comply with BNG, it has no ecological justification. Custom- and self-build developments can and do damage habitats and ecosystems.

The real and perceived risk of developers manipulating the BNG system through exemptions is placing a significant burden on LPAs. It can be difficult for LPAs to verify exemptions, such as whether a





We know a lot of them get through our validation, but we don't have time to check them all.

#### Interviewee E

Local authority ecologist





This (scrutinising exemptions) means I am spending more time doing paperwork than work with real ecology benefits.

#### Interviewee B

Local authority ecologist





(Lack of trust) wastes time, creates adversarial conversations... Having honest metrics coming in would speed up applications.

#### Interviewee F

Local authority ecologist



#### Box 7. The role of professional bodies

Ecologists and other environmental scientists can be reported for malpractice to their professional body. This can lead to them being stripped of their professional accreditation.

development is genuinely custom- or self-build, especially with most planning departments having extremely limited access to ecological expertise. Some LPAs have told us they are now requiring legal agreements for custom- and self-builds, such as section 106 agreements or unilateral undertakings, in anticipation of incorrect exemption applications. Manipulation of the metric was also reported as an issue by LPA ecologists, for example the underestimation of the baseline metric and an inflation of the post-development metric.

The planning portal should scrutinise exemption claims and negate the need for these checks. However in practice, LPAs often feel as if they have no choice but to scrutinise applications, despite their limited time and resources.

A long-term solution would be to increase levels of trust on both sides, a long-standing need for our adversarial planning system.<sup>13</sup> Trust could be increased by establishing an independent regulator to provide a framework for productive dialogue, arbitrate and take action against bad practice (see Section 7). In the context of BNG, the ability for LPAs to report organisations that were incorrectly applying exemptions or manipulating the metric would significantly reduce the risk of such actions taking place, and therefore the need for LPAs to take precautionary and additional measures.



#### 2. Recommendations

- 2.1 Defra should remove the customand self-build exemptions for BNG (the increased burden on small developers can be offset by our proposed changes to small sites, see Section 4).
- **2.2** Defra should establish a BNG regulator (see Section 7 for more detail).

- **2.3** Defra should continue regular monitoring of the proportion of planning applications subject to BNG, and publish this information by LPA every year, enabling progress to be monitored by the OEP and others.
- **2.4** Professional bodies representing ecologists should increase awareness of reporting of bad practice amongst local authorities, and continue to develop BNG professional standards.

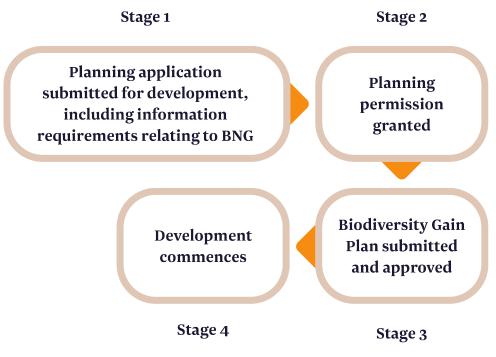


### 3. Good BNG data

Before planning permission can be granted for a development, the applicant must provide certain BNG-related information, including the pre-development biodiversity value of the site and details of any irreplaceable habitats.

Applicants do not need to provide a postdevelopment biodiversity metric calculation or information on how they will achieve the 10 per cent BNG gain – called the biodiversity gain plan – to secure planning permission. Indeed, the Biodiversity Gain (Town and Country Planning) Regulations 2024 state that the biodiversity gain plan should not be submitted until the day after planning permission is granted. However it is best practice to submit a draft biodiversity gain plan with the planning application (see Box 10). Once planning permission has been granted, a biodiversity gain plan must be submitted and approved by the LPA before construction can commence.

Figure 4. BNG planning process





#### Box 8. BNG Technical Guide

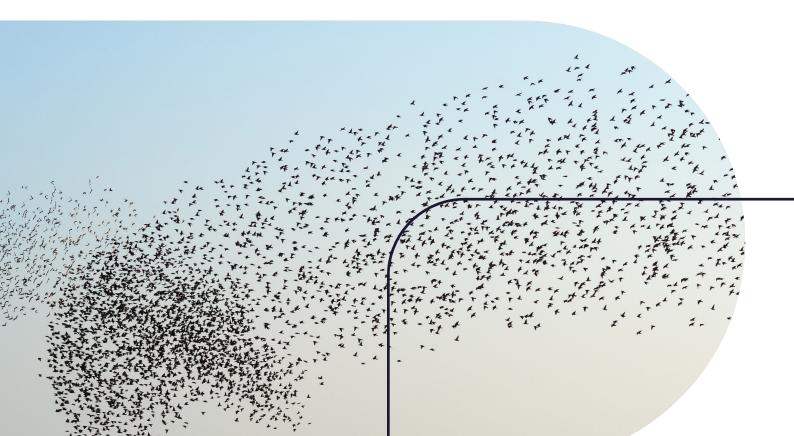
The BNG Technical Guide, produced by CIEEM, IEMA and CIRIA, states that in addition to the statutory requirements planning applications should include:

- · On-site BNG design and HMMP.
- A BNG design stage report describing any on-site significant enhancements.
- Any off-site BNG requirements should be modelled in biodiversity metric calculation with information on any initial discussions with off-site providers.
- A draft biodiversity gain plan.

The pre-approval stage is the LPA's key opportunity to scrutinise the application, and if they are not given any information about the developer's plans to achieve 10 per cent BNG, then they will struggle to verify the achievability of the gain. For instance, their reliance on off-site units may be unrealistic, or their plans for on-site gains may be over ambitious and need to be scaled to more manageable habitats.

# In practice: a proliferation of approaches

In reality there is a large variation in the BNG information asked for and given to LPAs at the planning application stage. Many LPAs have brought out their own BNG 'template' or 'report'. To some extent this reflects the different needs of different types of authorities; a large urban LPA will have different information requirements than a small rural LPA. But this proliferation







Many applicants just give the metrics, sometimes it has the post development metric, sometimes it doesn't. The good ones give a report.

#### Interviewee E

Local authority ecologist





Everyone is finding their feet and therefore there is a big variability. There is a lot of negotiation around what is actually necessary.

#### Interviewee A

Planning consultant



of approaches means many are not meeting good practice and can be confusing for developers working across the country.

Natural England has recognised there is inconsistency across the country, stating that 'some smaller developers report that LPAs are being overly bureaucratic when considering BNG for planning applications whilst some LPAs report developers submitting incomplete information.'12

As well as greater consistency across the country, it is important that LPAs are clear about what information they want

pre-determination. For instance, for applications achieving significant on-site enhancements the LPA will need to know the post development calculations, so they can attach a planning condition or section 106 agreement. Many LPAs offer preapplication advice and some have created or sponsored advice services that can act as the liaison between applicant and planning officers.

#### Biodiversity gain plan

Many interviewees reported concerns that some questions in the biodiversity gain plan template are open to interpretation, and require tightening or accompanying guidance. The hand type format of the gain plan template also increases the risk of errors. There is an opportunity for the gain plan to capture the key data needed for monitoring in an easy to use, fully digitalised and shareable format.

#### 3. Recommendations

- **3.1** LPAs should give clear guidance on what pre-determination information they require.
- **3.2** Working with professional bodies and others, Natural England should produce a pre-application BNG information template.
- **3.4** Defra should publish accompanying guidance for the biodiversity gain plan template.
- **3.5** Defra should make the biodiversity gain plan template fully digitalised. The option to share data with LERCs (Question 10) should be made mandatory.

# 4. Support for small developers

Mandatory BNG was expanded to small sites in April 2024. Small sites are those not classed as major developments under the Town and Country Planning (Development Management) (England) Order 2015. For example, for residential developments a small site is a development on less than one hectare of land, with nine houses or fewer.

Exemptions to BNG apply for small sites just as they do for major developments. Small site developers can use a simplified version of the BNG metric (called the Small Sites Metric), which does not have to be completed by an ecologist.

#### In practice: a disproportionate burden

The challenges posed by the application of BNG to small sites have been well documented, most clearly in CIEEM's BNG for Small Sites report, as well as in the feedback from the IES and ALGE's initial survey. As Natural England has acknowledged the difficulties faced by small developers and we are encouraged to hear they are actively looking at solutions alongside Defra and MHCLG.

The key challenge raised in CIEEM's report, as well as by our survey respondents and interviewees, was the difficulty of delivering biodiversity gains on-site. By their nature,

small sites have limited space to deliver on-site gains. This is exacerbated for small residential developments, as the creation of private gardens scores very low in the biodiversity metric. When gains are delivered on small sites, there is often no monitoring requirement and the likelihood of the habitat creation and enhancement being secured for 30 years is relatively low.

The challenges with securing gains on-site means that small site developers often have to purchase off-site biodiversity units or statutory credits. However they typically only need a fraction of a unit, which many providers do not offer. Both biodiversity



It currently doesn't work for us as a business model, we can't afford the resources needed to work with developers who want to purchase less than 1 unit and landowners can't work with developers who want to purchase less than 1 unit.



Interviewee J BNG Broker

#### Box 9. BNGx

The emergence of digital BNG unit traders, such as fully digital platform BNGx, is providing increased options for purchases of fractional BNG units. BNGx allows developers to upload their metric, matches them with a package of units registered with Natural England, processes the transaction and adds the units to their metric file.

units and statutory credits are often prohibitively expensive for small site developers.

#### A small sites levy

Supporting habitat banks and local authorities to develop a pool of affordable units for small sites could help small site developers looking to purchase fractions of a unit. However this may not be practical for already stretched local authorities, and would still require some element of bureaucracy for the small site developer.

There was strong support amongst interviewees for simplifying the process through the introduction of a small sites levy. While it is appreciated that this reduces accountability, for small sites it is clearly a practical solution and would reduce the workload for both small site developers and local authorities. Small site developers would hugely benefit from the increased certainty on costs and the simplified process would speed up development and boost growth.

The funds raised by the levy could be ringfenced for local nature recovery and enhancement, for instance to be used by the local authority to fund LNRS (as

suggested for statutory credits in Section

1). This would go some way towards addressing the funding gap experienced by local authorities trying to take action on nature recovery.<sup>14</sup>

#### 4. Recommendations

**4.1** Defra should introduce a small sites levy to unlock the development of small sites, with the funds ringfenced for strategic nature recovery at scale, for instance funding priorities identified in LNRSs.

# 5. Biodiversity market

The introduction of mandatory BNG has accelerated the growth of the UK's biodiversity market. All off-site biodiversity units have to be registered on national biodiversity gain sites register. Buyers and sellers of biodiversity units must find each other through the private market.

There is now a diverse landscape of sellers and brokers, including habitat banks, online trading platforms, and local authority backed services, many of which have sprung up in the last 12 months. Despite this growth, the market is far off being fully

developed. As of December 2024, there were 37 sites on the register containing 939 hectares of land.<sup>12</sup> Our interviewees reported difficulty in finding off-site providers, especially for those requiring watercourse units.

# In practice: delays securing legal agreements

Off-site biodiversity units must be secured through a legal agreement, which sets out who will do the BNG creation, enhancement





and management work for at least 30 years. The legal agreement can be a section 106 agreement with a LPA or a conservation covenant agreement with a responsible body.

Our survey results from August 2024 highlighted the delays to processing s106s as a critical issue that was seizing up the planning system. Natural England has since stated that the creation of template s106s for BNG, as well as increased LPA experience of the process, is now speeding up applications.<sup>12</sup> While these measures are likely to have eased difficulties, our interviewees reported that LPAs are still overwhelmed with the demand for s106s. One interviewee reported that some LPAs are now only admitting applications in a call for site period.

To be able to secure s106s for their clients, habitat banks also need to register with LPAs, which we were told is often a long and complicated process. Due to the difficulties in registering with LPAs and securing s106s, one habitat bank executive described how they have now switched to working with responsible bodies, which is a quicker if more costly process.



Responsible bodies are also pretty stretched, though we can get a site that is relatively straight forward up and running in 2 to 3 months.

Interviewee H Habitat Bank Executive

#### Box 10. What is a section 106?

A section 106 agreement (s106) is a legally binding contract between a developer and a LPA that is used to secure specific contributions or obligations from a developer in relation to a planning application. These agreements help to mitigate the impacts of development and ensure that new projects contribute positively to local communities, infrastructure, and the environment.

To speed up the process of registering providers and processing s106s, it is clear that LPAs require a significant increase in staffing. There is a severe shortage of planning officers across the country, and the ecological skills gap in local authorities has been well documented, including by ALGE and House of Lords Built Environment Committee.<sup>15,16</sup>

#### Box 11. What is a conservation covenant?

A conservation covenant is a voluntary, legally binding agreement made between a landowner and a responsible body to manage and protect the natural environment of the land. There are currently 21 responsible bodies, including Natural England, the Environment Agency, local authorities and charities.







It is difficult to run a business with the rate at which planning applications go through.

Interviewee J

**BNG Broker** 



The Government has recently committed to recruit 300 new planning officers over the next year. These efforts are welcome but they should be scaled up and appropriately targeted to recruit professionals with legal and ecological expertise. For instance, research by the Home Builders Federation in January 2025 estimated that 2,200 additional planning officers are needed to fill the gap. A radical investment in LPA capacity would unlock the planning system and enable LPAs to secure consistent revenue through s106s.

#### In practice: market failure?

The BNG market is a private, unregulated market. The basic requirements that developers need to meet are that the metric is filled in by a competent person and that the LPA or responsible body believes that the landowner will meet their obligations to deliver on BNG. In practice this means there are limited controls on standards, and good quality providers are at risk of being undercut by low quality providers who may be unlikely to achieve the biodiversity gains in the long-term.

Some LPAs have been able to set up or sponsor a 'matchmaking service' through which they can match developers with trusted and appropriate providers (see Box 12). But many LPAs do not have the capacity to provide these services, and ultimately there is nothing to stop developers from choosing the cheapest option.

LPAs could look to implement a 'community wealth building' approach, by producing provider checklists or adding a requirement in their Local Plan for developers to choose off-site providers that also provide local social, economic and environmental benefits. It is important that there is central support for these innovations, and it was good to see the Government recognise it needs to do more to set standards and shape the emerging nature and biodiversity markets in the recent Land-Use Framework consultation.<sup>19</sup> A BNG regulator could also help with ensuring the quality of off-site providers, as set out in Section 7 of this report.

#### In practice: uninformed decision making

There is a patchwork of habitat information available for BNG purposes, with different data sources with different levels of access, including the Multi-Agency Geographic Information for the Countryside (MAGIC), the National Biodiversity Network Atlas, LERCs and LNRSs. This can be confusing for planners and developers to navigate, and means they often do not have clear information as to what biodiversity units are available. This can lead to uninformed decision making.

A comprehensive and user-friendly service would allow developers and planners to make more strategic and locally appropriate decisions about habitat creation and enhancement.

The Institution
of Environmental
Sciences



"If LPAs could have more help and investment – they need a dedicated team – BNG could be a good opportunity for revenue generation. I feel that they are missing out."

Interviewee H

Habitat Bank Executive



### Box 12. Gloucestershire Climate & Nature Fund

The Gloucestershire Climate and Nature Fund (GCNF) is a not-forprofit BNG broker. It was established by the Gloucestershire Local Nature Partnership and Local Enterprise Partnership, received start-up funding from Gloucestershire Local Authorities and acts as an independent business. As a broker. GNCF works with landowners to bring their nature restoration schemes to the market and find buyers for their BNG units. Landowners are responsible for delivering and reporting on their scheme.

GNCF was created to ensure that nature restoration is delivered strategically within the county using BNG as the finance mechanism. They promote nature recovery schemes that are in alignment with local priorities; such as the Local Nature Recovery Strategy (formerly the Gloucestershire Nature Recovery Network). Links with local authorities enable GNCF to support a communicative and effective BNG process with developers, landowners and the LPA.

#### Box 13. GiGL Sites Register

Greenspace Information for Greater London (GiGL) is the LERC for Greater London. GiGL is looking to create a site register for London that will help match providers to developers. This would be a more informal version of the national sites register, including sites that are not formally registered but where landowners have flagged they may have an opportunity for off-site. The service would be available to developers to use for a nominal fee.

66

Planners don't have the time to look at all of the data, and in the absence of local or national data requirements it is easy for developers to pull the wool over someone's eyes (and say) I've looked at MAGIC and there's nothing of biodiversity interest in the area

Interviewee I LERC Executive





#### 5. Recommendations

- **5.1** Defra should scale up existing plans to boost LPA capacity, providing additional funding for an increased target of 2,200 new planning staff, with a focus on recruiting staff with legal and ecological expertise.
- **5.2** Professional bodies and other supporting organisations should create a best practice off-site provider checklist for LPAs.
- **5.3** LPAs should consider using planning policy to encourage the use of high quality off-site providers.
- **5.4** Defra, Natural England, professional bodies and others should support LPAs to create match making services, similar to the Gloucestershire Climate and Nature Fund, through promotion, and setting and sharing of best practice.
- **5.5** Defra, Natural England, LPAs, professional bodies and others should support LERCs to create comprehensive data services for their area, through promotion and setting and sharing of best practice. Any data services should comply with national standards (as set by Natural England) to ensure consistency across the country.

# 6. 21<sup>st</sup> century habitat monitoring

For off-site gains and significant on-site gains, as part of the s106 or conservation covenant, the landowner (or manager) has to agree on how habitats will be monitored with the LPA or responsible body. This is set out in a habitat management and monitoring plan (HMMP).

An agreement must be reached on:

- When and how the landowner will monitor the delivery of the habitat.
- When and how the results will be reported to the LPA or responsible body.
- How monitoring will be funded. LPAs can set monitoring and enforcement fees as part of s106 obligations and responsible bodies should reflect monitoring costs in the price of biodiversity units.
- What happens if the habitat creation or enhancement is not achieved.

For on-site gains, this means that the developer (as the landowner) has responsibility for verifying that habitat creation and enhancement is carried out as agreed during construction, and submitting post construction monitoring reports to the LPA. The LPA is responsible for reviewing

the monitoring reports and can attend sites to oversee compliance.

#### In practice: a reactive approach

In practice this system can be complex and lines of responsibility can quickly get blurred. The landowner (who may or may not also be the developer) might employ habitat maintenance contractors to maintain and monitor the site. Some habitat banks or brokers will also be involved in monitoring and will take on varying levels of responsibility. The site might get sold on multiple times during the 30 year period.



[The] housing estate will put it in, leave it as the responsibility of ground management or the home owners and walk away.

Interviewee G Developer







The habitat management plan might have been created with the best will in the world, but the site might get sold on, and then it ends up with some random guy.

#### Interviewee B

Local authority ecologist



Critically, LPAs need to ensure that the monitoring costs included in the s106s are sufficient to fund the monitoring of sites for 30 years. The historic under-resourcing of LPA enforcement teams is well documented and they have limited capacity to undertake the monitoring of BNG sites, as well as specifically often lacking the ecological skills needed to make habitat assessments. Some LPAs reported having to take a risk-based and reactive approach; only monitoring the most significant habitats, and waiting for issues on other sites to be brought to their attention.

There are sensible steps that LPAs can and are taking to conduct monitoring as effectively as possible:

- Focusing monitoring efforts on the first 5 to 10 years, which are the most critical for habitat establishment.
- Conducting randomised spot checks.
- Training landowners on habitat management.
- Recommending easy to maintain habitats for non-significant sites.

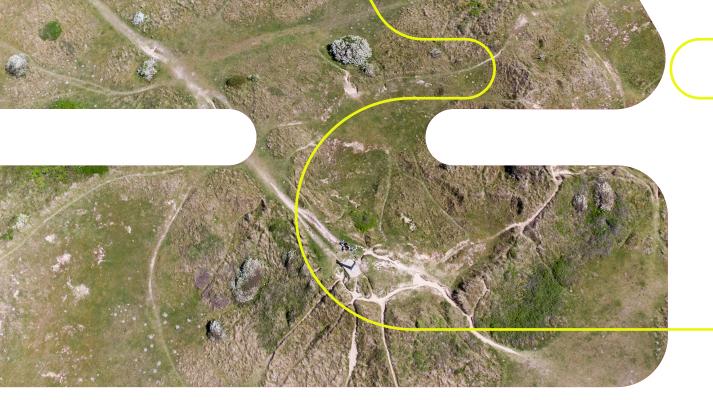
If a BNG regulator was established (see Section 7), then developers or third parties who were not delivering on their monitoring commitments could be reported to the regulator.

#### Digital monitoring and citizen science

The use of remote sensing, through satellite data, drone technology and artificial intelligence (AI) has the potential to revolutionise habitat monitoring. Natural England's Living England project has shown a high level of accuracy in mapping habitat types and temporal changes using satellite imagery and existing data in a machine learning framework.<sup>20</sup> This is now routinely used at the national scale. While this technology may not yet be able to

#### Box 14. LERCs' role in monitoring

The biodiversity gain plan includes an option for on-site monitoring data to be shared with LERCs. As it is not mandatory, most developers choose not to share this data. LPAs could make this mandatory through planning application or supplementary planning guidance requirements. This would enable LERCs to create a monitoring map of the habitat enhancements in a local area. This could support monitoring efforts, including by citizen scientists. It could also enable other developers to make more informed decisions about complimentary enhancements and provide useful data in determining what works and what doesn't work in delivering BNG.



consistently assess habitats on the granular scale needed for BNG monitoring, it could act as an early warning system. Any potential issues would then be assessed by ecologists working on the ground.

Similarly, community nature groups could also support BNG monitoring by acting as an early warning system. This would require access to basic site monitoring training and a clear system for them to identify and report potential issues on sites, which again could then be looked at by professional ecologists. This would build on the progress made on citizen science monitoring by Natural England as part of the Defra and Treasury-funded National Capital Ecosystem Assessment Programme (NCEA).<sup>21</sup>

#### 6. Recommendations

- **6.1** Defra should commission Natural England to work with LPAs and LERCs to develop a pilot scheme assessing the potential of an early BNG monitoring system using remote sensing.
- **6.2** Professional bodies should provide training and capacity building to LPAs in using geospatial data and remote sensing technologies.
- **6.3** Defra should commission Natural England to work with LPAs and LERCs, to develop a pilot scheme assessing the potential of an early BNG monitoring system using citizen science.
- **6.4** LPAs should make it mandatory for developers to share on-site monitoring data with LERCs through planning application or supplementary planning guidance requirements.

34 BNG IN PRACTICE: ONE YEAR ON REPORT 2025 www.the-ies.org

# 7. A BNG regulator

If biodiversity gains are not achieved or maintained, and are subject to an s106 agreement, the LPA is responsible for taking enforcement action. Enforcement for non-compliance is not a statutory requirement and is up to LPA discretion, but could potentially result in civil legal action against the responsible landowner or manager.

#### In practice: no bad cop

In practice, the threat of enforcement action is almost non-existent. Not all LPAs have enforcement teams and those that do are often operating with highly stretched capacity. There is extremely limited appetite for legal action. This means that the risks of non-compliance for landowners and developers are mainly reputational, with very little threat of legal or financial consequences.

This highlights the need for developers and land-owners to understand and buy into the need for BNG. But goodwill alone will not solve the enforcement problem. This is the strongest argument for the creation of a BNG regulator: the need for a body that can take strong and clear enforcement action, for instance through issuing fines.

### Box 15. What could a BNG regulator look like?

A BNG regulator could form part of an existing body with regulatory powers, such as Natural England or the Environment Agency. Natural England already plays a significant role in the support and delivery of BNG and employs regional BNG officers. Conflicts of interest could be alleviated through the use of separate teams and accountabilities, as is done in similar areas of potential conflict (such as pre-application advice, consenting and enforcing roles for SSSIs). Alternatively, a new independent body could be set up, sponsored by Natural England or the Environment Agency, and monitored by the OEP.



# "We've got no bad cop."

Interviewee F

Local government ecologist







To implement the law as it stands, an on-site regulator is essential.

#### Interviewee K

**BNG Consultant** 

#### 7. Recommendations

**7.1** Defra should establish a BNG regulator, to act as an arbitrator and set positive standards, to regulate the biodiversity market and to take action against landowners who fail to deliver promised gains.



# The Institution of Environmental Sciences

### References

- <sup>1</sup>Throughout this report BNG refers to the mandatory BNG legislation.
- <sup>2</sup>NAO (2024) Implementing Statutory Biodiversity Net Gain. https://www.nao.org.uk/reports/implementing-statutory-biodiversity-net-gain/ (Accessed: 1 September 2024).
- <sup>3</sup> **GFI (2024)** Biodiversity Net Gain: A Roadmap for Action. https://hive.greenfinanceinstitute.com/wp-content/uploads/2024/08/GFI-BNG-ROADMAP-FULL.pdf (Accessed: 25 August 2024).
- <sup>4</sup> **CIEEM (2025)** Biodiversity Net Gain for Small Sites. https://cieem.net/wp-content/uploads/2025/01/CIEEM-BNG-for-Small-Sites-report.pdf (Accessed: 21 January 2025).
- <sup>5</sup> Savage, E. and Childs, E. (2024) Mandatory biodiversity net gain six months on. environmental SCIENTIST 34 (3), pp. 56-65. https://www.the-ies.org/sites/default/files/journals/ies38\_september\_24-web-final.pdf (Accessed: 24 September 2024).
- <sup>6</sup> Kass, G. (2019) Systems approaches for tackling environmental issues. https://www.the-ies.org/analysis/systems-approaches-tackling (Accessed: 5 January 2025).
- <sup>7</sup> Stacking is when an activity on a piece of land is able to create and sell multiple credits or units from different environmental markets.
- \* Ministry of Housing, Communities and Local Government and Department for Environment, Food & Rural Affairs (2024) Planning Reform Working Paper: Development and Nature Recovery. https://www.gov.uk/ government/publications/planning-reform-workingpaper-development-and-nature-recovery (Accessed: 5 January 2025).

- **9 Culver, A. (2024)** BNG's exemption loopholes are blocking truly sustainable housebuilding. https://www.theplanner.co.uk/2024/10/07/bngs-exemption-loopholes-are-blocking-truly-sustainable-housebuilding (Accessed: 5 January 2025).
- <sup>10</sup> This analysis is based on the Glenigan planning applications dataset, the gold standard in UK planning data that is used by the UK Government and the Office for National Statistics. All figures to 2sf. For more information, or a copy of the original research, please contact Knight Frank Research: Patrick.Dillon@knightfrank.com.
- <sup>11</sup> **Kaighin, C. (2024)** Reflecting on the first six months of BNG. https://naturalengland.blog.gov.uk/2024/08/29/reflecting-on-the-first-six-months-of-bng/ (Accessed: 3 September 2024).
- <sup>12</sup> **Natural England (2024)** Natural England written evidence to EAC Inquiry on Environmental sustainability and housing growth. https://committees.parliament.uk/writtenevidence/133103/pdf/ (Accessed: 1 December 2024).
- <sup>13</sup> **Lewis, J. (2023)** Adversarial to Integrated: Making environmental consenting a team sport. https://www.the-ies.org/analysis/making-environmental-consenting-team-sport (Accessed: 5 January 2025).
- <sup>14</sup> Planning Advisory Service (2022) Nature Recovery Emerging Insights Snapshot In conversation with early adopter local authorities. <a href="https://www.local.gov.uk/pas/topics/environment/nature-recovery-local-authorities/nature-recovery-emerging-insights-snapshot">https://www.local.gov.uk/pas/topics/environment/nature-recovery-local-authorities/nature-recovery-emerging-insights-snapshot</a> (Accessed: 5 January).
- <sup>15</sup> House of Lords Built Environment Committee (2024) Impact of environmental regulations on development. https://lordslibrary.parliament.uk/





built-environment-committee-report-impact-ofenvironmental-regulations-on-development/ (Accessed: 15 January 2025).

<sup>16</sup> ALGE, ADEPT, Defra (2021) Survey of local planning authorities and their ability to deliver biodiversity net gain in England. https://randd.defra.gov.uk/ ProjectDetails?ProjectID=20638&FromSearch =Y&Publisher=1&SearchText=NR0183& SortString=ProjectCode&SortOrder=Asc&Paging=10

<sup>17</sup> Ministry of Housing, Communities and Local Government (2024) Building the homes we need. https://questions-statements.parliament.uk/writtenstatements/detail/2024-07-30/hcws48 (Accessed: 29 Jan 2025).

<sup>18</sup> Home Builders Federation (2025) Planning on Empty. https://www.hbf.co.uk/documents/14186/Planning\_on\_empty\_report.pdf (Accessed: 29 Jan 2025).

<sup>19</sup> HM Government (2025) Land-Use Consultation. https://consult.defra.gov.uk/land-use-framework/ land-use-consultation/supporting\_documents/Land%20 Use%20Consultation.pdf (Accessed: 3 February 2025).

<sup>20</sup> **Natural England (2024)** Living England 2022-2023. https://naturalengland-defra.opendata.arcgis.com/maps/19aa7b1604434fd7a3b35f2fbfb9c519/about (Accessed: 29 January 2025).

<sup>21</sup> **Defra (2022)** Natural Capital and Ecosystem
Assessment Programme. https://www.gov.uk/
government/publications/natural-capital-andecosystem-assessment-programme/
natural-capital-and-ecosystem-assessment-programme
(Accessed: 29 Janaury 2025).

www.the-ies.org

# **Image Credits**

### Front Cover – Kidbrooke Village, by the Berkeley Group

© Shaun | Adobe Stock

p. 13 - Children smelling flowers

© Helen Filatova | Adobe Stock

p. 15 - Wastwater, Lake District

© Philip Enticknap | Adobe Stock

p. 20 - Engineers meet at construction site

© saksit | Adobe Stock

p. 22 - Murmuration of starlings

© Ewald Fröch | Adobe Stock

p. 26 - Wildflower meadow

© Lois GoBe | Adobe Stock

40

p. 29 - Surveyors measuring land with digital levels

© Lightfield Studios | Adobe Stock

p. 34 – Aerial view of sand dunes habitat at Perranporth, UK

© pbnash1964 | Adobe Stock

p. 36 - Builders working on scaffolding platform

© Rose Makin | Adobe Stock

The Institution
of Environmental
Sciences

Institution of Environmental Sciences 6-8 Great Eastern Street London EC2A 3NT +44 (0)20 3862 7484 info@the-ies.org www.the-ies.org Registered charity no. 277611