

Biodiversity net gain (BNG) area-based exemption evidence annex

Introduction

This annex provides supporting evidence to the government's response to the consultation on "Improving the implementation of biodiversity net gain (BNG) for minor, medium and brownfield development". It estimates the likely impact of different exemptions scenarios, based on sample data from approved planning permissions that are subject to BNG. The impacts assessed for each scenario include biodiversity units affected, possible implications for off-site nature markets, and the share of residential planning applications that would be exempt.

Rationale for intervention

In the response to the consultation on "Improving BNG for minor, medium and brownfield development", the government has confirmed plans for development with a site area of less than 0.2 hectare (ha) to be exempt from BNG¹. This new exemption is intended to make BNG more proportionate for the smallest developments where the process can be comparatively burdensome and costly to deliver.

Small sites often face similar administrative burdens to larger developments when delivering certain requirements. For example, in the case of BNG, there may be circumstances where ecological expertise needs to be contracted to help undertake an environmental assessment and to prepare BNG documents. Due to their limited size, smaller developers may not be able to spread these costs across as many homes.

The Local Authority Planning Capacity and Capability Survey 2025 identified 'Ecology and Biodiversity' as the top skill gaps in local planning authority (LPA) capability, with over 50% of planning departments reporting a skills gap.² Further exemptions would be expected to reduce their workload, reducing the need to devote time and resources processing BNG requirements on very small sites, and allowing limited capacity to be focused on proposals where the biodiversity outcomes and planning impacts are likely to be larger.

Rationale for improving housebuilding viability

BNG is estimated to add £13.3k to £53.0k per hectare to the cost of development (assuming 34 dwellings per hectare, this is a cost per dwelling of £0.4k to £1.6k). In an already challenging macroeconomic environment, these costs can make development on some sites unviable. By reducing costs associated with BNG, some

¹ Dependent on no priority habitats being impacted.

² [Local Authority Planning Capacity and Capability Survey 2025 - GOV.UK](#).

sites will become viable resulting in housebuilding. Housebuilding in England has not kept up with housing need.³

A 0.2 ha exemption will also support small and medium-sized enterprise (SME) housebuilders. The Competition and Markets Authority's (CMA) report into housebuilding identified smaller sites are more likely to be built out by SME developers than large developers.⁴ The CMA also found SME developers were disproportionately burdened by delays and financial burdens in the planning system because the per-dwelling planning costs are higher for small sites. The 0.2 ha exemption will reduce costs on small sites and improve site viability.

Methodology

Analysis

1.1.1 Approach to data collection and analysis

To help inform the government's response to the consultation and in particular the decision to introduce a new area-based exemption, detailed analysis of existing BNG practice was undertaken. Defra analysts collected data from LPA planning portals. Using this, around 16,000 approved residential planning applications were collected, and from these around 3,000 BNG metrics were accessed.⁵ The data collected covers almost half of England's local planning authorities over a 18-month period following the commencement of mandatory BNG in February 2024. Approximately 1,000 applications with attached metrics were subsequently selected for further analysis based on whether they had data in an accessible format, used the full statutory metric and related to development of new dwellings (as opposed to focusing on commercial development only).

This has enabled the most comprehensive analysis of BNG data yet, allowing Defra analysts to estimate the likely impact of various exemption scenarios on biodiversity, nature markets and planning applications, which is set out below.

Several academic and other external research projects such as Duffus and others (2025)⁶, BNG500 Group⁷, Eftec (2025)⁸ have also investigated the current state of

³ On average between 2021/22 and 2023/24, local authorities in England delivered a total of around 229,940 net additions relative to a total indicative local housing need figure of 370,400. ([CDP-2025-0100.pdf](#)).

⁴ [Housebuilding market study final report](#).

⁵ This matches the national applications to metrics proportion. The completed BNG metrics contain an expert assessment of biodiversity value before development expressed in terms of baseline biodiversity units, providing a simple way to compare the relative biodiversity value which would be reduced between scenarios if further exemptions were introduced.

⁶ Duffus, N.E. and others (2025) 'Early outcomes of England's new biodiversity offset market', bioRxiv [Preprint]. Available at: doi.org/10.1101/2025.06.22.660961.

⁷ BNG 500 Group. (2025). Available at multiple places including: [BNG500 - Francis Hesketh LinkedIn](#).

⁸ eftec. (2025). Lessons learned from the first year of the Biodiversity Net Gain Market in England. [Online]. Available at: eftec.co.uk/projects/lessons--learned-from-the-first-year-of-the-biodiversity-net-gain-market-in-england.

BNG and the likely impact of various exemptions.

1.1.2 Impact on biodiversity and development

The impact on biodiversity and development was examined via the planning permissions data and associated BNG metrics. This data enables insight into likely biodiversity losses resulting from development at different exemption thresholds.

1.1.3 Impact on nature markets

Impact on the off-site BNG market for biodiversity units was estimated based on 2 key measures: the market value; and the number of trades. Market value estimates the overall demand for off-site biodiversity units by assuming each unit required has an average price. The number of trades is an indicator of transaction volume. The assumption is that each planning application needing off-site units would typically result in one transaction only. It still provides an indication of how active and liquid the market is and how well prices can adjust to supply and demand.

1.1.4 Impact on housing

BNG costs are driven by the land take and habitat value impacted by development. The costs range from £13.3k to £53.0k per hectare, and approximately £0.4k to £1.6k per dwelling on average. Higher density reduces the per dwelling cost of BNG. Exempt developments will not incur these costs, resulting in higher viability for some sites. Overall cost savings to developers were estimated by multiplying the per dwelling cost savings by the number of dwellings assessed to be covered by various exemptions based on Defra data.

Scenarios considered

The data collected enabled a broad range of exemption scenarios to be examined and assessed. Table 1 below presents a selection of exemption thresholds, focusing on 0.1, 0.2 and 0.5 ha which allow the key variables and criteria to be quantified and assessed. The option of exempting all minor development, as included in the consultation, was also examined.

Table 1: Scenarios and their estimated impact

Exemption type	% of BNG eligible planning applications exempted	% of BNG eligible dwellings exempted	% biodiversity units foregone	Impact on nature markets	Estimated compliance cost savings to developers (annual, £m)	Estimated cost to nature (annual, £m)
	Total figure includes 0.2 ha	Total figure includes 0.2 ha	Total figure includes 0.2 ha		Central savings and range	
0.1 ha area-based	~29%	~5%	~4%	Trades: ~19% Value: ~3%	£7.9m Range: £3.4m to £13.4m	~£35m
0.2 ha area-based	~51%	~11%	~12%	Trades: ~42% Value: ~10%	£17.4m Range: £7.4m to £29.6m	~£100m
0.5 ha area-based	~78%	~32%	~31%	Trades: ~75% Value: ~23%	£50.4m Range: £21.5m to £85.6m	~£261m
All minor development	~88%	~18%	~60%	Trades: ~80% Value: ~34%	£28.4m Range: £12.1m to £48.2m	~£154m

Scenarios comparison

The 4 scenarios are compared using several measures:

- the estimated share of biodiversity units that would additionally fall outside the policy
- the expected effect on how the offsite BNG market functions
- the proportion of residential planning applications that would become exempt
- the likely impact on housing viability

Further explanation of the measures and how they should be interpreted is provided in Section 3, Methodology.

1.1.5 Biodiversity

A key finding from the analysis of a new area-based exemption is that the biodiversity impacts increase as the size of the exemption increases. This is because small developments make up a large share of all applications but impact a small amount of habitat. As a result, introducing exemptions from a starting point of zero affects a much larger number of applications, while incurring relatively small losses in biodiversity units, compared with raising exemptions by the same amount from a higher level.

1.1.6 Nature markets

The analysis also indicates that the impact on nature markets increases as the exemption threshold increases. The number of expected trades decreases across the scenarios with most trades originating from sites under 0.5ha, suggesting that exemptions on this scale would significantly reduce market activity. Estimated market value also falls but at a lower rate. It is worth noting that the off-site market impact estimates have high uncertainty. In parallel, the proportion of residential planning applications exempted rises quickly from roughly one third under the smallest threshold to almost nine tenths under the broadest scenario, similar effect can be seen for housing viability impacts estimates, illustrating that incremental threshold changes have a disproportional effect.

1.1.7 Housing supply

We estimate overall savings to developers from different area exemptions. This is based on Defra data on residential planning application proportions for consistency and Ministry of Housing, Communities and Local Government (MHCLG) data on new builds. We use the updated value from MHCLG on the developer cost of meeting BNG obligations per dwelling of £0.4k to £1.6k. As shown in Table 2, the 0.2 ha exemption across all site types saves developers roughly £17.4 million annually.

Table 2: Cost savings to developers from different exemptions

Area exemption	Proportion of dwellings exempt	Annual dwellings exempt	BNG cost per dwelling	Cost saving to developers central estimate (£m per annum)	Range (£m)
Less than 0.1	5%	8,600	£918 (£392 to £1,559)	£7.9m	£3.4m to £13.4m
Less than 0.2	11%	18,900	£918 (£392 to £1,559)	£17.4m	£7.4m to £29.6m
Less than 0.5	32%	54,900	£918 (£392 to £1,559)	£50.4m	£21.5m to £85.6m

With the exemption from BNG costs, overall site development costs will be lower. These lower costs are expected to contribute positively to site viability. Without the exemption, some sites with marginal viability would have been made unviable by the costs of BNG. With the exemption, these sites remain viable. Therefore, the BNG exemption will contribute marginally to housing supply.

1.1.8 Consistency with other evidence

We also considered the external research (see 3.1.1.) alongside internal analysis, which finds impacts on comparable scenarios largely to be of similar magnitude. For example, Eftec (2025)⁹ suggest that a 0.1 ha exemption such as in Scenario 1 (see below for an explanation of the scenarios) would lead to a 27% decrease in applications subject to BNG compared to approximately 29% estimated internally. Other estimates are similarly comparable, with the minor differences to be expected given the underlying uncertainty behind the estimates.

1.1.9 Decision

The government has announced that it will implement a 0.2 ha area-based exemption as outlined in Scenario 2. Based on the analysis above it is estimated that 12% of biodiversity units will not be compensated for compared to the status quo. It also results in a more pronounced reduction in nature market activity (around 42% fewer trades and 10% reduced market value) when compared to no exemptions.

National totals and other impacts

Extrapolating to national impacts

The analysis set out above is based on a large sample of planning permissions and associated BNG metric data, however necessarily it does not represent the population of data. Extrapolation to national totals needs to be done carefully given the nascent nature of the BNG policy and the sample data available. A selection of extrapolated national totals is provided in Table 3 below to illustrate the potential real-world magnitude of the expected impacts from the different exemption scenarios. These values should be interpreted with caution as there is greater variation in the uncertainty of these estimates.

Biodiversity units are converted to hectares of habitat by applying the estimated proportional unit impact to the upper and lower total expected habitat area covered by BNG per year. This also assumes that on a national scale, the biodiversity unit to habitat size ratio is constant and does not vary significantly by site size. A similar method is applied for the current estimated off-site market value and estimates for number of applications.

⁹ Eftec. (2025). Lessons learned from the first year of the Biodiversity Net Gain Market in England. [Online]. Available at: eftec.co.uk/projects/lessons--learned-from-the-first-year-of-the-biodiversity-net-gain-market-in-england.

Table 3: Overall annual estimated impacts by scenario

Exemption type	Potential habitat area foregone	Impact on nature markets (£m)	Residential planning applications exempted
0.1ha area-based	250 to 1,200 ha	£1m to £3.4m	2,400
0.2ha area-based	750 to 3,400 ha	£3.4m to £11.5m	4,200
0.5ha area-based	1,900 to 8,800 ha	£9.2m to £31.0m	6,400
All minor development	3,700 to 17,000 ha	£13.4m to £45.2m	7,300

Off-site biodiversity metrics

An inherent limitation of using post-approval but pre-development statutory metrics is that the Biodiversity Gain plan may contain the plan to seek BNG units in the off-site market and that BNG requirements can be met through credits post planning application approval. This means that the final metric does not always contain the information about the final actions taken with respect to the off-site market.

Where possible allocations and totals of BNG unit trades were extracted from the Defra statutory BNG register.¹⁰ However, there is a delay between off-site market activity occurring between developers and offsite BNG providers, and those allocations appearing in the register. This means that the offsetting actions of some of the more recent applications have not yet appeared on the register. The main assumption for the central estimates therefore is that only the applications indicating off-site activity in the final supplied metric or the register are included in the market impact estimates.

Alternatively, an assumption of perfect “post metric approval” compliance was tested where applications in the dataset indicating a unit shortfall were assumed to be meeting the remaining requirement up to the 10% net gain through the off-site market. With this assumption the impact on the off-site market increases substantially as shown in Table 4, however it is unclear if this increase would have been directed towards the off-site market, be addressed in post-approval design changes or be absorbed by credits.

¹⁰ The BNG Register is Natural England’s statutory public list of land legally secured to deliver off-site biodiversity gains for developments. It ensures that biodiversity units are transparently recorded and prevents double-counting or double-selling within the mandatory Biodiversity Net Gain system.

Table 4: Assumption sensitivity of off-site market estimates (exc. Scenario 4)

Exemption type	Volume impact (standard assumptions)	Volume impact (higher compliance)	Value impact (standard assumptions)	Value impact (higher compliance)
0.1ha area-based	~19%	~36%	~3%	~4%
0.2ha area-based	~42%	~58%	~10%	~12%
0.5ha area-based	~75%	~84%	~23%	~30%

Secondary impacts

The figures and analysis presented in this annex are based on a relatively large historic sample of planning application/permissions data. They do not therefore provide a forecast of future activity. Alongside the impacts of the exemptions as set out, there are a few additional practical considerations.

For example, decisions close to the threshold of being exempt may sometimes involve extra clarification on site boundaries and measurements, or other administrative requirements. This can create some uncertainty about the process and impact the exact proportion of applications that are exempt.

Over the medium term, we expect that land with high existing biodiversity will be cheaper than comparable land with low biodiversity value, as the costs of mitigation are absorbed by the expected land value uplift of development. That means that the impact of BNG on development will lessen over time.

Impacts may also be felt unevenly across places, as smaller sites are more common in some areas than others, and, regardless of BNG exemption status, developments may still need to meet other environmental and planning requirements (for example protected species, designated sites, or local plan policies).