



CIEEM

Implementation of a biodiversity metric in Scotland

Position paper

September 2025

Purpose of this paper

CIEEM is broadly in support of the Scottish Government's decision to develop a metric and associated guidance as a tool to support delivery of the requirements of NPF4. However, a metric alone is not enough to effectively and equitably deliver biodiversity enhancements. The purpose of this paper is to briefly outline recommendations for what is needed in addition to a biodiversity metric if the approach to biodiversity enhancement is to deliver for nature and society in Scotland.

Background

Legislative and policy background to biodiversity enhancement in Scotland

The National Planning Framework 4 (NPF4) in Scotland, mandated by the Planning (Scotland) Act 2019, requires planning policy to secure positive effects for biodiversity. Rather than legislating for biodiversity enhancement (known as "Biodiversity Net Gain (BNG)" in England), the Scottish Government addresses positive effects for biodiversity through NPF4 Policy 3b, which requires that all national, major and Environmental Impact Assessment (EIA) developments – in addition to mitigation – provide significant biodiversity enhancements that leave nature in a demonstrably better state than before intervention. Local developments require proportionate measures and householders are exempt. All impacts must be minimised through careful planning and design.

NPF4 does not prescribe a specific assessment method; instead it encourages best practice and allows both qualitative and quantitative approaches, aligned with existing statutory requirements where relevant. In the absence of a standard Scottish methodology, applicants must show how biodiversity will be left in a "demonstrably better state," and may use established metrics if adapted for Scotland's habitats and conditions.

In 2023, NatureScot published [Developing with Nature guidance](#), which supports delivery of NPF4 Policy 3c and applies primarily to local development in Scotland.

To support delivery of NPF4 Policy 3b, the [Scottish Government commissioned research](#) into adapting

England's Biodiversity Metric, and is developing a bespoke Scottish biodiversity metric led by NatureScot. Scotland's biodiversity metric is primarily expected to apply to national and major developments, and EIA developments. Stakeholder [consultation](#) has informed this process, and [interim planning guidance](#) (published in November 2023) stresses flexibility so that the lack of a universal tool does not delay planning decisions. Currently, a range of qualitative and quantitative methods are used.

The [Scottish Biodiversity Strategy to 2045](#) was published in November 2024 together with a [delivery plan 2024-2030](#). In this first delivery plan, the Scottish Government has reiterated a commitment to developing and publishing a biodiversity metric (Annex 1, 12.1) and to "developing clear guidance on the implementation and delivery of NPF4 policies which support the cross-cutting outcome 'improving biodiversity'" (Annex 1, 12.5).

In January 2025, NatureScot advised CIEEM that it expects to be in a position to consult on a draft tool and guidance in 2026, and that updates on progress will be made on its [Scottish Biodiversity Metric](#) webpage. While a Scottish biodiversity metric is in development, multiple approaches to biodiversity enhancement are currently being practised across Scotland, leading to inconsistencies which are compounded by the lack of capacity and access to biodiversity and ecological expertise within local planning authorities (LPAs)^{1 2}.

Learning from implementation of Biodiversity Net Gain (BNG) in England

CIEEM has been closely involved in the development and implementation of BNG in England. BNG has now been fully implemented in England for most developments since February 2024, requiring a minimum 10% increase in biodiversity value either on-site or through off-site compensation. This was extended to small sites in April 2024, and will be extended to Nationally Significant Infrastructure Projects in 2026.

There is a great deal that can be learnt from the metric's

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- 1 www.planningdemocracy.org.uk/wp-content/uploads/2024/02/Community-Led-report-on-NPF4-Biodiversity-Policy-Delivery-2024-1.pdf
 - 2 cieem.net/survey-of-scottish-local-planning-authority-capacity-highlights-risk-to-delivery-of-npf4/

application to date in England and it is important that these lessons are taken into account in Scotland to ensure success. Uptake has been widespread. Developers are increasingly embedding BNG into the early stages of planning which has had the added benefit of ecologists being engaged early in projects. The system is beginning to generate new income streams for landowners while attracting significant private investment. However, delivery and enforcement remain inconsistent as LPAs often lack the ecological capacity and resources to monitor compliance effectively. Despite these challenges, BNG is gaining international interest as a model for incentivising nature recovery through the planning system, and (despite the current Defra consultations on thresholds and exemptions cooling some enthusiasm) there are early signs of ecological and economic benefits starting to emerge.

Recommendations

1. Metric Development

Metric development should be undertaken in consultation with industry and the local planning authorities to ensure that the needs of the user of the metric (likely to include LPAs, developers, consultant ecologists, habitat banks) are understood. We advise that two expert advisory working groups are established to facilitate this engagement. A technical advisory group (TAG) would provide strategic advice and expertise on the technical aspects of the metric. An implementation advisory group (IAG) would advise on what needs to be in place to ensure effective implementation of a metric e.g. training, upskilling, guidance, and communication ahead of launch of the metric. CIEEM can support the facilitation of this. Both groups should consist of representatives from:

- ☐ Renewables industry
- ☐ Housing developers
- ☐ Transport sector
- ☐ Consultancies
- ☐ Infrastructure bodies (including the Infrastructure Investment Board (IIB))
- ☐ LBAP network and LPAs ecologists and planners
- ☐ eNGOs

- ☐ Landowners
- ☐ SEPA
- ☐ Scottish Water

In relation to habitats, the metric should:

- ☐ take account of Scottish habitats in line with the recommendations set out in the SRUC Research into Approaches to Measuring Biodiversity in Scotland Report³ and our response to the key issues consultation on a Biodiversity Metric for Scotland's Planning System⁴;
- ☐ incentivise habitat creation of high value habitats, to ensure gains can be achieved through woodland creation and peatland restoration;
- ☐ accompanying guidance should emphasise the importance of adherence to the mitigation hierarchy;
- ☐ avoidance, of irreplaceable habitats, such as ancient woodland and old species-rich grassland should be emphasised in guidance and restoration and enhancement incentivised;
- ☐ allow for gains to be achieved through natural regeneration, where appropriate measures are implemented to allow this to occur and on condition of an appropriate monitoring and reporting plan.

The habitat data requirements should be set at a level that can be captured by ecologists suitably experienced in habitat survey and assessment, following appropriate guidance, including CIEEM guidelines⁵.

3 McVittie, A., Cole, L., McCarthy, J., Fisher, H., and Rudman, H. (2023) Research into Approaches to Measuring Biodiversity in Scotland, Final Report to Scottish Government. <https://www.gov.scot/publications/research-approaches-measuring-biodiversity-scotland/documents/>

4 <https://cieem.net/wp-content/uploads/2024/05/CIEEMR1.pdf>
5 Noting that the SRUC report identified a need to review Scotland's capacity to deliver surveys (e.g. surveyors competent in UKHab).

2. Guidance Development

Clear guidance must be developed to accompany the metric, covering the following aspects:

- When a metric is required (i.e. for what scale/ types of development, along with clear guidance on exemptions).
- What level of uplift is appropriate to the application.
- What documents are required to support planning submissions and at what point in the planning process these are needed (NOTE: standard reporting templates for these are recommended to ensure consistency across the industry).
- Definition and description of irreplaceable habitats in the Scottish context.
- Sample planning conditions to demonstrate an industry standard of what is required to support planning applications.

LPAs will require additional guidance to help them when reviewing and interpreting applications utilising an agreed metric. The guidance should be clear on what flexibility LPAs have, if any, when interpreting applications using the metric approach within their boundaries, taking into account cross-boundary developments. LPAs will also need to understand how to evaluate opportunities for biodiversity enhancement on-site and when it is appropriate to seek alternative opportunities off site.

To achieve genuine biodiversity enhancement—delivering measurable environmental benefits beyond baseline conditions—guidance must support users to address interactions with existing legal protections for conservation sites and species, along with complementary initiatives like the developing Ecosystem Restoration Code (ERC). Crucially, guidance on stacking (combining multiple environmental benefits) and bundling (grouping credits across schemes) is needed to ensure seamless integration with carbon markets, woodland initiatives, and the ERC, providing clarity for landowners and aligning with broader ecosystem restoration goals.

Consideration will also need to be given to how a metric would intersect with other environmental assessments, such as Environmental Impact Assessment (EIA) or Habitat Regulations Assessment (HRA) requirements; and how metric results will be interpreted alongside these.

Once the metric, associated guidance and templates are developed, these should be communicated to stakeholders in advance of their introduction to ensure industry-wide understanding prior to roll out. A campaign of awareness-raising should be accompanied by suitable training and case studies demonstrating its application (see “Resourcing and Governance”).

Interim guidance

Guidance on the use of existing biodiversity metrics in the Scottish planning system was published on the NatureScot website in June 2025⁶. The guidance was commissioned by the Scottish Government because there was a need for advice on the use of existing metrics in advance of a Scottish biodiversity metric being available. Its stated purpose is to provide good practice advice on use of metrics in advance of a Scottish Government commissioned Scottish biodiversity metric being available; and, an explanation of the key differences between the two main currently published metric tools — the English statutory biodiversity metric, and the Scottish and Southern Energy Renewables (SSER) biodiversity project toolkit.

While the guidance is welcome and contains useful information, some questions routinely asked by our members remain open, including in what circumstances one or other metric would be appropriate for use. For instance, the guidance notes that, “...differences remain between both the English metric, and the SSER toolkit, when compared with NatureScot’s current advice on peatland, carbon-rich soils and priority peatland habitats”, but there is no detail provided or advice on what this means for deciding whether or not to use one of these tools.

The interim guidance says explicitly that it does not cover tools developed by SSER, and Scottish Water, because these are not publicly available, but LPAs will be required to review applications which use them; therefore, for any metric tool used, the version number and user guidance should be provided, as per the interim

6 www.nature.scot/doc/guidance-use-existing-biodiversity-metrics-scottish-planning-system

guidance.

3. Resourcing and Governance

Monitoring and reporting standards are required, alongside details of appropriate enforcement measures to ensure biodiversity enhancements are successfully delivered. This is especially critical as biodiversity enhancement in Scotland is being driven by guidance, as opposed to being legally mandated, as in England.

LPA planners and ecologists will require training specific to the Scottish biodiversity enhancement approach to ensure an understanding of the metric to allow for appropriate scrutiny of planning applications⁷. CIEEM can support the development and delivery of training.

Building capacity and expertise within LPAs is vital, ensuring that all relevant staff (i.e. those involved in the process)—including planners, ecologists, and legal experts—are equipped to process biodiversity enhancement assessments. LPAs must be able to access this expertise when required in order to process applications efficiently and in accordance with requirements.

Standards should address both on-site and off-site measures, and LPAs must have adequate resources to uphold these standards and enforce compliance⁸. Additionally, a transparent, accessible register of off-site biodiversity enhancement should be established to facilitate public scrutiny.

4. On- and off-site biodiversity enhancement

Both on-site and off-site biodiversity enhancement offer valuable benefits, and a balanced approach, determined on a case-by-case basis, can help achieve the best

outcomes for biodiversity and development. On-site delivery allows nature to be integrated into the fabric of new developments⁹, supporting local ecosystems, enhancing community access to green space, and reinforcing place-making. Off-site delivery, meanwhile, enables the creation or restoration of larger, more ecologically coherent habitats in strategically important locations, often delivering greater long-term gains for nature. Recognising the complementary strengths of each approach is essential to delivering effective and adaptive biodiversity enhancement.

A clear and robust process must be established for securing and evidencing off-site biodiversity enhancement delivery. This approach should be standardised, regulated, and enforceable to ensure consistency and accountability. Early engagement with off-site providers is essential to ensure the effective and appropriate use of the biodiversity metric from the outset.

Locations for off-site delivery should integrate with the National Nature Network to restore and create new habitats that connect up protected areas. This will require spatial planning and co-ordinated action across the planning and land use sectors.

Integrating with Nature Networks will help align the provision of off-site delivery with the broader aims of NPF4, particularly its goal of achieving positive effects for biodiversity. Guidance should make explicit how off-site delivery can support the creation and enhancement of nature networks, ensuring the opportunity to link these objectives is fully realised. The approach could be built into the metric (i.e. for example a strategic significance approach) or directed through associated guidance.

Existing guidance on biodiversity offsetting used the authoritative and internationally recognised Business and Biodiversity Offsets Programme core principles¹⁰. These were adapted by CIEEM, together with CIRIA and IEMA, to produce UK-based principles¹¹. Adoption of these principles would support cross-border application of the metric.

⁷ Note the responses from the CIEEM and Association of Local Government Ecologists (ALGE) survey on LPA ecological expertise and capacity in Scotland identified that a lack of enforcement staff to ensure compliance posed a high or very high risk to LPA's ability to implement NPF4, and 22% said they have no current ecological resource or expertise available. In addition, the SRUC report highlights concerns that Scotland does not have the capacity to assess development proposals to ensure they demonstrate biodiversity enhancements, noting the need for clear guidance and resources to upskill regulators.

⁸ A review of 42 developments across 5 LPAs in England found that only 53% of ecological enhancements that had been committed to were delivered. Lost Nature - housing developers fail to deliver their ecological commitments. - Wild Justice This paper highlights the need for regulation and enforcement to ensure biodiversity enhancements detailed within planning applications are actually undertaken on the ground.

⁹ For clarity, we use the term "on-site biodiversity enhancement" to refer to delivery of a net benefit to biodiversity (as opposed to just 'no net loss') within the red line boundary of a development, and "off-site biodiversity enhancement" to refer to a net benefit outside of the red line boundary. This complements the definitions in NatureScot's interim guidance.

¹⁰ <https://www.forest-trends.org/bbop-pubs/principles/>

¹¹ cieem.net/wp-content/uploads/2019/02/C776a-Biodiversity-net-gain.-Good-practice-principles-for-development.-A-practical-guide-web.pdf

Resources

CIEEM Biodiversity Net Gain Resource webpage, <https://cieem.net/i-am/biodiversity-enhancement-approaches/biodiversity-net-gain-resources/>

The Institution of Environmental Sciences (February 2025). BNG in Practice: One year on from mandatory implementation [bng in practice report 2025.pdf](#)

Wildlife and Countryside Link (February 2025) Implementation of mandatory Biodiversity Net Gain – one year on [Net Gain One Year On1.pdf](#)

Green Finance Institute (August 2024) Biodiversity Net Gain: A Road Map for Action [ROADMAP](#)

UK Gov (February 2023; updated June 2025). Biodiversity net gain: Information you need for biodiversity net gain (BNG). <https://www.gov.uk/government/collections/biodiversity-net-gain>

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