



Good Practice Requirements for Delivering Biodiversity Net Gain (On- and Off-Site)

New policies coming into effect in 2021 in England, and in development in other parts of the UK, will require Biodiversity Net Gain (BNG) to be demonstrated following certain types of development. The BNG Principles are set out in guidance produced by CIEEM, CIRIA and IEMA¹, but these do not address important implementation and delivery mechanisms. This document sets out requirements for good practice in the implementation of BNG through the 'mitigation hierarchy' (including off-site offsets) and mechanisms such as habitat banking.

CIEEM advises that these requirements be followed by developers and their consultants to demonstrate tangible and lasting gains in habitats that will contribute to gains in biodiversity at different scales and in accordance with ambitions for recovery of ecosystems and the benefits they provide.

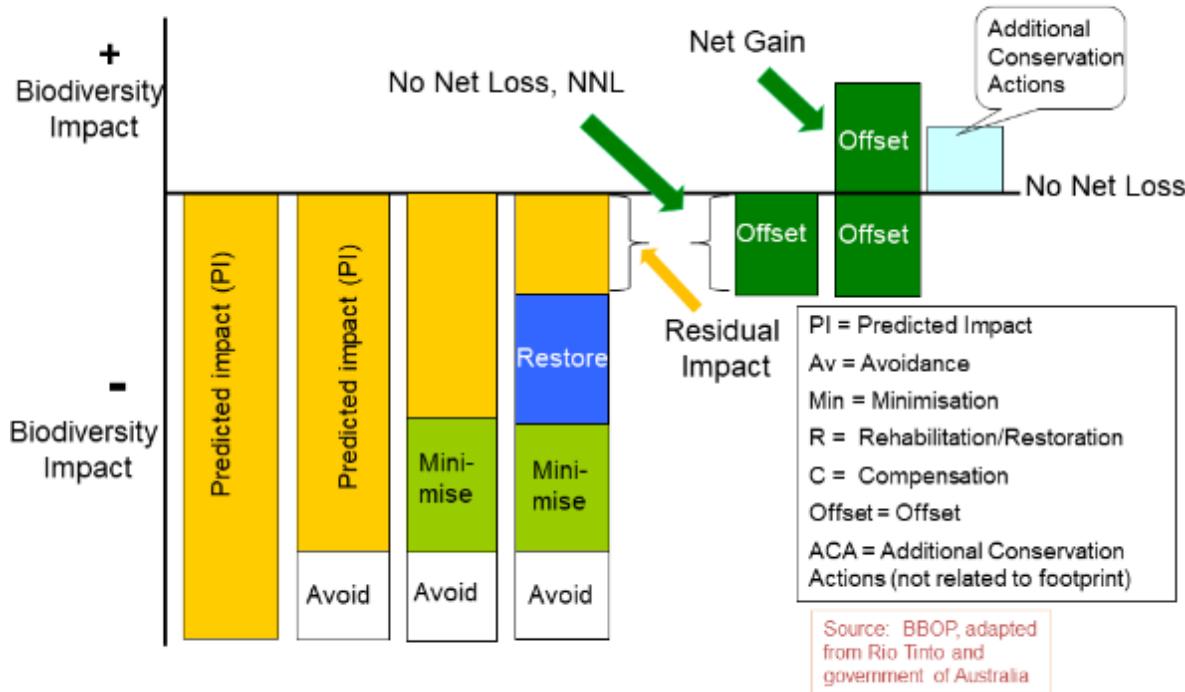
Achieving BNG requires appropriate action to avoid and minimise impacts in accordance with the mitigation hierarchy, followed by efforts to restore damaged habitats within development sites. If residual impacts remain despite such efforts, offsets must be provided off-site. Achieving BNG therefore rests on integrated efforts through all of these steps, to limit impacts and deliver enhancements to the extent required (see Figures 1 and 2).

Figure 1. The mitigation hierarchy

Avoid:	Habitats are retained
Minimise:	Development is redesigned to limit the extent of the land take from natural habitats
Restore:	Condition of on-site habitat is improved (e.g. degraded habitat is brought back into good condition)
Offset/Compensate:	Create habitat of similar type where it did not previously occur, or enhance existing habitat elsewhere
Additional Actions:	Use to achieve the desired target level of gain

¹ <https://cieem.net/wp-content/uploads/2019/02/Biodiversity-Net-Gain-Principles.pdf>

Figure 2. Achieving net gain for biodiversity



Actions implemented to achieve BNG must be designed to demonstrate gains in comparison with a genuine baseline. It is not acceptable to destroy or damage habitats in anticipation of BNG requirements in order to apparently increase the level of gain that can be achieved.

These BNG delivery good practice requirements are applicable to the terrestrial, freshwater and coastal environments. They are intended to complement existing legislative requirements (e.g. planning permission, EclIA, SEA, consents, etc.).

We recognise that demand for different types of habitat credits will vary, but biodiversity restoration and enhancement should be a primary driver of BNG offsets, rather than solely development demand.

As with the BNG Principles and Guidance, irreplaceable habitats are outside the scope of these requirements since destruction of irreplaceable habitats cannot be considered to deliver BNG.

1. Implement the best practice principles for BNG

Offsetting is part of the mitigation hierarchy and should only be used if other options for reducing residual impacts on affected habitats (including retention, restoration or enhancement on-site) have been fully explored. Impacts should be avoided where possible and developers should identify how they have sought to avoid impacts.

Habitats should not be considered as ‘retained’ unless it is possible to demonstrate, with good evidence, that they will remain functional in the context of the development, with key ecological processes in place, for the duration of the BNG commitment.

2. Use appropriate tools and competent expertise and advice

Tools for quantifying losses and gains should be populated with data generated by competent ecological professionals, based on first-hand evidence of the affected habitats and their context.

Specialist knowledge should be used to determine what should be retained, what gains are achievable and optimal locations for off-site habitat creation/enhancement to benefit affected species populations or contribute to, for example, Nature Recovery Networks or Shoreline Management Plans.

3. Create an offset which is ecologically coherent, viable and which adds value

Replacement habitats should be ecologically equivalent to those which have been lost, and not selected based on ease of creation. In general, for example, terrestrial habitats should not be used to replace marine habitats. In all cases, a biodiversity offset must be appropriate to the ecology of the offset site; for example, trees should not be planted on valuable grassland or heathland habitat.

The principle of ‘like for like or better’ should be applied in terms of habitat type and distinctiveness. If habitats to be lost are of low distinctiveness, consideration can be given to targeting an offset to deliver other local habitat priorities through trading up options. If habitats to be lost are of higher distinctiveness, efforts should be made to minimise trade-offs between habitat types, to avoid cumulative loss of habitats that are harder to recreate. Offsets should be created in the location where most appropriate biodiversity benefit can be gained – this may not necessarily be on or adjacent to the development site. To deliver BNG the offset cannot be an intervention that would have happened anyway without the development’s contribution, and the boundaries of the offset must be clear. When joining a larger strategic scheme such as a habitat bank, it should be clear that the bank has a transparent and auditable system of tracking and extinguishing biodiversity credits.

4. Create an offset of appropriate scale and context

The size of the offset should not be smaller than the size of the habitat lost. The use of an appropriate metric (such as the Defra metric in England) will normally ensure that the size of the offset is roughly matched to the area lost and may be bigger because of the various risk multipliers. Attention should be placed on the local and wider landscape contexts of the offset, ensuring that the site remains locally appropriate and that landscape-scale functionality is retained or enhanced. For example, it may be

appropriate for the offset to follow linear features or join existing habitats rather than being created in one block.

5. Design offsets that provide habitats for the range of species likely to be affected by the development

In many cases this may be achieved by delivering an offset as close as possible to the site of habitat loss, as long as ecological coherence (and, for example, risks from disturbance) are accounted for. However, where this is not possible or not appropriate, then consideration should be given to the species the offset could support in identifying a suitable location and/or species issues should be dealt with by uplifting the offset requirement through the risk multiplier attached to distinctiveness.

6. Choose bigger, better and more joined-up sites for offsets

Ecological theory and practice clearly demonstrates that large, well-connected sites are better for biodiversity than small or isolated sites. Notwithstanding the need to deliver green infrastructure within development sites and to secure biodiversity for local people, ultimately the purpose of BNG is to provide a contribution to reversing the crisis of biodiversity loss. Offsets must therefore benefit biodiversity first. A small offset is likely to perform better as part of a larger initiative such as a Nature Improvement Area, strategic rewilder initiative or habitat bank than in isolation.

7. Ensure the offset is secured

A legal agreement should be in place (such as a lease, Conservation Bank Agreement, Conservation Covenant, etc.) to ensure that the offset site cannot be lost (for example, through a change in ownership) for the duration of the offset requirement.

If a landowner brings forward an offset for to sell ‘biodiversity credits’ in the absence of a credit retailer or habitat bank, the agreement should be between the landowner and the local authority, who in turn would be responsible for enforcing the legal agreement, for example via a Section 106 agreement in England.

The offset must exist and be funded in the long-term (in England the Environment Bill will mandate 30 years), and for longer if by mutual agreement.

All on- and off-site BNG delivery should be registered on a public BNG registry (the Environment Bill will mandate this in England for off-site delivery), otherwise the biodiversity gain plan is open to legal challenge against a planning application being subsequently permitted.

All on- and off-site BNG delivery must have security of funding for at least 30 years.

8. Develop a clear plan for how the offset will be delivered

A plan should be in place before the loss of the development site is consented, which sets out how the offset would be created and managed, identifying whether this is delivered directly by the developer or via the purchase of biodiversity credits. If not part of a credit scheme already on the public BNG Registry, a BNG Management and Monitoring Plan for the offset should be developed by an appropriately experienced ecologist.

9. Monitor the offset and adapt management where needed

The offset should be monitored at the agreed frequency by a suitably qualified and experienced ecologist. Where the offset is not achieving its objectives, additional management should be put in place to ensure that the biodiversity outcomes for which it was designed are delivered.

10. Ensure the offset has adequate funding and is legally enforceable

The funding mechanisms for biodiversity offsets will vary but in all cases this must be sufficient for the initial works, annual/regular maintenance and management to bring to target condition, ecological monitoring and any adaptive/restorative works that may be needed. This funding should be evidenced as part of the consenting for the offset whether the developer is paying through a commercial service provider (e.g. a broker) or where the local planning authority has levied a tariff in the absence of a specific site.

The use of, for example, a Conservation Credit Purchase Agreement which details the number and type of credits purchased, the location of where the credits have been raised (either a bespoke offset site or a habitat bank), together with a Letter of Sale and a Conservation Credit Certificate containing number, location and type, is an appropriate approach.

Chartered Institute of Ecology and Environmental Management

Grosvenor Court, Ampfield Hill, Ampfield, Romsey, SO51 9BD

01962868626 | enquiries@cieem.net | www.cieem.net

Company Number: RC000861 | Registered Charity (England and Wales): 1189915

Published July 2021