

The UK's new biodiversity net gain requirements and what they mean for planners, developers and architects.

In 2019, the UK Government announced that new English planning developments will be required to demonstrate a 10% increase in biodiversity on or near development sites.

The Chancellors' 2019 spring statement indicated it will be mandatory for all development in England to deliver a 'Biodiversity Net Gain'.

This is a milestone moment for many sectors and operators and the new guidance has expediated the requirement for products and solutions that deliver biodiversity benefits.

The timeline.

A more recent Government statement, in July 2019, outlined further details about how the Biodiversity Net Gain requirement will be defined, as well as exemptions, protections for 'irreplaceable habitats', and how net gain will be administered.

The Government proposes that the requirement will come in force after a twoyear 'transition period' after the new Environment Bill for England receives royal ascent.

 Autumn 2021: 9 Nov - Environment Bill gets Royal Assent - now the Environment Act Government consultation on Biodiversity net gain statutory instruments and regulations



- **Spring 2022:** Government response to consultation
- **Spring 2023:** Biodiversity net gain site register and statutory credits sales platform go live
- Autumn 2023: Biodiversity net gain expected to become mandatory for all TCPA developments

Measuring biodiversity net gains.

Following the announcements, The Department for Environment, Food & Rural Affairs (Defra) has further defined 'Net Gain' in terms of biodiversity.

Measurement of pre- and post-construction biodiversity levels will be based on Defra's 'Biodiversity Metric 3.0'.

Defra has proposed to use four components, each with specific 'metrics or indicators, to create an indicative score for biodiversity quality on the site:

- 1. **Distinctiveness:** the score is assigned based on DEFRA's habitat classification (8 = very high to 0 = very low distinctiveness)
- 2. **Condition:** the score is based on DEFRA criteria associated to different habitats (e.g., cropland, grassland, heathland, lakes, woodland, urban, wetlands) (3 = good to 1 = poor condition)
- 3. **Strategic significance:** the score is based on landscape-scale factors defined nationally and locally (1.15 = high to 1 = low significance)
- 4. **Habitat connectivity:** the score is based on 'habitat aggregation' calculation (1.15 = high to 1 = low connectivity)

A biodiversity score is calculated based on credits assigned to each of these components and then multiplied by the area or length of the site.



The predicted gain is then calculated in the same way, adding in new biodiversity elements and new components relating to risks associated to the development. These are:

- 1. **Spatial risk:** distance of offset from site
- 2. **Temporal risk:** time for habitats to reach target condition
- 3. **Delivery risk:** difficulty of habitat creation

These elements are then applied to calculate the onsite (and offsite) postdevelopment score.

The broader picture.

Defra has confirmed that the proposed Biodiversity Net Gain 3:0 metric will form part of the broader biodiversity picture, and that existing legislation protecting key species, habitats and designated sites will remain.

The metric also does not include species composition, habitat structure, ecological functionality or people's use or values associated to biodiversity.

These all need to be assessed to gain a full picture of the biodiversity contribution in a site.



What it means for planners, developers and architects.

The framework will inform and establish the principle that planning permission should only be given if a new development project increases rather than reduces levels of biodiversity present on a site.

Evidence of an increase in biodiversity will require a baseline assessment of what is currently present on a site and then an estimation how proposed designs will add to that level, and latterly supported by post-construction evidence that a 10% gain has been delivered.

'Being additional' and making a measurable net gain contribution.

Two of the guiding good practice principles set out by the new biodiversity net gain legislation (Chartered Institute of Ecology and Environmental Management)

- Make a measurable Net Gain contribution Achieve a measurable, overall gain for biodiversity and the ecosystem services it provides while directly contributing towards nature conservation priorities
- Be additional Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e., do not deliver something that would occur anyway)



The BioCube® is a unique patented product that has been developed to create species-rich ecosystems, and directly address the requirement for **biodiversity net gain**.

This is achieved through the creation of **additional** integrated habitats capable of supporting small mammals, amphibians, micro-organisms and other invertebrates.

Recent studies have shown substantive increases in Biodiversity. When compared to an adjacent short grass area, BioScapes products delivered a ten-fold increase in invertebrates and a three-fold increase in amphibian species.

References and further reading.

Biodiversity Net Gain: Future developments must improve wildlife habitats – *Biodiversity in Planning*

https://www.biodiversityinplanning.org/news/bd-net-gain/

Biodiversity Net Gain: more than just a number – Gov.uk

https://naturalengland.blog.gov.uk/2021/09/21/biodiversity-net-gain-more-than-just-a-number/

The Biodiversity Metric 3.0 – *Natural England*

http://publications.naturalengland.org.uk/publication/6049804846366720