## Biodiversity Offsetting in the UK: A Beginner's Guide

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# What is Biodiversity Offsetting?

Biodiversity
offsetting is a
policy approach
that seeks to
minimize the
environmental
impacts of a
development
project by ensuring
that any damage in
one place is
compensated for
somewhere else.

In the UK, biodiversity offsets have been defined as conservation activities that are designed to give



biodiversity gain to compensate for residual losses.

Biodiversity offsetting is understood as a 'last resort' in a 'mitigation hierarchy', to be adopted only after all measures had been taken to avoid and minimize development impacts and to rehabilitate or restore biodiversity on-site.

### How does Biodiversity Offsetting work?

In biodiversity offsetting, ecological gains and losses are represented through numerical scores setting the base for the creation and exchange of

conservation credits.

Ecological losses and gains from a development proposal are calculated through numerical scores, for example a number of biodiversity 'units' in England. In contrast with carbon offsetting, where measurements are based on greenhouse gas concentration in the atmosphere and the mass of CO<sub>2</sub> emitted, no single metric underpins the discussion on biodiversity trading in the ecological literature.

It is far from settled among ecologists what exactly should be measured to comprise a metric (e.g. species diversity, ecosystem functions or ecosystem services) and there are academic disputes over the suitability of different metrics, exchange rules and methodologies to establish equivalence.

In England, the metric quantified the value of habitats on the basis of three criteria: the distinctiveness of the habitat (assessed as low, medium or high), the quality of the habitat (assessed as poor, moderate or good) and the area of the habitats in hectares.

#### Where did the idea come from?

Biodiversity offsetting (also sometimes called compensatory mitigation, mitigation banking, or compensatory habitat) was developed in the late 1980s. It was a fruit of the neoliberal turn in environmental policy in the USA in the early 1970s, which sought to use the market rather

than regulation and laws to achieve environmental goals. In the USA, commercial wetland mitigation banking, involving a 'free market' in wetland ecosystem services, developed from 1991, and 'species banking' expanded at a similar period driven by the Endangered Species
Act. Biodiversity
offsetting is a part of the
fundamental shift in the
way we think about
nonhuman nature
towards the economic
valuation of ecosystem
services and natural
capital.

## Biodiversity Offsetting in the UK

In England, the first explorations of the concept of biodiversity offsetting started under the Labour government elected in 2007 as part of a wider discussion on the possibility of 'market

creation in biodiversity'.
In 2009, Defra
commissioned a scoping
study for the design and
use of biodiversity
offsets. At this time, the
UK Biodiversity Action
Plan was focusing on

targeted management of individual habitat types and species offering a basis for defining tradable biodiversity credits. Also, finance for offsets was needed to address the drastic under-resourcing of many local authorities with respect to their Biodiversity Duty.

Biodiversity offsetting was also suggested as a means to achieve habitat restoration and deliver a more 'landscape scale' approach to nature conservation in the 2010 Making Space for Nature Review. It was suggested that biodiversity offsetting could contribute to these goals by pooling a number of offsets required for separate small developments into a larger habitat block without imposing additional burdens on developers.

The Coalition
government elected in
2010 took the view that
offsetting could provide a
straightforward approach
to assessing development
impacts, creating greater
certainty leading offset
suppliers to come forward
and establishing an
offsets market, ultimately
increasing the number
and quality of bio-diverse
habitats in England.

The 2011 Natural **Environment White Paper** built on the *Making Space* for Nature Review and announced Defra's decision to test biodiversity offsetting in selected pilots across the country for two years (April 2012-April 2014). In 2012, the government launched six voluntary pilot areas in England (Devon; Doncaster; Essex; Greater Norwich; Nottinghamshire; Warwickshire, Coventry and Solihull). In these areas Local Planning Authorities, and a range of other partners (including NGOs and businesses) formed various public-private partnerships to pilot voluntary offsetting and test the Defra metric.

Simultaneously, developers began testing the potential of biodiversity offsetting as a way of mitigating the environmental impacts of development projects in other areas that were not officially part of the pilots, including, the Lodge Hill and North Tyneside housing

developments, the HS<sub>2</sub>, the Thameslink Project, and the Coventry and Warwickshire Gateway.

In 2012, the Environment Bank, the first private compensation brokering and consultancy company in the UK (<a href="http://www.environment">http://www.environment</a> bank.com/about.php), launched the **Environmental Markets** Exchange (initially known as Conservation Credits Exchange). Its goal was to provide a one-stop-shop for people to register their offsetting receptor sites and have the credit value of their site measured. The **Environment Bank hoped** that the exchange would pave the way for the creation of a 'biodiversity offsetting market' in the UK by providing a national resource for identifying sites to receive offset funds and that in turn a large number of available sites ready to sell credits would foster companies and developers to buy biodiversity credits.



### Biodiversity Offsetting and Habitat Banking

The creation of biodiversity credits also enables 'habitat banking' (also known as 'conservation banking' and 'biodiversity banking'). In banking, credits are provided by a conservation or mitigation bank, consisting of a site (or a suite of sites) where resources (e.g. habitats, species, wetlands) are restored, established, enhanced and/or preserved. Providers of credits enter an agreement to sell credits to developers to offset impacts on biodiversity that result from their projects. Through banking, biodiversity offsets can be turned into 'assets' potentially creating a market for developers' compensation liabilities. Even though biodiversity offsetting can be exercised without being linked to banking, the two work ideally together. Thus the new EU NNL initiative favors the establishment of biodiversity offsetting in conjunction with banking.

In the UK, habitat banking has yet to be established. Attempts by broker companies to do so are ongoing.

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