International examples

Information sheet 8

Development of the current biodiversity accounting and compensation (offsetting) system in the UK has largely been based on experiences of the system working around the world. There are 40 offsetting systems worldwide with Australia and the US being established the longest. Environment Bank have experienced or been in communication with a number of these systems and keeps a close eye on the successes and learnings in other countries for application in the UK. The examples below provide just a sample of the many international frameworks quickly developing to halt biodiversity loss.

France

France has been implementing a similar system to the UK for the last 10 years but only recently (2016) made adherence to the mitigation hierarchy and off-site compensation a legal requirement. 'Offsets' are mentioned or recommended in a handful of national policies (in addition to European policies) but no national standards or metric have been introduced as yet (although work to develop a standardised metric is underway) – developers currently propose their own method of quantifying and compensating for their residual impacts. The key content from 2012 guidance, within **31 methodological sheets**, which were developed to improve and standardise the application of environmental measures in project design was used to develop the new law now in place. Plus, 5 experimental '**mitigation banks**' were set up in 2011 (the first in 2008) to explore how the system performs under different conditions – i.e. to deal with the diversity of habitats and operators that exist.

A particularly useful **case study** that demonstrates how the approach is working in France, for a large-scale project, is that of the high speed rail project (BPL), which is broadly similar to HS2. In contrast to HS2, however, the French project made efforts to deliver NNL early in the process, with compensation sites secured along the line ahead of time. Demonstrating best practice for meeting requirements of national policies for protected habitats, species and water (in addition to achieving NNL) was also an important aim of the project. The impact totaled 271 ha (plus ponds, which were dealt with separately), with a goal for compensation set at 664 ha. What was achieved exceeded this – 812 ha across 233 sites is being delivered (prior to the impact even taking place), mostly within 2km of the line. While no agreements are in place for *long-term* management post 2036, agronomists have been heavily involved in developing plans with landowners so it is believed farmers will have enough of an incentive to continue managing the sites into the future.

Germany

A comprehensive system (all impacts, all scales, in all areas) of biodiversity offsetting has been in place in Germany since 1976 – it is considered one of the best developed systems in the world and the largest in Europe. More recent (2002 and 2009) amendments to the Federal Building Code and Nature Conservation Act created a more flexible system that allowed for '**compensation pools**'. Like habitat banks, these sites bundle-up compensation measures so that developers can benefit from the economies of landscape-scale conservation. Most of the compensation pools are run by Local Authorities to cover their individual development demands, but uniform national standards and procedures are being developed by Government.

The Brandenburg land pool is considered to be an exemplary case study of habitat banking in practice. Management of the 1,000 ha site includes extensifying farm practices (decreasing the use of fertilisers, pesticides, etc) and restoration of water bodies with long-term maintenance over 25 years. Developers prefer the 'pool' route as their obligations can be quickly and affordably met – hence, demand for the Brandenburg land pool is ever increasing.

Sweden

In Sweden, there is no clear regulatory framework and so delivery of NNL has been patchy, particularly with regard to residential and infrastructure developments. While the Environmental Code does provide regional authorities with the powers to require compensation for impacts to non-protected sites and habitats, these powers are rarely used and such impacts are usually ignored. Where compensation is secured it varies greatly and there is no habitat banking.

However, with a change in public perception and an increase in awareness, biodiversity compensation outside of protected areas is becoming more common. Plus, a **handbook on compensation** has recently been published with the aim of making application of the system more uniform. Although not explicitly mentioned in the handbook, adherence to the mitigation hierarchy is key. Since the handbook has been launched, a **public enquiry running until March 2017** aims to identify measures for a more efficient and consistent application of ecological compensation in Sweden.

Australia

Policy for biodiversity compensation/offsets has developed rapidly in Australia over the last decade with established frameworks in place at national and state levels (e.g. Bushbroker in Victoria and BioBanking in NSW). With the mitigation hierarchy underpinning these frameworks, there has been a general acceptance of market-based instruments. To accompany this, the growing wealth of biological data has enabled more accurate assessments of the impacts to biodiversity and the monitoring of compensation. Robust regulatory frameworks in the planning system and land tenure have introduced long-term confidence and legality to the system. In addition to the national EPBC Act, which triggers compensation if residual impacts are considered significant, there are now 7 states/territories with schemes and policies. Victoria and NSW have the oldest schemes, requiring like-for-like compensation sites.

In Victoria, by way of an example, **BushBroker** was set up by the state government to facilitate offset arrangements for impacts to native vegetation. Developers had access to a large registry of ready providers (mostly NGOs and farmers) and were sometimes able to secure their offsets quickly via an 'over-the-counter' purchase if their requirement was considered low risk. After 10 years and over 500 'credit trades' (via BushBroker alone), BushBroker is now a franchised system run by a number of accredited organisations/companies. Plus, the native vegetation policy was replaced in 2013 by a new framework that aimed to address some of the problems faced within the system - the main issue being the complexity when dealing with small developments with low risk impacts. Amendments, now in place, aimed to cut out this 'red-tape' so that risk-pathways are part of the decision-making process regarding impacts, determined by the extent and location of the habitat removal. The standard **metric** that has been used since introduction of the first framework is 'Habitat Hectares' where the condition and quality of a habitat (or uplift in condition based on management if assessing gains) is assessed against an ideal habitat benchmark.

New Zealand

The goal of New Zealand's current Biodiversity Strategy is to halt (and hopefully reverse) the decline of indigenous biodiversity. While no formal legislation or policy yet exists for biodiversity offsetting/compensation in NZ, the Government (Department of Conservation) has published'Guidance on Good Practice Biodiversity Offsetting in New Zealand '. This document and the principles within it provide a New Zealand context to the BBOP (Business and Biodiversity Offsets Program) Standard – it provides relevant stakeholders (policy-makers, planners, developers, etc) with an understanding of the concepts, with additional technical information available for ecologists and others who need more practical resources.

A biodiversity offsetting accounting system has also been developed, along with an associated user guide and worked examples. Similar to the UK and Australia, this **metric** is based on an area by condition calculation, along with a time 'discounter'. While the system was intended to be transparent and easy to use, it is also a 'flexible empty-shell' into which a user populates with background information including discount rates.

US Wetland & Conservation banking

The US has a No Net Loss policy, originating from the 1970's Water Act that required NNL of wetland. This has subsequently led to a mitigation banking system, for wetland credits. A Conservation Banking policy is also in place, underpinning the sale of credits from habitat for protected fauna species. **Wetland or conservation banks** may be privately or publicly owned with prices agreed between buyers and sellers to reflect the cost of the compensation activities required.

Within the wetland mitigation system, credits are usually calculated using the area of wetland lost, or length of waterway lost. While there is no standard methodology for calculating credits in the conservation banking system, generally the unit of measure is the area of habitat required to support one family group of a protected species - one credit equates to around one acre of habitat – and the same methodology must be used to calculate the magnitude of the impact at the development site.

Mitigation banking is now big business in the US, with over 1,000 wetland, stream and conservation banks either active or sold-out of credits, equating to 15,000 hectares and US2.0-3.4 billion annually.

Find out more;

- about how the system works in the UK – see Information sheet 1

All information sheets are downloadable from our online library
www.environmentbank.com/library.php

Contact us

To find out more about how the system is working here in the UK, or what Environment Bank do, please contact us on 07710 192295 (Louise Martland) or at admin@environmentbank.com, or see our website www.environmentbank.com for more information.