

## Biodiversity offsets:



## Views, experience, and the business case

### Executive summary

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## Full report

The full report of which this document is the Executive Summary can be found at:  
[http://www.insightinvestment.com/Documents/responsibility/Biodiversity\\_Offsets\\_Report.pdf](http://www.insightinvestment.com/Documents/responsibility/Biodiversity_Offsets_Report.pdf)  
and from IUCN at: <http://biodiversityeconomics.org/offsets>.

## Acknowledgements

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The report is based primarily on interviews and discussions with the individuals listed in Appendix 1 of the full report and the authors are extremely grateful to them for the information, views and insights that they shared and for their comments on the draft report. Interviewees were speaking in their personal capacity and their views may not be the official policy of the organisations for which they work. Many other individuals have kindly contributed information on particular boxes and information included in the report and the authors would like to thank them as well. The authors have made their best efforts to ensure the accuracy of the information contained in this report and apologise for any inadvertent errors.

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# Biodiversity offsets: Views, experience, and the business case

## *EXECUTIVE SUMMARY*

*For more information, see following sections of the main report:*

Biodiversity<sup>1</sup> offsets are conservation<sup>2</sup> activities intended to compensate for the residual, unavoidable harm to biodiversity caused by development projects. Recent experience with regulatory regimes, such as wetland and conservation banking in the USA, tradable forest conservation obligations in Brazil and habitat compensation requirements in Australia, Canada and the EU, has been supplemented by growing interest in the potential of voluntary biodiversity offsets.

*What is a biodiversity offset?  
Section 2*

This report is a joint effort by Insight Investment and IUCN-The World Conservation Union. Insight Investment is a fund management company based in the City of London managing approximately £75 billion of assets (as at 30 September 2004) on behalf of some 300 institutional investors and millions of retail customers of the HBOS group. Insight has both a financial interest and a moral responsibility to engage with companies in which it is invested to encourage them to adopt high standards on, and manage risks related to, key social, environmental and ethical issues, of which biodiversity is one. IUCN is a union of 77 nation states, 114 government agencies and over 800 non-governmental organisations dedicated to the vision of “a just world that values and conserves nature”. IUCN seeks to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable. As part of this effort, IUCN encourages dialogue with industry and debate among its membership to clarify concepts and practices on issues such as biodiversity offsets.

*See  
[www.insightinvestment.com/responsibility](http://www.insightinvestment.com/responsibility)  
and  
[www.iucn.org](http://www.iucn.org)*

The authors’ aim in conducting the interviews with companies, regulators and biodiversity experts that form the basis of this report was to explore the potential and limitations of biodiversity offsets as a tool for conservation: to consider the concepts involved, such as “net benefit” and “no net loss”, as well as why, where, when and by whom biodiversity offsets might be used, and what issues remain to be resolved.

This report contains a synthesis and interpretation of a series of semi-structured interviews about biodiversity offsets, conducted by the authors with 37 individuals from around the world between March and August, 2004. The authors have also drawn on shorter discussions with some 20 other people. In the report, we discuss the results of the interviews and draw preliminary conclusions regarding the potential and limitations of biodiversity offsets, and what should be done to improve them.

*Methodology  
section 1.1*

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<sup>1</sup> Biological diversity – or “biodiversity” for short – is a general term for the diversity of genes, species and ecosystems that constitute life on earth. It is defined in Article 2 of the Convention on Biological Diversity as “the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems”.

<sup>2</sup> According to Article 2 of the Convention on Biological Diversity, “In-situ conservation means the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties.” The range of conservation activities that might be involved in a biodiversity offset are described in section 6.5 of this report.

## Potential benefits of biodiversity offsets

Our overall finding from the interviews is that biodiversity offsets are widely seen as a useful tool for managing the adverse impacts of development activities on biodiversity. Some of the potential benefits of biodiversity offsets identified by those interviewed are as follows:

### *For companies, developers and investors:*

- The ability to undertake projects that might not otherwise be possible;
- Better relationships with local communities, government regulators, environmental groups and other important stakeholders;
- An enhanced reputation and therefore “social license to operate”;
- Increased “regulatory goodwill” which could lead to faster permitting;
- Easier access to capital and associated competitive advantages;
- A practical tool for managing social and environmental risks and liabilities;
- The possibility of influencing emerging environmental regulation and policy;
- Reduced costs of compliance with environmental regulations;
- “First mover” advantage for innovative companies; and
- Strategic opportunities in the new markets and businesses that emerge as biodiversity offsets become more widespread.

*Why biodiversity offsets? The business case. Section 5*

### *For environmental regulators and policy makers:*

- A mechanism to encourage companies to make increased contributions to biodiversity conservation, without necessarily requiring elaborate new rules;
- A means to ensure that development projects required to meet the growing demand for energy, minerals, food, fibre and transport are nonetheless planned in the context of sustainable development; and
- Better balancing of the costs and benefits of biodiversity conservation and economic development.

*Why biodiversity offsets? The regulatory case. Section 4*

### *For organisations devoted to the conservation of biodiversity:*

- The possibility of more *in situ* conservation activity than would occur if developers were not encouraged to offset their impacts on biodiversity;
- A way to ensure better conservation outcomes by offsetting degradation of natural habitat of relatively low biodiversity value for conservation or restoration of high biodiversity value habitat (e.g. focusing on ecological corridors and priority sites) and by trading small, highly compromised sites for larger areas of habitat where conservation outcomes are more secure;
- A mechanism to integrate conservation into development planning at a time of growing pressure for resource development; to internalise environmental “externalities”; and to integrate biodiversity conservation into the investment plans of companies;
- The possibility that offsets will give greater economic value to biodiversity, natural habitat and the restoration of degraded ecosystems; and
- A significant new source of finance for biodiversity conservation.

*Why biodiversity offsets? The conservation case. Section 3*

### *For communities affected by development projects:*

- A means to ensure that developers leave a legacy not only of properly rehabilitated project sites, but also additional conservation benefits in the surrounding area; a legacy that could support livelihoods and amenity values;
- The opportunity to negotiate optimal environmental, economic and social outcomes at a community or landscape scale; and
- A means to identify pre-project biodiversity and ecosystem benefits and to ensure that important ecosystems remain functioning and productive both during and after development projects.

## Disadvantages and risks of offsets

Despite the significant potential benefits of biodiversity offsets identified by our interviewees, several also acknowledged their limitations, the risks associated with offsets, and the reservations of many conservationists.

### *Offsets are no substitute for “no go” areas*

Where damage to biodiversity would be irreversible or where projects are proposed on sites of high environmental value, many people agree that development is simply not appropriate and should not proceed. This perspective is reflected in the general practice of designating permanent protected areas, where development activities are strictly limited by law. In such cases, the question of offsets should not even arise. Several of the individuals interviewed for this report were adamant that offsets should not be offered up in order to make unacceptable projects more palatable, where they could justifiably be perceived as seeking a “license to trash” for developers.

### *Failure to deliver*

Even where governments have introduced legal regimes to mandate biodiversity offsets, many conservation groups believe that the requirements for viable offsets have not been met. Wetland banking in the USA, for example, has been the subject of considerable controversy and some legal dispute. Several NGOs claim that the scheme has failed to deliver on its ecological promise and that the goal of “no net loss” of wetlands has not been met. On the basis of such experience, some conservation groups resist efforts to develop offset schemes elsewhere.

### *Controversy*

Offsets are controversial and subject to disagreement. Some conservation groups oppose the concept entirely, preferring to lobby for an outright ban on habitat conversion. Conversely, some developers oppose biodiversity offsets on the grounds that compensation will cost more than they can bear. The public, meanwhile, may be sceptical that offsets deliver net benefits and local communities may not feel that they stand to gain, particularly if the offsetting conservation activities take place far from the original development site, or if companies trade conservation benefits off against socio-economic ones, rather than delivering both.

A backlash against biodiversity offsets due to these or other problems could stifle interest in exploring voluntary offsets, particularly on the part of companies, as it would counter one of the strongest elements of the business case (i.e. reputational advantages and license to operate). These risks point to the need for credible and transparent standards, methodologies and guidelines for biodiversity offsets, if the approach is to be adopted more widely.

## Turning point

Biodiversity offsets are at a turning point: There is wide interest and growing experience around the world. Our interviews suggest that the use of biodiversity offsets as part of development projects is increasingly accepted as best practice by governments, companies and NGOs. Government authorities are investigating how they can use existing legal frameworks or introduce new policy to facilitate biodiversity offsets as part of existing project approval processes. Meanwhile, a number of companies are developing technical expertise and building institutional support for voluntary offsets. They are moving towards quantified approaches that demonstrate “no net loss” or even “net benefit” to biodiversity; experimenting with the practice of biodiversity offsets; and calling for help in designing methodologies to assess both sides of the offset equation: their impact and actions to benefit biodiversity. Leadership groups of companies such as the International Council of Mining and Metals (ICMM) and multi-stakeholder partnerships such as the Energy and Biodiversity Initiative (EBI) have also been working on the issue.

One basic challenge to the development of better biodiversity offsets is the lack of a common vocabulary, which hampers dialogue and comparison of experience. With few countries requiring biodiversity offsets and a general lack of intergovernmental discussion of the issue, most experience has emerged ad hoc. There has been little international exchange of information and no co-ordination to speak of. Not much is known of existing practice or innovations in biodiversity offsets. Several leading companies have recently announced commitments related to “net positive effect” on biodiversity, but none has published a clear strategy on how it intends to accomplish this. Above all, there is a lack of guidelines and tools to help those involved in biodiversity offsets to clarify their objectives, design effective projects that deliver on their promises, and transparently demonstrate their success or failure.

Against this background, we offer some initial conclusions based on our interviews and research.

## Key conclusions

*Biodiversity offsets are only relevant where development is appropriate and they should only take place as part of the environmental mitigation hierarchy*

Biodiversity offsets are no excuse for development projects that should not take place in the first place. Moreover, where a decision has been taken that a development project may proceed, biodiversity offsets should keep their proper place in the “mitigation hierarchy”. In other words, developers should seek first to avoid, minimise and mitigate the harm their projects cause (where “minimise” means to design a project in such a way as to reduce harm, and “mitigate” means to alleviate any residual harm to the extent possible). Companies, industry associations and others are increasingly suggesting that the appropriate goal for offsets is to go beyond “no net loss” and seek to achieve “net benefit”; that is, a measurable improvement in biodiversity compared to the *status quo ante*.

*Biodiversity offsets are feasible in a range of policy settings, each of which has advantages and disadvantages*

Offsets can take place within a broad spectrum that ranges from one-off voluntary agreements designed to compensate for the residual damage of a particular project, through more regular

voluntary offsets required by company policies, all the way to legally mandated compulsory offsets that can form the basis of a market in tradable “offset credits”.

Laws such as those in the USA, Canada, Europe and parts of Brazil require offsetting activities for damage caused by development projects to certain watersheds, species and ecosystems. In some other countries, such as Australia and Uganda, law and policy on conservation, environmental impact assessment, planning and negotiation of the terms and conditions of resource access and concession agreements offer a basis for agreement between regulators and companies to establish biodiversity offsets. Companies seeking to raise investment capital for development projects are likely to face requirements to establish mitigation measures – some of which may include off-site biodiversity offsets – in loan agreements from the IFC, and, since the advent of the Equator Principles, from several private sector banks. Finally, the business case may be sufficiently compelling to motivate some companies to conduct offsets on a purely voluntary basis.

Each of these contexts for biodiversity offsets has its own advantages and disadvantages. Regulatory regimes create legal certainty, clarify the expectations of companies on the design and implementation of offsets, help ensure a level playing-field and may facilitate the emergence of efficient markets in biodiversity credits. However, the institutional and legal prerequisites for an effective regulatory regime for biodiversity offsets exist in so few countries today that voluntary approaches are probably also needed to address urgent conservation challenges. The pace of biodiversity loss is simply too rapid and widespread to justify waiting for mandatory offset requirements in all countries. Furthermore, premature regulatory regimes can be restrictive and stifle innovation in the design of offsets that make the best possible contribution to conservation. Voluntary approaches offer flexibility and room for creativity although, without regulation or strong public support to back them up, they can more easily be abandoned in hard times.

### *Flexibility*

Many interviewees stressed the importance of flexibility and case-by-case responses as a prerequisite for appropriate biodiversity offsets. While the basic principles of offsets should be clear and consistent (see below), many practitioners argue that the rules governing offsets must also be sufficiently flexible to allow site-specific solutions that achieve the best possible results and also ensure that all relevant stakeholders are involved and satisfied.

### *Basic principles*

Our research suggests some basic principles of biodiversity offsets that apply in virtually all cases, even though their interpretation in specific cases may vary. Balancing the principles may involve some trade-offs. Drawing on the interviews and other sources, we arrive at the following general conclusions about designing offsets to achieve no net loss or net benefit to biodiversity:

- Measuring “no net loss” is a challenge but not an insuperable barrier: Limits to the current knowledge of biodiversity and its complexity mean that it can be very difficult to establish a “currency” to measure both the loss of biodiversity caused at a development site and the conservation that is needed to offset it elsewhere, in order to be confident that there is “no net loss”. Much more work is needed to develop socially acceptable and workable methodologies to measure both biodiversity loss and gain.
- Ecological equivalence and conservation priorities need to be balanced: Establishing ecological equivalence between the affected and offset sites –sometimes referred to as trading “like for like”– appears to be a good basis for ensuring no net loss of biodiversity. This bias toward equivalence should be tempered with sufficient flexibility to allow offsets to focus on agreed conservation priorities.

- Conservation priorities defined nationally or internationally must be balanced by local needs: In order to meet the needs of local stakeholders, offsets are normally implemented at a location that is sufficiently close to those who are most affected so that they can benefit from the outcome. In some cases, however, flexibility may be needed to allow for the selection of sites that will make a greater contribution to biodiversity conservation, even if that means conducting offsets further afield. In such cases, the consent of local people is essential.
- Offsets should demonstrate real *in situ* conservation outcomes: While financial support for taxonomic and other research and for capacity-building and training can make an important contribution to biodiversity, the conservation outcomes of activities such as training are often hard to demonstrate. Biodiversity offsets are only likely to deliver the business benefits of risk management and license to operate if they can demonstrate practical and measurable conservation outcomes in the field.
- Successful offsets require agreement among key stakeholders: The successful design and implementation of biodiversity offsets depends on satisfying key stakeholders including local communities, government authorities, environmental groups and the companies involved in a development project. The support of local communities is crucial. They may reject an offset that contributes to the country's top conservation priority if they do not benefit from it, or reject a neighbouring offset if it is of low conservation value. Ideally, the stakeholders will, together, weigh up the various factors to select biodiversity offsets that balance a mixture of considerations. It is not always easy to identify who has a legitimate place at the negotiating table. Dialogue can be time consuming and expensive and stakeholders are not always able to reach consensus. Notwithstanding these challenges, stakeholder involvement is vital.

### *Clear conservation priorities*

Offsets are predicated on the notion that biodiversity in one place may be damaged (or even destroyed) in return for the restoration or enhanced conservation of biodiversity somewhere else. In order to make such trade-offs, it is essential to reach broad agreement on conservation priorities; to assign values that allow a determination of what can be damaged, what needs to be protected, and what can be traded for what. Time and again, our interviewees stressed that those designing offsets should understand the conservation priorities of the country or region concerned and plan their offsets with a view to making the best possible contribution at an ecosystemic, landscape or eco-regional level. Familiarity with national biodiversity strategies and action plans and contact with relevant authorities and experts can help make offsets more effective. Many of the companies interviewed stated that they would welcome guidance on conservation priorities and described a lack of clarity on this issue as a significant constraint in the design of offsets.

### *Further work is needed*

Many interviewees identified the need for further work to articulate the concepts involved in biodiversity offsets and to develop guidelines and methodologies, particularly on the issue of "currency": the basis for measuring the loss of biodiversity caused at a development site and the conservation outcomes needed to offset it elsewhere. Some specific areas where further work is called for include:

- More dialogue and a shared vocabulary: Biodiversity offsets raise many scientific, social, political, legal and economic questions to which there are no easy answers. More open and informed debate is needed to develop a shared vocabulary on biodiversity offsets, to articulate the concept, to assess its political, scientific and commercial feasibility, to explore the various dimensions of offsets and to share information and experience. This

would help to address the evident suspicion that could become a barrier to further development of the approach. The debate should involve those who are sceptical about biodiversity offsets and those who have simply not given it much thought, as well as its more ardent supporters.

- Pilot projects and case studies to experiment and, if possible, demonstrate net benefits: The most effective way to address the many doubts that surround biodiversity offsets would be to point to projects on the ground that demonstrably improve the status of biodiversity. Practical experience, for instance through pilot projects and case studies documenting the design, implementation and evaluation of biodiversity offsets, is an essential input to the debate, as well as the development of guidelines and methodologies.
- Ensure all stakeholders play their part: If they are to succeed, biodiversity offsets will need support from of companies, governments, NGOs and local communities; first in exploring the general approach of “no net loss”, and then in the design of specific offset projects. It has become clear through our research and interviews that any progress on the issue will require certain steps to be taken by each of these stakeholders. Some of these steps are outlined below:

## Recommendations

### *Recommendations for companies*

For companies, biodiversity represents both a business risk and an opportunity. Biodiversity offsets are but one tool they can use to manage this risk and capitalise on the opportunity. In doing so, companies should:

- Clarify to external audiences and to staff and contractors their policy commitment on biodiversity, including reference to the mitigation hierarchy and to biodiversity offsets.
- Communicate a clear strategy for how they plan to implement their policy commitments, preferably including specific, time-bound targets. As part of this strategy, companies should set out how they propose to achieve any commitments to “no net loss” or “positive impacts on biodiversity”. We recommend that this aspect should comprise two main elements: (a) biodiversity offsets to be a routine part of project design for new projects in areas of high biodiversity value, where permitted by local authorities; and (b) group-level contributions to conservation (which might include capacity-building and research) with the broad aim of offsetting the cumulative effect of the company’s other impacts on biodiversity, for instance in urban or other sites of lower biodiversity value.
- Communicate their experience of designing and implementing biodiversity offsets.
- Look for opportunities to participate in pilot projects to design and implement biodiversity offsets, working in collaboration with representatives from local communities and government and drawing on appropriate expertise.
- Work with NGOs and other experts to develop guidelines and methodologies and consistent and transparent indicators for achieving “no net loss” that can satisfy stakeholders and be workable in practice.
- Encourage governments, communities, NGOs and others to identify clear biodiversity, ecosystemic, and other conservation priorities needed to make offsets possible.

### *Recommendations for governments*

As described above, biodiversity offsets may be used in a variety of policy contexts, from the highly prescriptive regulatory regime of the US Clean Water Act to the more basic setting of environmental and planning law found in many parts of the world. Governments seeking to test or encourage biodiversity offsets should:

- Provide an enabling policy framework. This will not necessarily require the introduction of new law mandating biodiversity offsets. On the other hand, offsets are unlikely to succeed without effective law and policy on conservation; environmental impact assessment and mitigation; land use planning and zoning; conditions for extractive and other industrial developments with biodiversity impacts; and clear national sustainable development goals and priorities with associated national biodiversity strategies and action plans.
- Communicate clearly their national and local conservation priorities.
- Collaborate with other stakeholders to develop guidelines on best practice on biodiversity offsets.
- Engage, where appropriate, at the national or local level, in site-specific negotiations on the most appropriate design for biodiversity offsets.
- Work with other government parties to the Convention on Biological Diversity to discuss biodiversity offsets under the auspices of the CBD under a suitable agenda item, such as implementation of Article 11 (Economic incentives) or as part of an endeavour to engage the business community in securing the objectives of the treaty.

### *Recommendations for NGOs & conservation experts*

Many of our interviewees stressed the important role that conservation groups and experts in the natural and social sciences and in law and economics can play in developing the concept of biodiversity offsets, including the design of ground-rules and methodologies needed to move forward. For companies, the support of members of the NGO community is critical to their motivation to implement biodiversity offsets voluntarily. Several company representatives interviewed for this report posed a specific challenge to NGOs to co-ordinate their views and engage in discussions with government and companies to prioritise conservation efforts. NGOs and conservation experts prepared to engage constructively in this debate should:

- Foster and contribute to dialogue on biodiversity offsets to explore their potential advantages and disadvantages.
- Contribute their expertise and engage with other members of the NGO and expert community to agree and communicate conservation priorities.
- Contribute technical expertise and work with companies and governments to develop transparent guidelines and methodologies, as well as consistent and transparent measures and indicators for achieving “no net loss” of biodiversity that will satisfy the needs of stakeholders and be workable in practice.
- Help to build the capacity of companies, governments and communities to discuss conservation priorities and to engage in fair and transparent discussions on offsets, both generally and in specific cases.
- Help to monitor and evaluate biodiversity offset projects.

### *Recommendations for communities*

Communities affected by development projects are often those who stand to lose or gain the most from biodiversity offsets. Their involvement is crucial. Communities interested in this approach should:

- At the political level, signal interest in biodiversity offsets to governments and companies. Fear that communities will not accept offsets is one of the greatest barriers to their use.
- When biodiversity offsets are planned at the project level, engage with government and companies and seek independent expert advice. This would help all concerned to select and design biodiversity offsets that ensure the original site is sufficiently rehabilitated while the offset project delivers the appropriate mixture of local benefits and contribution to biodiversity priorities.

## Next steps for Insight and IUCN

Insight Investment plans to use this report as the basis for engagement with companies in which it is invested, to encourage them to address the business risks associated with biodiversity to which they are exposed. Insight also aims to contribute to discussions on biodiversity offsets taking place in groups such as the Energy and Biodiversity Initiative and the International Council on Mining and Metals.

Insight Investment is collaborating with Forest Trends on a programme to establish a number of pilot biodiversity offset projects around the world.

The authors plan to present this report and discuss the issues involved at the IUCN World Conservation Forum in Bangkok in November 2004. This and other venues will be used to explore the concept of biodiversity offsets by promoting dialogue with industry and debate among the conservation community. It is hoped that further stakeholder dialogue will help to clarify the concepts and practices involved and to develop appropriate policy frameworks and practical guidelines for equitable, sustainable and cost-effective biodiversity offsets.