To No Net Loss and Beyond

An Overview of the Business and Biodiversity Offsets Programme (BBOP)






BBOP
Business and Biodiversity Offsets Programme

Forest Trends and the Wildlife Conservation Society provide the Secretariat for BBOP.

Publication Data

Business and Biodiversity Offsets Programme (BBOP). 2013. *To No Net Loss and Beyond: An Overview of the Business and Biodiversity Offsets Programme (BBOP)*, Washington, D.C.

Available from www.forest-trends.org/biodiversityoffsetprogram/guidelines/Overview_II.pdf

ISBN 978-1-932928-56-3 (paperback) ISBN 978-1-932928-55-6 (PDF)

Cover and graphic design by Rima Design and Forest Trends.

HBP is a FSC-certified printing company and uses vegetable based inks. This publication is printed on Lynx Opaque, a FSC / Recycled paper.

About this document

This updated Overview document with its Principles on Biodiversity Offsets, introduction to the Standard on Biodiversity Offsets, and the accompanying supporting materials have been prepared by the Business and Biodiversity Offsets Programme (BBOP). BBOP aims to help developers, conservation groups, communities, governments and financial institutions who wish to consider and develop best practice related to achieving no net loss of biodiversity through the thorough application of the mitigation hierarchy (avoid, minimise, rehabilitate/restore, offset). The Principles and Standard have been developed and tested by members of the BBOP Secretariat and Advisory Group[1] since 2004 and have benefited from contributions and suggestions from many people who registered on the BBOP consultation website and numerous others who have joined us for discussions in meetings.

All Advisory Group members support the Principles, a growing number of companies are using the Standard, and the members commend the full set of BBOP tools and case studies to readers as a source of guidance on which to draw when considering, designing and implementing biodiversity offsets. Best practice in following the mitigation hierarchy and using biodiversity offsets to demonstrate no net loss is still developing. The concepts and methodologies presented here will be refined over time based on practical experience and broad debate within society.

All those involved in BBOP are grateful to the companies who have volunteered pilot projects and for the support of the donors listed overleaf, who have enabled the Secretariat and Advisory Group to prepare these documents.

BBOP is now in the third phase of its work, during which we aim to collaborate with more individuals and organizations around the world, to improve the Standard based on experience and to enable professionals from many backgrounds to learn and share experience with the mitigation hierarchy and biodiversity offsets through a broad, international Community of Practice. BBOP is a collaborative program, and we welcome your involvement. To learn more about the program and how to get involved please:

See: **www.forest-trends.org/biodiversityoffsetprogram**
Contact: bbop@forest-trends.org

1 As at 28 January 2013, the BBOP Advisory Group comprises representatives from: Ambatovy Project; Arup; Biodiversity Works; Biotope; BirdLife International; CDC Biodiversité; Centre for Research-Information-Action for Development in Africa; Citi; Conservation International; Daemeter Consulting; Department for Environment and Rural Affairs – Defra (UK); Department of Conservation, New Zealand; Earthwatch Institute; Ecoagriculture Partners; EcoDecisión; Environ Corporation; Environmental Banc & Exchange; Environmental Resources Management; ERAMET - PT WEDABAY Nickel Project; European Bank for Reconstruction and Development; Fauna & Flora International; Forest Trends; Wildlife Division, Forestry Commission, Government of Ghana; Global Environment Fund; Golder Associates; Grupo Ecológico Sierra Gorda, I.A.P., México; Hardner & Gullison Associates; Inmet Mining; Inter-American Development Bank; International Conservation Services CC; International Institute for Environment and Development; International Union for Conservation of Nature (IUCN); KfW Bankengruppe; Leibniz Institute of Ecological and Regional Development (IOER); Markit Environmental Registry; Ministry of Ecology, Energy, Sustainable Development, and Spatial Planning, France; Ministry of Infrastructure and the Environment, The Netherlands; Ministry of Mines and Energy, Namibia; Ministry of Nature, Environment and Tourism, Mongolia; Mizuho Corporate Bank; National Environment Management Authority, Uganda; National Institute of Ecology, Mexico; Nature Conservation Resource Center, Ghana; New Britain Palm Oil Ltd.; New Forests; Newcrest Mining Limited; Nollen Group; Proforest; Rainforest Alliance; Response Ability, Inc.; Royal Botanic Gardens, Kew; Scientific Certification Systems; SLR Consulting; Solid Energy Coals of New Zealand; South African National Biodiversity Institute; Sveaskog; Tahi Estate; The Biodiversity Consultancy; The Brazilian Biodiversity Fund (Funbio); The Environment Bank; The Nature Conservancy; Tonkin and Taylor; Treweek Environmental Consultants; Tulalip Tribes, US; United Nations Development Programme (Environment and Energy Group); United Nations Environment Programme – World Conservation Monitoring Centre (UNEP-WCMC); WWF; Wildlands Inc.; Wildlife Conservation Society; Winstone Aggregates; Zoological Society of London; and the following individuals: Steve Botts; Susie Brownlie; Mark Christensen; Michael Crowe; Toby Gardner; Martin Hollands; Louise Johnson; Daniela Lerda; Paul Mitchell; Dave Richards;Shelagh Rosenthal.

For an updated list of Advisory Group members, see: **http://bbop.forest-trends.org/pages/advisory_group**

We thank those organizations that have provided financial support for BBOP's work between 2009 and 2012:[2]

UNDP

gef

IFC International Finance Corporation World Bank Group

MacArthur Foundation

UKaid from the Department for International Development

RICHARD AND RHODA GOLDMAN FUND

NL Agency Ministry of Economic Affairs, Agriculture and Innovation

European Bank for Reconstruction and Development

In addition, the Secretariat is grateful to the Advisory Group members for contributing membership fees and in-kind support.

2 Endorsement of some or all of the BBOP documents is not implied by financial support for BBOP's work.

Contents

Business, biodiversity, and no net loss: Meeting new demands. 2

The Business and Biodiversity Offsets Programme (BBOP). 4

BBOP's progress and achievements 5

- The BBOP Principles 5
- The Standard on Biodiversity Offsets 5
- Guidance and case studies to accompany the Standard. 8
- Other relevant developments 9

The future for BBOP and biodiversity offsets 12

- Reasons for engagement now 13
- BBOP Standard on Biodiversity Offsets: Principles with Criteria and Indicators 14

Business, biodiversity, and no net loss: Meeting new demands

How can a company show that its environmental performance reflects evolving best practice? In the last few years there have been significant changes in investor requirements of companies, in law and policy and in the expectations of employees, local communities and environmental NGOs. These developments require or encourage companies to demonstrate "no net loss" or even a "net gain" of biodiversity in the context of their operations.

This demands a sophisticated approach to handling risk and opportunity related to natural capital, but leaves a number of questions open: How much to invest in rerouting a pipeline or setting aside a piece of land that could be developed? Who to involve and how to secure long term sustainable development objectives once a project has closed? How to measure impacts on biodiversity and dependence on ecosystem services? Whether to get involved in activities outside the company's main zone of influence? How to tackle multiple overlapping issues such as biodiversity, carbon, water, and poverty alleviation? How to work with governments, particularly at the regional and local levels, when they too are coming to terms with these new challenges?

For their operations to run smoothly, companies must find answers to these questions in the challenging economic climate that compels environmental managers to justify every dollar they spend. This demands skill in risk management and in following the mitigation hierarchy: avoid, minimize, restore, and offset.[3]

Biodiversity offsets constitute measurable conservation gains, deliberately achieved to balance any significant biodiversity losses that cannot be

countered by avoiding or minimizing impacts from the start, or addressing the damage done through restoration. As Figure 1 shows, offsets are specifically designed to address the impacts that remain in such a way that the offset can reasonably be predicted, on the basis of our scientific understanding, to result in no net loss of biodiversity, including the perspective of relevant stakeholders. They help companies develop partnerships with governments, civil society and conservation organizations to address the environmental impacts of their activities, and to enhance their contribution to biodiversity conservation and sustainable development. However, attempting to achieve "no net loss" without proper

3 The term "compensation" is sometimes seen in the literature instead of, or as well as, "offset". In some languages, there is no separate word for "offset", and "compensation" is used instead. However, in other languages, both terms exist and can sometimes be distinguished. BBOP makes a clear distinction, defining offsets as a specific kind of compensation designed to achieve no net loss or a net gain of biodiversity, while compensation may not achieve no net loss, for a variety of reasons. Typical reasons are that the compensation was not designed to achieve no net loss; gains were not quantified to balance the losses; no net loss cannot be achieved because the impacts are too severe to offset; information is missing on the nature and condition of the biodiversity affected by the project; or the compensation activities were not established for the long term.

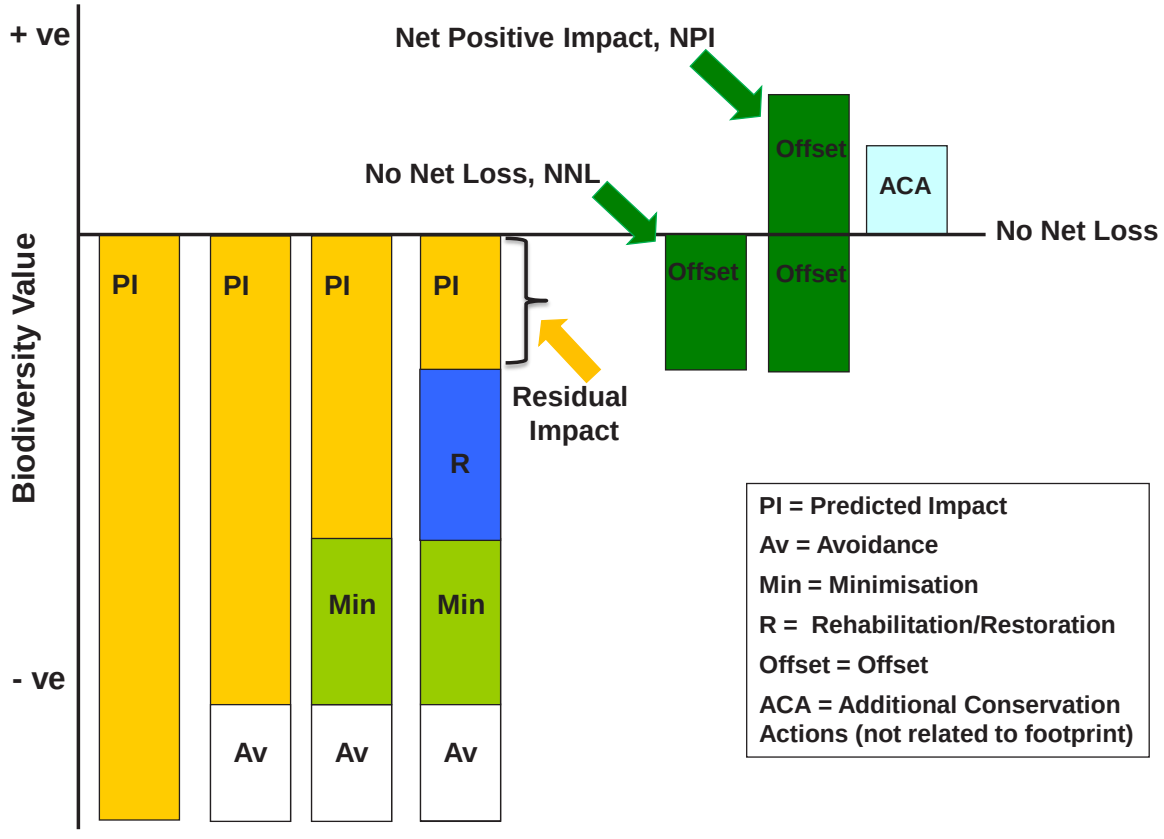


regard to the mitigation hierarchy and the use of appropriate methodologies can do more harm to biodiversity, communities and to companies than it does good.

Recognizing that there was no clear and reliable way to answer the opening question "what is good enough?", over 90 collaborators in the Business and Biodiversity Offsets Programme (BBOP) have developed a Standard on Biodiversity Offsets. The aim of the Standard is to help companies, lenders, governments, civil society and auditors navigate through the mitigation hierarchy and establish sustainable conservation programs to achieve no net loss or a net gain of biodiversity. It allows companies to assess and manage business risk and opportunity, compare their performance with peers in their sector and distinguish themselves from competitors.

This overview document provides an introduction to the Business and Biodiversity Offsets Programme, its work to date in helping companies meet these new challenges and opportunities, and ways to get involved. It is an update of the overview first published in 2009.

Figure 1: The Mitigation Hierarchy



Adapted fro Rio Tinto & Government of Australia

The Business and Biodiversity Offsets Programme (BBOP)

Over the last eight years, the Business and Biodiversity Offsets Programme (BBOP), now a partnership of more than 90 leading organizations and individuals including companies, governments, conservation experts and financial institutions from around the world, has been exploring the mitigation hierarchy, with an emphasis on biodiversity offsets.[4] This section defines biodiversity offsets and describes the Principles, the Standard on Biodiversity Offsets and other tools produced by BBOP.

Defining biodiversity offsets

The BBOP partners have defined biodiversity offsets (see Box 1) as the measurable conservation outcomes that result from actions designed to compensate for development projects' impacts. Key elements of this definition are clarified in the Principles on Biodiversity Offsets (page 6). Essentially, 'conservation outcomes' refer to improved maintenance and recovery of viable populations of species in their natural surroundings. To qualify as an offset, the conservation outcomes should be quantified, since the purpose of biodiversity offsets is to demonstrate a balance between a project's impacts on biodiversity and the benefits achieved through the offset. This involves measuring both the residual losses to biodiversity caused by the project (after avoidance, minimization and restoration) and the conservation gains achieved by the offset.

Box 1: Definition of Biodiversity Offsets

Biodiversity offsets are measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development* after appropriate prevention and mitigation measures have been taken.

The goal of biodiversity offsets is to achieve no net loss and preferably a net gain of biodiversity on the ground with respect to species composition, habitat structure, ecosystem function and people's use and cultural values associated with biodiversity.

* While biodiversity offsets are defined here in terms of specific development projects (such as a road or a mine), they could also be used to compensate for the broader effects of programmes and plans.

4 http://bbop.forest-trends.org/pages/advisory_group.

BBOP's progress and achievements

The BBOP Principles

BBOP is a voluntary collaboration that has operated by seeking consensus among the members of its broad Advisory Group, representing groups in society with diverse perspectives on environment and development from many different countries. They have worked rigorously to reach agreement on fundamental issues relating to biodiversity offsets, and to develop practical guidelines for offset design and implementation.

Chief among BBOP's outputs is a set of ten fundamental principles which members of the Advisory Group unanimously support and which they hope other companies, governments and civil society will also adopt as a sound basis for planning for no net loss of biodiversity. The principles are set out in Box 2 and provide the compass and framework for all the other BBOP products. Approaches to mitigation that follow these principles should achieve the best outcomes for biodiversity and manage the risks associated with biodiversity offsets.

The Standard on Biodiversity Offsets

In 2009, when BBOP published the Principles, Handbooks and case studies, the members recognized that best practice on biodiversity offsets was still in its infancy. They felt that the concepts and methodologies involved deserved further discussion, development, testing and refinement based on more practical experience and broad debate within society. Consequently, BBOP embarked on its second phase of work from 2009-June 2012. In particular, members felt that what was needed was an agreed standard on biodiversity offsets, allowing companies to demonstrate in a credible way that their approach to the mitigation hierarchy reflected best practice.

The Standard on Biodiversity Offsets ("the Standard") (http://bbop.forest-trends.org/guidelines/Standard.pdf) and the accompanying supporting materials were developed by members of the BBOP Secretariat and Advisory Group and released in January 2012. Their aim was to enable companies and their investors and auditors to determine whether international best practice has been followed in avoiding and minimizing impacts on biodiversity, undertaking restoration, and ultimately offsetting any residual impacts in order to demonstrate no net loss, or preferably a net gain, of biodiversity. The Standard (which appears on pages 14 to 20) presents criteria and indicators built on the set of ten principles on biodiversity offsets which define best practice in biodiversity offsets. It is accompanied by guidance notes for assessors and a glossary. It is the product of seven years of experimentation and negotiation among over 90 companies, governments, civil society organizations, research groups and financial institutions from around the world, as well as public consultations. The BBOP Standard complements other standards on carbon, and water, and guidelines on alleviation of poverty and helps companies show they meet safeguards established by the World Bank and the International Finance Corporation.

Box 2: Principles on Biodiversity Offsets supported by all the members of the BBOP Advisory Group

Biodiversity offsets are measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development* after appropriate prevention and mitigation measures have been taken. The goal of biodiversity offsets is to achieve no net loss and preferably a net gain of biodiversity on the ground with respect to species composition, habitat structure, ecosystem function and people's use and cultural values associated with biodiversity.

These principles establish a framework for designing and implementing biodiversity offsets and verifying their success. Biodiversity offsets should be designed to comply with all relevant national and international law, and planned and implemented in accordance with the Convention on Biological Diversity and its ecosystem approach, as articulated in National Biodiversity Strategies and Action Plans.

1. Adherence to the mitigation hierarchy: A biodiversity offset is a commitment to compensate for significant residual adverse impacts on biodiversity identified after appropriate avoidance, minimization and on-site rehabilitation measures have been taken according to the mitigation hierarchy.

2. Limits to what can be offset: There are situations where residual impacts cannot be fully compensated for by a biodiversity offset because of the irreplaceability or vulnerability of the biodiversity affected.

3. Landscape context: A biodiversity offset should be designed and implemented in a landscape context to achieve the expected measurable conservation outcomes taking into account available information on the full range of biological, social and cultural values of biodiversity and supporting an ecosystem approach.

4. No net loss: A biodiversity offset should be designed and implemented to achieve in situ, measurable conservation outcomes that can reasonably be expected to result in no net loss and preferably a net gain of biodiversity.

5. Additional conservation outcomes: A biodiversity offset should achieve conservation outcomes above and beyond results that would have occurred if the offset had not taken place. Offset design and implementation should avoid displacing activities harmful to biodiversity to other locations.

6. Stakeholder participation: In areas affected by the project and by the biodiversity offset, the effective participation of stakeholders should be ensured in decision-making about biodiversity offsets, including their evaluation, selection, design, and implementation and monitoring.

7. Equity: A biodiversity offset should be designed and implemented in an equitable manner, which means the sharing among stakeholders of the rights and responsibilities, risks and rewards associated with a project and offset in a fair and balanced way, respecting legal and customary arrangements. Special consideration should be given to respecting both internationally and nationally recognized rights of indigenous peoples and local communities.

8. Long-term outcomes: The design and implementation of a biodiversity offset should be based on an adaptive management approach, incorporating monitoring and evaluation, with the objective of securing outcomes that last at least as long as the project's impacts and preferably in perpetuity.

9. Transparency: The design and implementation of a biodiversity offset, and communication of its results to the public, should be undertaken in a transparent and timely manner.

10. Science and traditional knowledge: The design and implementation of a biodiversity offset should be a documented process informed by sound science, including an appropriate consideration of traditional knowledge.

* While biodiversity offsets are defined here in terms of specific development projects (such as a road or a mine), they could also be used to compensate for the broader effects of programs and plans.

The Standard is presented as a hierarchy of Principles, Criteria and Indicators (PCI): an architecture similar to that used in a number of other standards. 'Principles' are interpreted as the fundamental statements about a desired outcome. 'Criteria' are the conditions that need to be met in order to comply with a Principle. 'Indicators' are the measurable states which allow the assessment of whether or not a particular Criterion has been met. Although the PCI focus on the ecological aspects (e.g., intrinsic ecological values) of biodiversity, the principles also embrace its socioeconomic and cultural values. These must be taken into consideration in following the mitigation hierarchy[5] and demonstrating no net loss or a net gain of biodiversity. Taking care of these values is also essential to ensure the long-term success and sustainability of biodiversity offsets.

The Standard is intended for two principal categories of users:

• **Assessors and Auditors:** The PCI were prepared to enable auditors and assessors to determine whether an offset has been designed and subsequently implemented in accordance with the BBOP Principles. Assessment could be undertaken by a variety of people. An assessor could be an employee of a company designing a biodiversity offset (first-party assessment), a member of an NGO that is a company's partner or some other organisation associated with the company (second-party assessment), or a third-party auditor or evaluator. Consequently, the principal users of the Standard and accompanying Guidance Notes will be individuals assessing biodiversity offsets against the Standard. Assessment takes place once a biodiversity offset has been designed and continues through the implementation stage.

• **Offset designers and implementers:** Since biodiversity offsets are likely to be assessed against the Standard, it will be useful for individuals to refer to the PCI as they design and implement the biodiversity offset, so the offset will meet the Standard. The PCI could thus provide guidance for offset design and implementation, when used with other "How to" tools for offset design and implementation such as BBOP's Handbooks.

In addition, there are other potential audiences for the Standard:

• **Policy makers:** Those involved in developing and administering policy on the mitigation hierarchy and biodiversity offsets (whether they work for governments, individual companies or industry associations) may also find the Standard and Guidance Notes useful, as they capture international best practice on identifying impacts on biodiversity and applying the mitigation hierarchy (avoid, minimize, rehabilitate/restore, offset).

• **Civil society:** Similarly, representatives from local communities, indigenous peoples and civil society organisations such as NGOs may find the Standard and Guidance Notes helpful if they are affected by or interested in a project or biodiversity offset. The documents could help inform their dialogue with developers.

5 The mitigation hierarchy is defined as:

a. Avoidance: measures taken to avoid creating impacts from the outset, such as careful spatial or temporal placement of elements of infrastructure, in order to completely avoid impacts on certain components of biodiversity.

b. Minimisation: measures taken to reduce the duration, intensity and/or extent of impacts (including direct, indirect and cumulative impacts, as appropriate) that cannot be completely avoided, as far as is practically feasible.

c. Rehabilitation/restoration: measures taken to rehabilitate degraded ecosystems or restore cleared ecosystems following exposure to impacts that cannot be completely avoided and/or minimised.

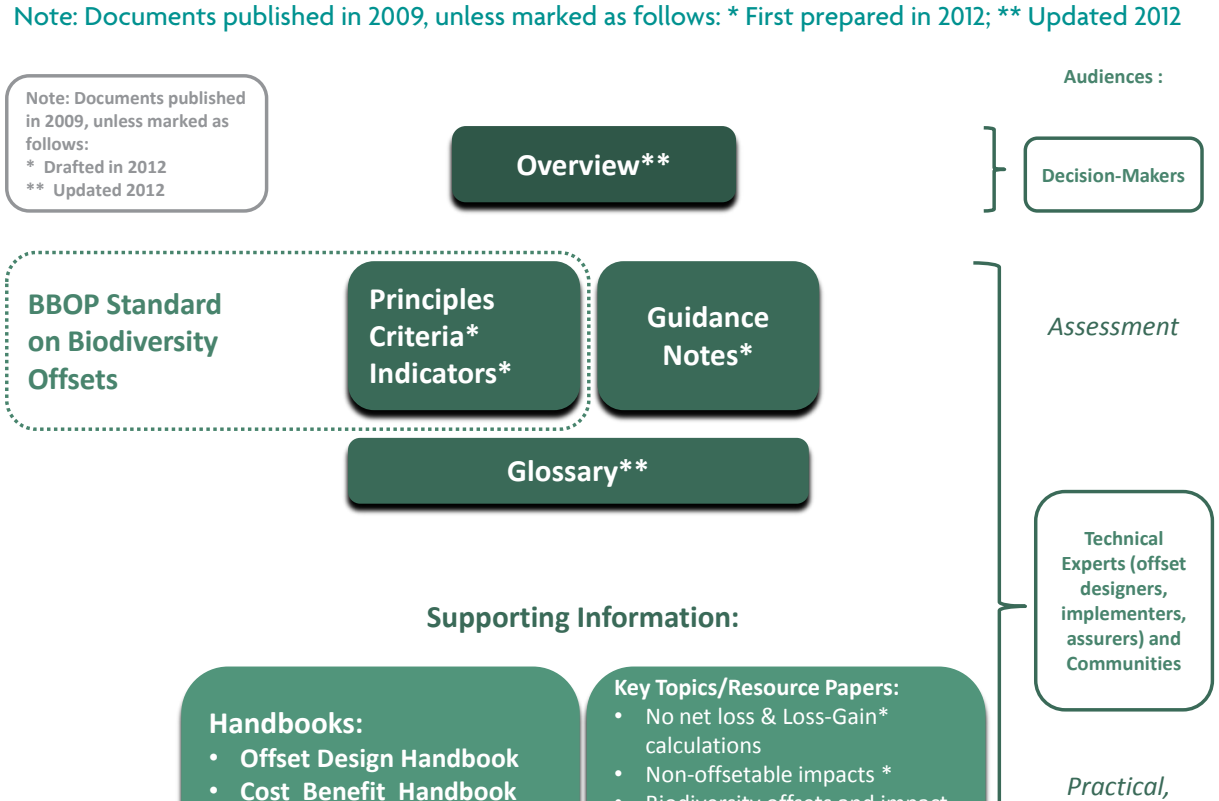
d. Offset: measures taken to compensate for any residual significant, adverse impacts that cannot be avoided, minimised and/or rehabilitated or restored, in order to achieve no net loss or a net gain of biodiversity. Offsets can take the form of positive management interventions such as restoration of degraded habitat, arrested degradation or averted risk, protecting areas where there is imminent or projected loss of biodiversity.

Guidance and case studies to accompany the Standard

Figure 2 illustrates the full set of tools and products that accompany the Standard on Biodiversity Offsets. All are freely available on the BBOP website.

Figure 2: BBOP Standard on Biodiversity Offsets and Associated Material

Note: Documents published in 2009, unless marked as follows: * First prepared in 2012; ** Updated 2012



The Standard is accompanied by Guidance Notes for Assessors. These help users determine whether an offset has been designed and subsequently implemented in conformance with the BBOP Principles, Criteria and Indicators. They give an interpretation of each Indicator; key questions for assessment; factors to consider in assessing conformance (conformance requirements and situations that are likely to represent causes of non-conformance); as well as related activities from other Indicators.

This is available at: http://bbop.forest-trends.org/guidelines/Standard_Guidance_Notes.

The three Handbooks provide a description of key issues worthy of consideration, outline typical steps to take in offset design and implementation, and offer guidance on how to do so. They include a range of optional tools and methodologies that might be used in different circumstances. A set of resource papers are available to provide supplementary guidance. These cover no net loss and important features of loss-gain calculations; impacts that are sufficiently severe that offsets are unlikely to succeed; stakeholder participation; and the relationship between biodiversity offsets and impact assessment. The webpage also hosts case studies on the BBOP pilot projects and on a range of other biodiversity offset and compensatory conservation projects. Finally, a glossary clarifies the terminology used throughout the documents.

Other relevant developments

When BBOP started at the end of 2004, the concept of biodiversity offsets was little known, often misunderstood and barely tried or tested in most parts of the world. It was rarely acknowledged as a tool that might contribute to sustainable development. There was no international forum to bring together groups from all sectors of civil society to discuss and work on this promising, but complex and controversial mechanism. Furthermore, there were few projects with explicit goals of "no net loss" or a "net gain" of biodiversity to which people could contribute their ideas, and case studies of voluntary biodiversity offsets could be counted on the fingers of one hand.

BBOP has stimulated and contributed to increasing global interest and commitment to biodiversity offsets. Biodiversity offsets have attracted considerable interest and support, which continues to grow. Many environmental managers and government planners are familiar with the idea. More governments have introduced offset policy and others are now developing it. Banks are increasingly including biodiversity offsets in their loan conditions, and more companies see that project design for 'no net loss' makes business sense and are using them as a means to secure good working relationships with communities and government authorities. Industry associations, inter-governmental organizations, non-governmental organizations, academics, and the media have all published on the subject.

In our 2009 Overview document, we listed pilot projects with companies in several countries, as well as discussions with a range of governments on policy options for embracing no net loss and decisions in a number of intergovernmental meetings referring to BBOP and biodiversity offsets. Since 2011, BBOP has stepped back from offering technical advice to specific companies and governments, choosing instead to focus on improving the Standard and facilitating a community of practice. Nevertheless, since then, the BBOP Standard and Toolkit are being used and referenced by BBOP members and others in a number of settings, including the following:

• Company use of the Standard and toolkits and other developments on "no net loss":

The BBOP Standard on Biodiversity Offsets is being used in three principal ways: as a framework for the assessment of risk and opportunity for projects at the pre-feasibility stage; during the design of mitigation measures including biodiversity offsets; and to assess biodiversity offset design and implementation to see whether it accords with the Standard. When this document went to press, the BBOP Secretariat was aware of the Standard being used by companies in the mining, tourism and forestry sectors in Madagascar, Botswana, Sweden, Romania, Colombia, Indonesia, and New Zealand, among others.

In addition to specific projects on the ground, a range of companies are starting to make corporate statements and policies related to 'no net loss', and encouraging government to adopt related policy commitments. For instance, the members of the Natural Capital Leaders Platform (Alstom, AngloAmerican, Arup, Asda, Aviva, Grupo Andre Maggi, Kingfisher, Mars, Natura, Nestle, Olam, Puma, SAB Miller, Unilever, Volac, and Votorantim) developed the "Natural Capital Leadership Compact" in 2012. This is a business statement of intent that also urges international governments to commit to a global policy framework on the responsible and sustainable use of natural resources. In it, among several other commitments, the companies pledge to operate within the limits of natural systems, and they urge governments to "set a clear goal of 'no net loss'. Some companies have already adopted the principle of 'no net loss', aiming to replenish natural capital of forests or biodiversity depleted through their operations. Governments should set similar goals for key natural capital assets (e.g., wetlands, forests and coastal habitats)."

• Reference to and use of the Standard and BBOP toolkit by financial institutions, governments and intergovernmental organisations:

A significant development in the application of the mitigation hierarchy to biodiversity has been the revision of the International Finance Corporation's Performance Standard 6 (PS6),[6] which took effect from 1 January 2012. This is a requirement of clients seeking project finance from the IFC, and from 2012[7] is also a condition of project finance from over seventy banks that have adopted the Equator Principles, and thus apply the IFC's Performance Standards.

Clients are required to demonstrate no net loss of biodiversity (where feasible) for their impacts on "natural habitat" (as defined by the IFC), and a net gain of biodiversity for their impacts on "critical habitat." The definition of biodiversity offsets in PS6 is in alignment with the core elements of BBOP's definition, and the requirements mentioned in PS6 (e.g., "like for like") are contained within the BBOP Standard. The two documents are complementary to one another. Guidance Note 6[8] also references the BBOP Principles as an internationally recognized standard in biodiversity offset design.

The IUCN resolution on "biodiversity offsets and related compensatory approaches" at the World Conservation Congress in Jeju in September 2012 noted the work and products developed by BBOP, including the Standard.

The BBOP Standard and the other tools and products of BBOP described in this document have informed recent policy developments in Colombia, Peru, South Africa, New Zealand and France, with other governments starting work in the area.

The EU biodiversity strategy to 2020 commits to "Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss." The European Commission has launched "An initiative on No Net Loss for the EU for 2015."[9] In April 2012, the European Parliament urged the Commission to "develop an effective regulatory framework based on the 'No Net Loss' initiative, taking into account the past experience of the Member States while also

6 http://www1.ifc.org/wps/wcm/connect/bff0a28049a790d6b835faa8c6a8312a/PS6_English_2012.pdf?MOD=AJPERES

7 The Equator Principles Association Steering Committee has agreed that the newly revised IFC Performance Standards will take effect for EP Association Members on 1 January 2012, just as they do for the IFC. Accordingly Exhibit III of the Equator Principles (which refers to the 2006 IFC Performance Standards) will be updated on 1 January 2012 to reflect their implementation by EP Association members under the current EP framework. The existing EPs (specifically Exhibit III) will refer to the revised IFC Performance Standards from 1 January 2012. The revised IFC Performance Standards should be applied by EP Association Members (as per the EPs) to all new and current project finance transactions when the borrower has commissioned an Environmental and Social Impact Assessment (ESIA) on or after 1 January 2012. The 2006 IFC Performance Standards can be applied to current project finance transactions when the borrower has commissioned an ESIA before 1 January 2012 on the proviso that it is completed by 30 June 2012. All new transactions after 30 June 2012 should apply the revised IFC Performance Standards. See: http://www.equator-principles.com/index.php/all-ep-association-news/ep-association-news-by-year/83-ep-association-news-2011/254-revised-ps

8 http://www1.ifc.org/wps/wcm/connect/a359a380498007e9a1b7f3336b93d75f/Updated_GN6-2012.pdf?MOD=AJPERES

9 http://www.business-biodiversity.eu/global/download/%7BSVQGFYZMWY-117201216128-JOFPKMNKXQ%7D.pdf

utilising the standards applied by the Business and Biodiversity Offsets Programme."

Conferences of the Parties (COPs 8, 9, and 10) to the Convention on Biological Diversity (CBD) have taken several decisions that refer to biodiversity offsets and BBOP.[10] In 2010, COP10 invited Parties to the CBD to identify options for incorporating biodiversity into business practice taking into account existing developments such as BBOP. The COP encouraged businesses and the private sector to adopt commitments to support the CBD, for instance, through approaches set out in the Jakarta Charter which states: "The concept of no-net-loss of biodiversity and net-positive impact, as articulated by the Business and Biodiversity Offsets Programme, is a practical framework for assessing efforts to implement the Convention on Biological Diversity." A resolution of the Ramsar Convention on Wetlands also encouraged decision makers, especially business leaders, to adopt strategies for ecosystem management, which avoid, remedy or as a last option offset adverse impacts on wetland ecosystems and consider the potential benefits from BBOP.

In addition, the BBOP Learning Network of individuals and organisations worldwide has swelled from some 1,000 members in 2009, to 2,300 in 2012, from Afghanistan to Zambia, and can now engage through BBOP's Community of Practice.

The recent developments highlighted in this section demonstrate that the goal of no net loss and preferably a net gain of biodiversity is attracting more interest in companies, financial institutions, governments and the intergovernmental organizations. In parallel, members of the scientific community continue to explore related issues in natural and social science, such as limits to what can be offset, tests for ecological equivalence, currencies and metrics for measuring loss and gain, and approaches for ensuring that local communities and indigenous peoples benefit from projects and offsets that are planned and implemented.

10 COP8: Decision VIII/17 (Private-sector engagement); COP9: Decision IX/11 (Review of implementation of Articles 20 and 21); Decision IX/18 (Protected Areas); Decision IX/26 (Promoting business engagement); COP10: Decision X/21 (Business Engagement).

The future for BBOP and biodiversity offsets

BBOP's priorities now include:

- Disseminating, field testing and improving the first version of the Standard on Biodiversity Offsets.

- Coordinating a Community of Practice to build and share skills and experience among many organizations and individuals worldwide on best practice to the mitigation hierarchy, including biodiversity offsets.

• Using and improving the Standard

The BBOP members are well aware that best practice in biodiversity offsets is evolving. Despite the collective effort, trialing, and time that went into its development, the current Standard is a first version. BBOP members are collaborating with individuals and organizations around the world to test and refine the Standard based on experience and practice, and to learn from a wide range of experiences with biodiversity offsets in a variety of industry sectors and geographical contexts.

The BBOP Secretariat (served by Forest Trends and the Wildlife Conservation Society) is looking for organizations willing to try using the Standard and offer feedback on its strengths and weaknesses, so it can be improved in subsequent editions. BBOP is a collaborative program, and welcomes participation and feedback from any interested organization.

To learn more about the program and how to get involved please:

See: http://bbop.forest-trends.org
Contact: bbop@forest-trends.org

• Community of Practice

BBOP is supporting a "Community of Practice" to provide a network and forum for the growing number of organizations and individuals working on various aspects of the mitigation hierarchy, including biodiversity offsets. The purpose of this Community of Practice is to enable anyone - whether a BBOP member or not - to share practical experiences, skills and lessons learned. Participants can hear about others' work, share their own experiences, source expertise, benefit from training and capacity building, generate feedback on methods and approaches (including the Standard on Biodiversity Offsets) and build awareness and demand for project outcomes that deliver no net loss of biodiversity.

BBOP and its members are also working on capacity building. For no net loss to be a norm of best environmental practice at development sites, a greater capacity than is currently present will be needed in government and civil society organizations to oversee, support and approve well designed mitigation measures, including biodiversity offsets, where these are needed. In particular, environmental and social impact assessment (ESIA) processes are rarely designed to accommodate biodiversity offsets and officials reviewing ESIAs are often poorly informed about biodiversity offsets, if they are aware of the concept at all. BBOP is running and involved in a range of training programs for companies, consultants, financial institutions, conservation experts and government representatives, on how to apply the mitigation hierarchy and plan for no net loss, based on the Standard on Biodiversity Offsets.

Reasons for engagement now

The last few years have witnessed growing interest in the use of biodiversity offsets by governments, banks and companies. As "no net loss" or a "net gain" of biodiversity (and ultimately of social and environmental values more broadly) are increasingly acknowledged as a core part of society's expectation of developers, more legislation and investment conditions requiring biodiversity offsets are likely to be introduced in the next few years, in tandem with voluntary practice. Early policies on biodiversity offsets, including those currently under development, are likely to be a model for wider adoption of biodiversity offsets around the world. The coming years are consequently a vital period in which to be involved for any company, government, financial institution or civil society organization wishing to influence global policy and practice on biodiversity offsets. The BBOP members encourage readers to consider the following:

Companies should consider how their business, license to operate and access to finance might benefit from showing leadership in demonstrating no net loss, and reflect on whether this is important to their viability and success in the long term. Companies would be well advised to assess whether their existing or planned operations or important parts of their supply chains lie in or adjacent to high conservation value areas, and whether they may seek project finance from one or more of the 74 financial institutions which have adopted revised IFC Performance Standard 6. They should check that they have the tools, expertise and staff or consultant capacity at their disposal to assess their impacts and dependence on biodiversity and ecosystem services, undertake baseline studies and design appropriate mitigation measures for their projects (including biodiversity offsets, where needed), to best practice standards such as PS6 and the BBOP Standard on Biodiversity Offsets, and foster the partnerships needed to do so. They may wish to consider some pilot projects to start the learning process before standardizing the approach and operating procedures across their operations.

Public sector developers and policy makers should think how a more rigorous application of the mitigation hierarchy, including biodiversity offsets could help their government to meet its biodiversity conservation targets and commitments, and simultaneously promote sustainable development and meet the expectations of local stakeholders.

Those representing the **interests of civil society**, whether in biodiversity conservation, community development or other issues, may find that dialogue on the mitigation hierarchy and biodiversity offsets offers a unique opportunity to debate with governments and developers and, in the context of development projects, to influence the conservation of biodiversity, including by creating sustainable livelihoods.

Banks, asset managers and insurers involved in financing development projects may find that BBOP's products and Community of Practice will assist their understanding of the risks and opportunities associated with biodiversity offsets, and facilitate management of those risks in their investments, in line with developments such as IFC Performance Standard 6.

We hope the Standard on Biodiversity Offsets will help with all these activities.

To learn more about the BBOP principles, guidelines and optional methodologies, go to: www.forest-trends.org/biodiversityoffsetprogram/guidelines

BBOP Standard on Biodiversity Offsets: Principles with Criteria and Indicators

Biodiversity offsets are measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development[11] after appropriate prevention and mitigation measures have been taken. The goal of biodiversity offsets is to achieve no net loss and preferably a net gain of biodiversity on the ground with respect to species composition, habitat structure, ecosystem function and people's use and cultural values associated with biodiversity.

These principles establish a framework for designing and implementing biodiversity offsets and verifying their success. Biodiversity offsets should be designed to comply with all relevant national and international law, and planned and implemented in accordance with the Convention on Biological Diversity and its ecosystem approach, as articulated in National Biodiversity Strategies and Action Plans.

Hierarchy Component	Requirement
Principle 1[12]	**Adherence to the mitigation hierarchy: A biodiversity offset is a commitment to compensate for significant residual adverse impacts on biodiversity identified after appropriate avoidance, minimization and on-site rehabilitation measures have been taken according to the mitigation hierarchy.**
Criterion 1-1	**The developer shall identify, implement and document appropriate measures to avoid and minimize the direct, indirect and cumulative negative impacts of the development project and to undertake on-site rehabilitation/restoration.**
Indicator 1-1-1	An assessment of the development project's impacts on biodiversity (including direct, indirect and cumulative impacts, as appropriate) is conducted with stakeholder participation.
Indicator 1-1-2	Measures to avoid and minimize biodiversity loss and to rehabilitate/restore biodiversity affected by the project are defined and documented, and these measures implemented, monitored and managed for the duration of the project's impacts.
Criterion 1-2	**The biodiversity offset shall only address the residual impacts of the development project, namely those impacts left after all the appropriate avoidance, minimisation and rehabilitation/restoration actions have been identified.**
Indicator 1-2-1	Any residual losses of biodiversity that may exist following avoidance, minimisation and rehabilitation/restoration are identified and described in the Biodiversity Offset Management Plan.

11 While biodiversity offsets are defined here in terms of specific development projects (such as a road or a mine), they could also be used to compensate for the broader effects of programmes and plans.

12 The Principles are identical in content to those agreed in 2009, but their sequence has been changed. The Principles that appear here as numbers 1, 2, 3, 4 and 5 were formerly numbered 3, 4, 5, 1 and 2.

Hierarchy Component	Requirement
Principle 2	**Limits to what can be offset: There are situations where residual impacts cannot be fully compensated for by a biodiversity offset because of the irreplaceability or vulnerability of the biodiversity affected.**
Criterion 2-1	The risk that the project's residual impacts on biodiversity may not be capable of being offset ("non-offsetable") shall be assessed and measures taken to minimize this risk.
Indicator 2-1-1	A risk assessment is undertaken to predict the level of risk that the project's residual impacts on biodiversity will be not be capable of being offset, with special attention afforded to any highly irreplaceable and vulnerable biodiversity components.
Indicator 2-1-2	The risk assessment demonstrates how the project's residual impacts can and will be offset through specific measures and commitments, taking into account the level of risk and uncertainties regarding the delivery of the offset.
Principle 3	**Landscape context: A biodiversity offset should be designed and implemented in a landscape context to achieve the expected measurable conservation outcomes taking into account available information on the full range of biological, social, and cultural values of biodiversity and supporting an ecosystem approach.**
Criterion 3-1	The biodiversity offset shall be designed and implemented to complement and contribute to biodiversity conservation priorities identified at the landscape, eco-regional and national levels.
Indicator 3-1-1	The identification of potential offset locations is undertaken in the context of a landscape-level analysis, and the ecosystem approach is used to plan the offset.
Indicator 3-1-2	Evidence is provided that the offset gains and conservation outcomes contribute to regional and national conservation goals, where these exist.
Criterion 3-2	The biodiversity offset shall be designed and implemented for the long term, taking into consideration other likely developments (e.g., competing land use pressures) within the landscape.
Indicator 3-2-1	Evidence is provided that any reasonably foreseeable future developments that might affect the offset, including developments by third parties, have been considered in the offset design.
Indicator 3-2-2	Evidence is provided that the offset planner has proposed to the relevant government authorities that the biodiversity offset should be incorporated, where possible, within local, regional and national government land use or other similar plans.

Hierarchy Component	Requirement
Principle 4	**No net loss: A biodiversity offset should be designed and implemented to achieve in situ, measurable conservation outcomes that can reasonably be expected to result in no net loss and preferably a net gain of biodiversity.**
Criterion 4-1	**The no net loss or net gain goal for the development project shall be explicitly stated, and the offset design and conservation outcomes required to achieve this goal clearly described.**
Indicator 4-1-1	The commitment to a goal of no net loss or a net gain of all biodiversity components affected by the project is stated by the project developer in a publicly available document.
Indicator 4-1-2	All residual biodiversity losses due to the project are quantified relative to the "pre-project" condition of affected biodiversity, which is identified, characterized, and documented.
Indicator 4-1-3	The biodiversity gains anticipated from the offset are quantified relative to the "without-offset" condition of biodiversity in the area of the offset site(s). The "without offset" biodiversity condition is identified, characterized, and documented.
Indicator 4-1-4	The Biodiversity Offset Management Plan (BOMP) describes the offset design and its intended conservation outcomes, and includes the evidence and assumptions used to predict that these outcomes will result from the offset activities described.
Criterion 4-2	**An explicit calculation of loss and gain shall be undertaken as the basis for the offset design and shall demonstrate the manner in which no net loss or a net gain of biodiversity can be achieved by the offset.**
Indicator 4-2-1	A set of key biodiversity components at species, habitats and ecosystem levels, including landscape features and components related to use and cultural values, is identified. The rationale for selecting these key biodiversity components to represent all the biodiversity affected by the project is explained and documented.
Indicator 4-2-2	Methods for (1) determining the equivalence of residual biodiversity losses and gains (assessing like for like or better) in the offset design, and (2) calculating the net balance of biodiversity losses due to the development project and gains due to the offset activities, including identification of suitable metrics, are identified and the rationale for their selection explained and documented.
Indicator 4-2-3	The methods used for determining equivalence of biodiversity losses and gains address equity[13] in the type and condition, the location, and if possible, the timing of biodiversity losses and gains, and explicitly consider the key biodiversity components.

13 The word 'equity' is used here in the sense of 'comparability', rather than 'fairness'.

Hierarchy Component	Requirement
Indicator 4-2-4	The metrics selected for quantifying the net balance of biodiversity losses and gains capture the type, amount and condition of affected biodiversity, including the key biodiversity components, and are used to calculate losses and gains in the offset design.
Indicator 4-2-5	The methods to determine net balance and equivalence of losses and gains (Indicator 4-2-2) are applied as the basis for the offset design, and demonstrate no net loss or a net gain of biodiversity.
Criterion 4-3	**The offset design and implementation shall include provisions for addressing sources of uncertainty and risk of failure in delivering the offset.**
Indicator 4-3-1	Sources of risk and uncertainty in the design and implementation of the offset (including in the loss/gain calculations), together with the measures taken to manage them, are documented in the Biodiversity Offset Management Plan.
Indicator 4-3-2	A series of milestones for implementing the offset, tracking progress towards achieving no net loss or net gain and verifying that the offset delivers the intended conservation outcomes, is established and monitored.
Principle 5	**Additional conservation outcomes: A biodiversity offset should achieve conservation outcomes above and beyond results that would have occurred if the offset had not taken place. Offset design and implementation should avoid displacing activities harmful to biodiversity to other locations.**
Criterion 5-1	**The conservation outcomes of the biodiversity offset shall be "additional" in that they are due to the offset activities and would not have occurred without them.**
Indicator 5-1-1	Evidence is provided that the conservation gains at the offset site(s), calculated as the difference between the conservation outcomes with and without the proposed offset activities, were caused by the offset activities. The gains are predicted for a specified, long-term period, and monitored and verified during offset implementation.
Criterion 5-2	**The offset shall be designed and implemented to avoid 'leakage': the displacement by the offset of activities that harm biodiversity from one location to another.**
Indicator 5-2-1	An assessment is undertaken to identify potential leakage resulting from the offset activities.
Indicator 5-2-2	The offset design includes provisions for addressing the risk of leakage and these are put into effect during implementation.

Hierarchy Component	Requirement
Principle 6	**Stakeholder participation: In areas affected by the development project and by the biodiversity offset, the effective participation of stakeholders should be ensured in decision-making about biodiversity offsets, including their evaluation, selection, design, implementation, and monitoring.**
Criterion 6-1	**Consultation and participation of relevant stakeholders shall be integrated into the decision-making process for offset design and implementation, and documented in the Biodiversity Offset Management Plan.**
Indicator 6-1-1	Relevant stakeholders are identified and informed of the plan to design and implement a biodiversity offset for the project.
Indicator 6-1-2	Records are maintained that document the results of informed consultation and participation of relevant stakeholders related to the design and implementation of the biodiversity offset.
Indicator 6-1-3	The roles of relevant stakeholders in the implementation of the biodiversity offset, including its evaluation and monitoring, are established and clearly defined in the Biodiversity Offset Management Plan.
Indicator 6-1-4	For projects and/or offsets with adverse impacts on indigenous peoples, their free, prior and informed consent (FPIC) will be obtained and documented.[14]
Criterion 6-2	**A mutually agreed and documented system for handling grievances exists and is accepted and implemented by all relevant parties.**
Indicator 6-2-1	A documented system, open to relevant affected parties, which handles and resolves grievances in an effective, timely and appropriate manner and records outcomes, is in operation.

14 The process of obtaining FPIC and the outcome (i.e., evidence of agreement between parties) for the purposes of this Indicator are those set out in IFC Performance Standard 7 on Indigenous Peoples. As described in IFC Performance Standard 7, adverse impacts on indigenous peoples are impacts to lands and natural resources subject to traditional ownership or under customary use, relocation of indigenous peoples from communally held lands and natural resources subject to traditional ownership or under customary use, and significant impacts to critical cultural heritage.

Hierarchy Component	Requirement
Principle 7	**Equity: A biodiversity offset should be designed and implemented in an equitable manner, which means the sharing among stakeholders of the rights and responsibilities, risks, and rewards associated with a development project and offset in a fair and balanced way, respecting legal and customary arrangements. Special consideration should be given to respecting both internationally and nationally recognized rights of indigenous peoples and local communities.**
Criterion 7-1	Rights, responsibilities, risks, and rewards shall be clearly identified and mechanisms to share these fairly amongst relevant stakeholders shall be included in the Biodiversity Offset Management Plan.
Indicator 7-1-1	The Biodiversity Offset Management Plan references all agreements with relevant stakeholders pertaining to sharing of rights, responsibilities, risk, and rewards related to the design and implementation of the project and offset.
Indicator 7-1-2	Documented evidence exists that agreements concerning the project and the design and implementation of the biodiversity offset were entered into willingly by all parties and comply with existing regulations, recognize customary arrangements and, as appropriate, respect the internationally and nationally recognized rights of indigenous peoples.
Indicator 7-1-3	Agreements with relevant stakeholders demonstrate that the impacts on peoples' biodiversity uses and values resulting from the development project and offset have been taken into account and appropriately compensated.
Principle 8	**Long-term outcomes: The design and implementation of a biodiversity offset should be based on an adaptive management approach, incorporating monitoring and evaluation, with the objective of securing outcomes that last at least as long as the development project's impacts and preferably in perpetuity.**
Criterion 8-1	Mechanisms shall be in place to ensure that the measurable conservation outcomes from the offset will outlive the duration of the development project's impact.
Indicator 8-1-1	Evidence is provided that those responsible for implementing the offset (see Indicator 6-1-3) have the requisite management and technical capacity.
Indicator 8-1-2	Legal and financial mechanisms are in place to guarantee the financial and institutional viability of the offset for at least the duration of the project's impacts, including under conditions of a sale, or transfer of project ownership or management.

Hierarchy Component	Requirement
Criterion 8-2	Adaptive monitoring and evaluation approaches shall be integrated into the Biodiversity Offset Management Plan to ensure regular feedback and allow management to adapt to changing conditions, and achieve conservation outcomes on the ground.
Indicator 8-2-1	Evidence is provided that the measures to manage and mitigate identified risks (see Indicator 4-3-1) are implemented, the results are monitored, and that risk assessment and management are adapted as necessary throughout offset implementation.
Indicator 8-2-2	Offset conservation outcomes and milestones are independently audited and project responds to audit recommendations in a timely manner.
Indicator 8-2-3	A system exists for monitoring and evaluating the success of offset implementation, including the monitoring of risks, and this provides regular feedback which is used to document, correct and learn from problems and achievements.
Principle 9	**Transparency: The design and implementation of a biodiversity offset, and communication of its results to the public, should be undertaken in a transparent and timely manner.**
Criterion 9-1	The developer responsible for designing and implementing the biodiversity offset shall ensure that clear, up to date, and easily accessible information is provided to stakeholders and the public on the offset design and implementation, including outcomes to date.
Indicator 9-1-1	Information on baseline findings, impact assessment as well as offset design and implementation is reported to stakeholders and the public in appropriate media during offset design and implementation.
Indicator 9-1-2	An independent mechanism (such as a steering committee, review panel, or system for peer review) is established to oversee the offset design and implementation process and report regularly to the public on their assessment of progress.
Principle 10	**Science and traditional knowledge: The design and implementation of a biodiversity offset shall be a documented process informed by sound science, including an appropriate consideration of traditional knowledge.**
Criterion 10-1	Scientific information, and, where applicable, traditional knowledge, shall be utilised when designing and implementing the offset.
Indicator 10-1-1	The Biodiversity Offset Management Plan describes how the best available scientific knowledge and methods have been used in offset design and implementation, providing evidence of consultation with scientific experts.
Indicator 10-1-2	The Biodiversity Offset Management Plan describes whether and how relevant traditional knowledge has been used in offset design and implementation, with, as appropriate, the involvement and prior approval of local communities and indigenous peoples, and of relevant experts.

To learn more about the BBOP Principles, Standard, and supporting materials, go to:

www.forest-trends.org/biodiversityoffsetprogram/guidelines