Standard on Biodiversity Offsets






BBOP
Business and Biodiversity Offsets Programme

Forest Trends and the Wildlife Conservation Society provided the Secretariat for BBOP during the second phase of BBOP (2009-2012)

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Standard on Biodiversity Offsets: A tool to assess adherence to the BBOP Principles on Biodiversity Offset Design and Implementation

This Standard on Biodiversity Offsets ('the Standard') and the accompanying supporting materials have been prepared by the Business and Biodiversity Offsets Programme (BBOP) to help auditors, developers, conservation groups, communities, governments and financial institutions that wish to assess biodiversity offsets against the BBOP Principles, Criteria and Indicators. They were developed by members of the BBOP Secretariat and Advisory Group during the second phase of the programme's work (2009 – 2012), and have benefited from contributions and suggestions from the many people and organisations who registered on the BBOP consultation website or have joined us for discussions in meetings.

The Advisory Group members listed here[1] support the Standard and commend the other documents to readers as a source of guidance on which to draw when considering, designing and implementing biodiversity offsets, in the context of the mitigation hierarchy. Best practice in biodiversity offsets is evolving, and the Standard and supporting documents presented here will be further refined based on more practical experience, feedback and discussion.

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[1] The BBOP Advisory Group members who support the Standard as of 1 February 2013 are: 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) ● Wildlands Inc. ● Wildlife Conservation Society ● Winstone Aggregates ● WWF ● Zoological Society of London; and the following individuals: Steve Botts ● Susie Brownlie ● Marc Christensen ● Michael Crowe ● Toby Gardner ● Martin Hollands ● Louise Johnson ● Daniela Lerda ● Paul Mitchell ● Dave Richards ● Shelagh Rosenthal [NB: Other Advisory Group members may add their names to this list. Updated versions of this document will be posted to the web site noted on the preceding page.]

During Phase 2 of BBOP, the BBOP Secretariat was provided by Forest Trends and the Wildlife Conservation Society.

All those involved in the development of this Standard are grateful to the companies who volunteered pilot projects in BBOP's first and second phases of our work and for the support of the donors listed overleaf, who have enabled the Secretariat and Advisory Group to prepare these documents.

BBOP is embarking on the next phase of its work, during which we hope to collaborate with more individuals and organisations around the world, continually to 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 areas. BBOP has already benefited from drawing on the experience and approaches of a the wide range of organizations, members and non-members alike, who are developing tools and mechanisms to apply the mitigation hierarchy, including delivery of biodiversity offsets. We hope their approaches and experiences will continue to inform and ultimately comply with the Standard as it is revised over time. BBOP is a collaborative programme, and we welcome your participation and feedback. To learn more about the programme and how to get involved please:

See: **http://bbop.forest-trends.org**

Contact: **bbop@forest-trends.org**

In addition to our fee paying membership, we thank those organisations that have provided financial support for BBOP's work[2] in its second phase:

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

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Part 1: Introduction

About the Principles, Criteria and Indicators

This document presents a standard on biodiversity offsets, intended to help determine whether an offset has been designed and subsequently implemented in accordance with the BBOP Principles. BBOP agreed its ten Principles in 2009, and this standard is presented as a hierarchy of Principles, Criteria and Indicators (PCI): an architecture similar to that used in a number of other standards, such as the Forest Stewardship Council, the Marine Stewardship Council, the Roundtable for Sustainable Palm Oil, Round Table on Responsible Soy, and others.

'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.

In order for the PCI structure to be as streamlined and efficient as possible, a 'necessary and sufficient' test was applied to each Criterion and Indicator during the drafting process. In other words, the Criteria need to be both 'necessary' (i.e. no redundancies) and 'sufficient' (i.e. together, the Criteria are enough to demonstrate the Principles have been met and the Indicators enough to demonstrate the Criteria have been achieved). Consequently, each Criterion and Indicator is an essential part of the whole, and all need to be met for a biodiversity offset to meet the Standard. The issue of conformance with the PCI (what is needed to 'meet the Standard') will be refined based on experience of using the standard and is discussed briefly below.

Although the PCI focus on the ecological aspect (i.e. intrinsic values) of biodiversity, the principles also embrace its socioeconomic and cultural values, since these must be taken into consideration in following the mitigation hierarchy[3] 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.

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[3] 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.

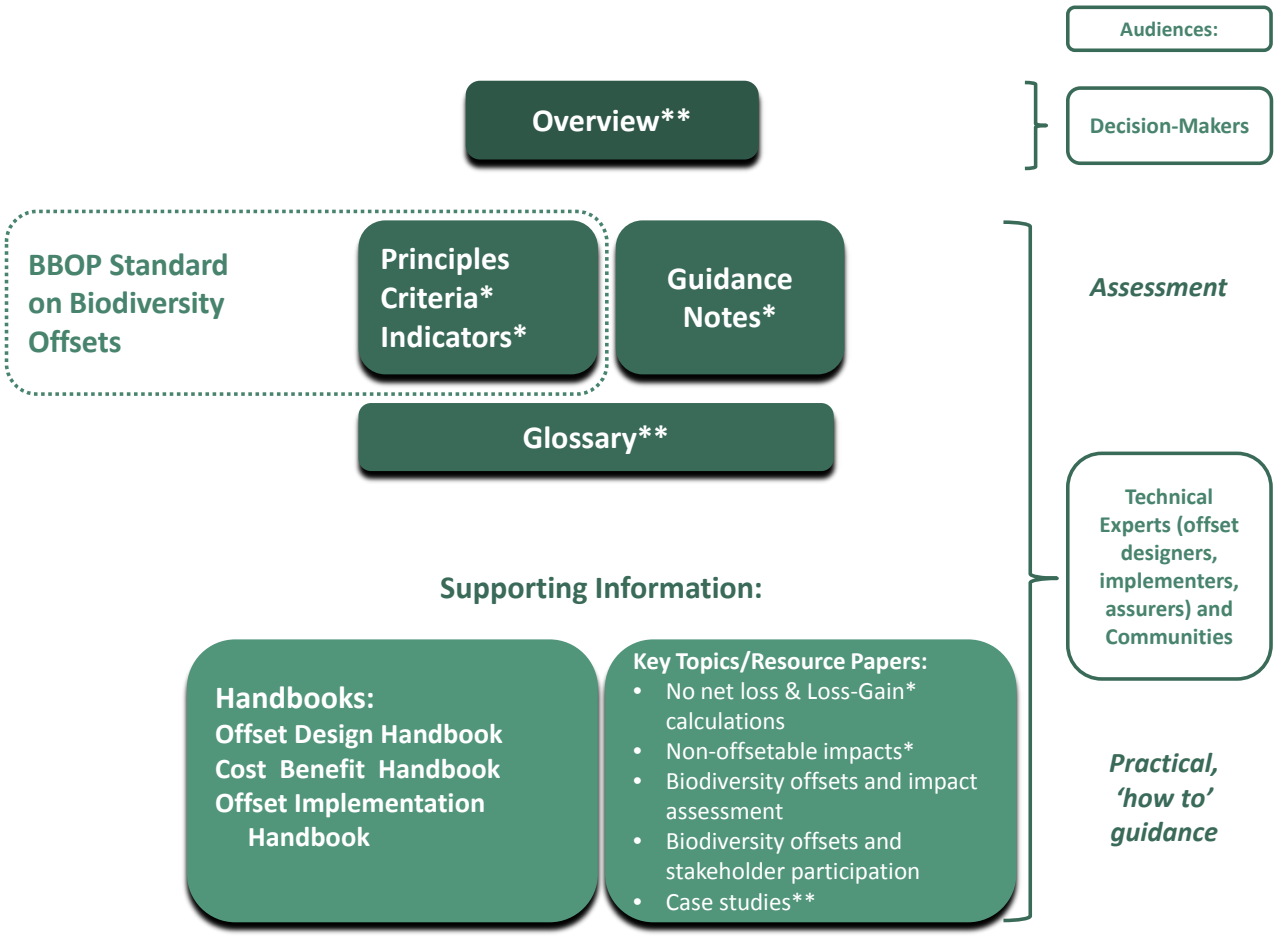
d. Offset: measures taken to compensate for any residual significant, adverse impacts that cannot be avoided, minimised and / or rehabilitated or restored, in order to achieve no net loss or a net gain of biodiversity. Offsets can take the form of positive management interventions such as restoration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

Related Documents, Including Guidance Notes and Glossary, Audience and Users

The BBOP Principles, and now the Criteria, Indicators and accompanying Guidance Notes, constitute the core of BBOP's work to develop best practice for biodiversity offsets. Since BBOP was established at the end of 2004, it has also produced a number of other tools and products. The relationship between these is illustrated simply in **Figure 1**:

Figure 1: BBOP Standard on Biodiversity Offsets and Associated Material

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



All the documents listed in the diagram above (from 2009 and from 2012) will be available on **http://bbop.forest-trends.org/guidelines/.**

The Standard is intended for two principal categories of users:

- **Assessors and Auditors:** The PCI have been 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. 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. (See chronology diagram on page 8, and more information on assessing conformance on page 11)

- **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, minimise, 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.

Among the documents mentioned in the diagram on the preceding page, two that accompany the Standard are particularly relevant to people using the Standard to assess biodiversity offsets. They are:

- **Guidance Notes for Assessors:** The document presents notes to assist with the assessment of whether an offset has been designed and subsequently implemented in conformance with the BBOP Principles, Criteria and Indicators. It offers 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 will be available at: **http://bbop.forest-trends.org/guidelines/Standard_Guidance_Notes**

- **Glossary**: A glossary of the terms found in the Standard and also common in methodologies and guidelines related to biodiversity offset design and implementation. This will be available at: **http://bbop.forest-trends.org/guidelines/Updated_Glossary**

The Standard set out in this document has been designed to enable assessors to determine whether a particular project (for example, the expansion of a palm oil plantation, the building of a road, the construction of a mine, an oil and gas field and pipeline, a dam, a wind farm, a housing estate, or a tourism venture) has met the BBOP Principles. However, biodiversity offsets can also be used to address the broader effects of programmes, plans, policies and schemes that have larger-scale, on-the-ground impacts on biodiversity. It is possible to plan for no net loss at a level broader than single projects, for instance, when developing:

- A **regional** development plan or strategic environmental assessment
- A **national** scheme or system for biodiversity offsets
- **Conservation banks** to provide offsets for multiple projects

For the present purposes, the term 'development project' should be understood throughout this document to embrace broader programmes, plans, systems and policies, where no net loss is planned for those. In the future, BBOP may develop standards that are tailored more closely to broader application for national systems or conservation banks, for instance.

A significant development in the application of the mitigation hierarchy (avoid, minimise, rehabilitate/restore, offset) to biodiversity has been the release in August 2011 of the International Finance Corporation's revised Performance Standard 6 (PS6), which will take effect from 1 January 2012. This is a requirement of clients seeking project finance from the IFC, and from 2012[4] 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. The key provisions of PS6 and relationship with the BBOP Standard on Biodiversity Offsets are explained in **Box 1**.

Box 1: Introduction to IFC Performance Standard 6 and Relationship with BBOP Standard on Biodiversity Offsets	
What is PS6?	The Performance Standards set out requirements for corporate clients of the IFC (and of banks that have adopted the Equator Principles) seeking project finance. There are 8 Performance Standards, and PS6 is titled 'Biodiversity Conservation and Sustainable Management of Living Natural Resources'. The amended version described below will come into effect on 1 January 2012.
What is its objective?	• Protect and conserve biodiversity • Maintain the benefits from ecosystem services • Promote the sustainable management of living natural resources **PS6 covers projects:** • Located in modified, natural or critical habitats • Which potentially impact on or are dependent on ecosystem services over which the client has direct management control or significant influence • Including production of living natural resources (e.g. agriculture, husbandry, fisheries, forests)
What are requirements of clients for impacts on 'modified habitat'?	**Modified habitat** comprises: 'Areas that may contain a large proportion of non-native plant and/or animal species, and/or where human activity have substantially modified the area's primary ecological functions and species composition.' It may include areas managed for agriculture, forest plantations, reclaimed coastal zones and reclaimed wetlands. • PS applies to areas of modified habitat including **significant biodiversity value**, as determined by the risk and impact identification process in Performance Standard 1. • The client should minimise impacts on such biodiversity and implement mitigation measures as appropriate.

[4] 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

What are requirements of clients for impacts on 'natural habitat'?	**Natural habitat** comprises: 'Areas composed of viable assemblages of plant and/or animal species of largely native origin, and/or where human activity has not essentially modified an area's primary ecological functions and species composition.'
	
	The client will not significantly convert or degrade natural habitats, unless all of the following have been demonstrated:
	• **No other viable alternatives** within the region exist for development of the project on modified habitat;
	• **Consultation** has established the views of stakeholders, including Affected Communities, with respect to the extent of conversion and degradation; and
	• Any conversion or degradation mitigated according to the **mitigation hierarchy**.
	• **In areas of natural habitat, mitigation measures will be designed to achieve no net loss of biodiversity where feasible.** Appropriate mitigation measures include:
	  ◦ Avoiding impacts on biodiversity through the identification and protection of set-asides;
	  ◦ Implementing measures to minimise habitat fragmentation, such as biological corridors;
	  ◦ Restoring habitats during operations and/or after operations; and
	  ◦ Implementing biodiversity offsets.

What are requirements of clients for impacts on 'critical habitat'?	**Critical habitat** comprises: 'Areas with high biodiversity value, including: (i) Habitat of significant importance to Critically Endangered and/or Endangered species; (ii) Habitat of significant importance to endemic and/or restricted-range species; (iii) Habitat supporting globally significant concentrations of migratory species and/or congregatory species; (iv) Highly threatened and/or unique ecosystems; and/or (v) Areas associated with key evolutionary processes.' In areas of critical habitat, the client will not implement any project activities unless all of the following are demonstrated: • **No other viable alternatives** within the region exist for development of the project on modified or natural habitats that are not critical; • Project **doesn't lead to measurable adverse impacts** on biodiversity values for which critical habitat designated and on ecological processes supporting them; • Project **doesn't lead to net reduction in the global and/or national/regional population** of any Critically Endangered or Endangered species over a reasonable period of time; and • Robust, appropriately designed, and long-term biodiversity **monitoring and evaluation** is integrated into the client's management program. • In cases where a client can meet these requirements, the project's mitigation strategy will be described in a **Biodiversity Action Plan** and will be designed to achieve **net gains** of those biodiversity values for which critical habitat was designated. • Where biodiversity **offsets** are proposed, client must demonstrate through an **assessment** that the project's significant residual impacts on biodiversity will be mitigated to meet the above requirements.

What are requirements of clients with projects within protected areas?	Where a proposed project is located within a **legally protected area or an internationally recognised area** (UNESCO Natural World Heritage Sites, UNESCO Man and the Biosphere Reserves, Key Biodiversity Areas, and wetlands designated under the (Ramsar) Convention on Wetlands of International Importance), the client will meet the requirements for natural or critical habitat, as applicable and, in addition, will: • Demonstrate that the proposed development in such areas is legally **permitted**; • Act in a manner **consistent with** any government recognised **management plans** for such areas; • **Consult** protected area sponsors and managers, affected communities, indigenous peoples and other stakeholders on the proposed project, as appropriate; and • Implement **additional programs**, as appropriate, to promote and enhance the conservation aims and effective management of the area.
What are requirements of clients concerning 'ecosystem services'?	Client will undertake a systematic review to identify priority ecosystem services, namely: • Ecosystem services which the project is likely to impact, resulting in adverse impacts to affected communities: Client will **avoid adverse impacts on such priority services**. Where such impacts are unavoidable, the client will minimise them and implement mitigation measures that aim to **maintain the value and functionality of priority services**. Affected communities will participate in determination of these priority ecosystem services. And/or: • Ecosystem services on which the project is directly **dependent** for operations: Client shall minimise impacts on these priority ecosystem services and implement measures that **increase resource efficiency** of their operations.
What is the relationship with the BBOP Standard?	• 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 of one another. • PS6 defines a set of circumstances in which companies will need to mitigate residual impacts on biodiversity using biodiversity offsets in order to obtain project finance.[5] The BBOP standard offers companies a way to demonstrate that they comply with PS6. Guidance Note 6 also references the BBOP Principles as an internationally recognized standard in biodiversity offset design. • In addition, there are many circumstances other than those covered by PS6 in which companies will need to, or benefit from, undertaking biodiversity offsets (for example, regulatory compliance or where there is a business case for demonstrating no net loss, even if project finance is not needed from the IFC or an Equator Bank). Conforming to the BBOP standard will offer companies the assurance that they have met and demonstrated international best practice.

[5] While PS6 concerns project finance, financial institutions and other organizations are already starting to regard PS6 as a benchmark of best practice generally, and to draw on it to guide lending and investment decisions for projects that do not involve project finance.

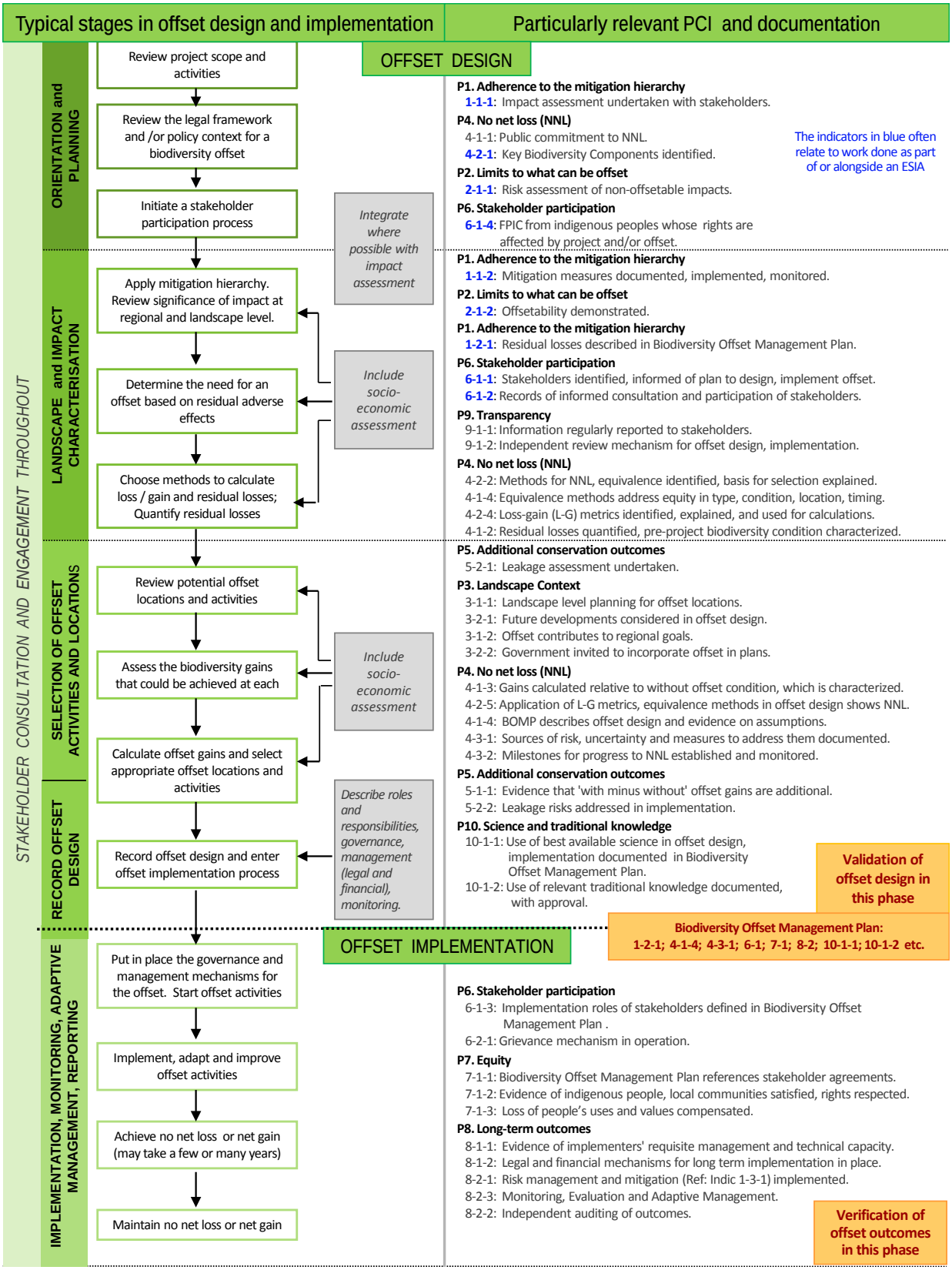
The assessment process and sequence of addressing the Principles, Criteria and Indicators

The Principles, Criteria and Indicators are presented in this document according to the order of the BBOP Principles (e.g. from Principle 1, Criterion 1, Indicator 1 through to Principle 10, Criterion 1, Indicator 2). However, to see them presented in a possible chronological order, typical of the stages involved in biodiversity offset design and implementation, please see the flow diagram on the next page.

The sequence of the Principles, Criteria and Indicators in the Standard has been the subject of extensive debate among BBOP members. On the one hand, it would naturally be very helpful to present the Principles, Criteria and Indicators in an order likely to reflect the steps followed by an offset designer or assessor. On the other hand, the chronology of offset design and implementation varies enormously according to whether the offset is prospective (planned prior to impacts taking place) or retrospective (planned once some impacts have already started), and according to the scale of the project and even the geographical location and industry sector concerned. There was a concern among some members that readers might feel that presenting a chronology would suggest there is a single, prescriptive approach to the offset design process, whereas the process might vary considerably in different settings. In addition, offset design is more an iterative than a simply linear process. Finally, presentation of the Principles, Criteria and Indicators in different running orders may be useful in different contexts for particular decision-makers, audiences and communicators. Consequently, **Figure 2** is purely illustrative and offers just one possible approach to the process.

Figure 2: Principles, Criteria and Indicators: Illustrative Chronology

Note: This diagram illustrates a general approach. Offset planning is usually more iterative than linear; so the order of events may vary depending on the circumstances.



Key documents

Naturally, there are many documents (including corporate environmental policies, site management plans, Environmental and Social Impact Assessments, records of meetings with various stakeholders, and others) which are relevant to the design and implementation of biodiversity offsets. However, a number of key documents are referred to throughout the Standard and are likely to offer especially useful evidence to assessors that particular PCIs have been satisfied. These include:

- **Environmental Impact Assessment (EIA) or Environmental and Social Impact Assessment (ESIA):** Many projects require a formalised process, including public consultation, in which all relevant environmental and social consequences of the project are identified and assessed before authorisation is given. The application to biodiversity of the mitigation hierarchy (avoidance, minimisation, rehabilitation/ restoration and offsets), can be integrated into ESIAs. ESIAs are thus mentioned in several of the BBOP Principles, Criteria and Indicators. The blue text in Figure 2 groups the Indicators particularly relevant to ESIAs within the chronology.

- **The Biodiversity Offset Management Plan (BOMP) and other management plans:** Developers typically adopt some form of management plan (often called a Biodiversity Action Plan) to address the mitigation measures set out in the ESIA and then developed as part of the environmental management plan to ensure their implementation. Biodiversity may be integrated throughout the environmental management plan, or may form a discrete component. Such documents may also incorporate biodiversity offsets, but they are generally more focussed on project sites (and managing impacts on-site) rather than on offset areas and activities. Offset activities may be physically separate from companies' on-site biodiversity management, broader in scope and involve more detailed and longer-term roles, responsibilities and legal, institutional and financial arrangements. The BBOP Standard is flexible as to what form and name such plans take, but requires one or more plans that address the full set of issues involved in design and implementation of mitigation measures, including the biodiversity offset. **Box 2** illustrates a possible table of contents for the BOMP, highlighting the PCIs that refer to it.

Box 2: The Biodiversity Offset Management Plan (BOMP)

For convenience, the document which describes the measures planned for avoidance, minimisation, rehabilitation/restoration of impacts, and the detailed design and implementation of an offset for the residual impacts is referred to throughout the Standard as the 'Biodiversity Offset Management Plan'. According to 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'. In fact, this document may have another name, and the issues may be covered in more than one document (including the Environmental Impact Assessment, Environmental Action Plan, Biodiversity Action Plan, and Offset Plan). Whatever approach is most suitable for the given project, one or more plans are needed that satisfy the assessor that all the requirements the Standard describes for the 'BOMP' have been met. Where there is more than one plan, they should be clearly cross-referenced and made available to the assessor together. As the layout of plans may vary, the following table offers an indicative outline only of the contents of the BOMP, and the specific criteria and indicators that refer to it.

INDICATIVE POSSIBLE OUTLINE OF THE BOMP	RELATED INDICATORS
TABLE OF CONTENTS	----
EXECUTIVE SUMMARY (two pages)	----
INTRODUCTION: • One or two-page summary about the project (location, sector, nature of activities, operator). • Developer's commitment to no net loss*, and rationale for this commitment (explanation of business case)	4-1-4: documentation of the offset design and how offset will achieve no net loss 1-1-1: assessment of project's predicted residual impacts 1-1-2: application of mitigation hierarchy documented 4-1-1: publicly stated commitment to no net loss; 2-1-1: assessment of whether impacts can be offset

• Intended conservation outcomes. • (* provided the project's impacts are capable of being offset)	
DESCRIPTION OF PROJECT IMPACTS: • Describe the key biodiversity components affected. • Describe the project's impacts on biodiversity (including direct, indirect, and cumulative impacts, as appropriate) including on the key biodiversity components identified. Include consideration of the intrinsic, socioeconomic and cultural values of biodiversity.	4-1-2: pre-project baseline characterised 4-2-1: key biodiversity components identified 1-1-1: the predicted residual impacts from the project on all affected biodiversity, including key biodiversity components, assessed and documented
DESCRIPTION OF MEASURES FOR AVOIDANCE, MINIMISATION, REHABILITATION/RESTORATION: • Describe the measures for avoidance of impacts, including those taken to avoid impacts and risks to highly irreplaceable and/or vulnerable biodiversity • Describe the measures for minimisation of impacts • Describe the measures for rehabilitation/restoration	1-1-2: application of mitigation hierarchy documents avoidance, minimisation, and rehabilitation / restoration measures 2-1-1: assessment of risk that impacts cannot be offset (highly irreplaceable or vulnerable biodiversity)
DESCRIPTION OF RESIDUAL IMPACTS: • Describe the residual impacts on biodiversity, after avoidance, minimisation, rehabilitation/restoration. • Describe the level of risk that any of these residual impacts are not capable of being offset.	1-1-1: assessment of project's predicted residual impacts 4-1-2: quantification of residual losses relative to pre-project baseline 2-1-1: assessment of risk that impacts cannot be offset 2-1-2: the risk assessment demonstrates how the impacts can be offset, accounting for uncertainties
DESCRIPTION OF OFFSET DESIGN: • Describe how stakeholders were identified and involved in offset design, and the results of their involvement • Describe the metrics selected and the rationale for doing so • Describe the offset site(s) selected and the rationale for doing so • Describe the offset activities selected and the rationale for doing so	6-1-1: relevant stakeholders identified and informed 6-1-2: stakeholder consultation and participation in design and implementation 6-1-3: roles of stakeholders defined 7-1-1: agreements established with relevant stakeholders 2-2-2: selection of methods and appropriate metrics documented, and rationale explained; 4-1-4: describe and document offset design (including location) and provide rationale for design 3-1-1: identification of offset sites in context of landscape level analysis 4-1-3: offset gains quantified relative to biodiversity baseline at offset site(s) 4-1-4: offset design described and rationale provided 4-2-5: loss-gain used in design and demonstrates no net loss 5-1-1: offset gains are additional 2-1-2: risk assessment demonstrates how residual impacts can and will be offset 9-1-2: implement a mechanism for independent review of offset design and implementation

DESCRIPTION OF OFFSET IMPLEMENTATION: • Describe the roles and responsibilities of the different stakeholders involved in the implementation of the offset • Describe the institutional and legal arrangements for the implementation of the offset • Describe the financial arrangements for the implementation of the offset • Describe the milestones for implementation • Describe the measures for monitoring, evaluation and adaptive management of offset implementation • Describe the grievance procedure	6-1-3: roles of stakeholders in implementing offset 8-1-1: evidence for management and technical capacity of those implementing the offset 8-1-2: legal mechanisms in place 8-1-2: financial mechanisms in place 4-3-1: sources of uncertainty and risk, and measures to manage risk are identified 4-3-2: milestones for delivery of offset gains established and monitored 8-2-1: risk management measures are implemented, monitored, and risk is adaptively managed 8-2-2: outcomes are independently audited 8-2-3: a system for monitoring, evaluating, and reporting on success 6-2-1: system for handling grievances implemented
REPORTING: • Describe the provisions for reporting on the implementation of the measures defined in this plan	4-1-1: public commitment to no net loss 4-1-4-: documentation of offset design and implementation 4-3-2: development of implementation milestones and tracking progress 8-2-2: outcomes independently audited 8-2-3: a system for monitoring and reporting on success 9-1-1: communication on baseline findings 9-1-2: mechanism for independent review and reporting

Assessing conformance

The Guidance Notes are intended primarily to help auditors assess conformance with the BBOP Standard. For more stepwise guidance on designing and implementing a biodiversity offset, the Guidance Notes can be read in conjunction with other technical documents related to the practical design and implementation of biodiversity offsets (such as the BBOP Handbooks on Offset Design, Cost Benefit Assessment and Offset Implementation; Resource Papers on Offsets and Impact Assessment, Offsets and Stakeholder Engagement, on No Net Loss (including Loss-Gain calculations) and on Impacts that are Difficult to Offset. These are available at: **http://bbop.forest-trends.org/guidelines/**. A wide range of other organisations, many of them BBOP members, are working on mitigation issues and offsets. These include companies with no net loss or net positive impact commitments, such as Ambatovy Minerals S.A, de Beers, BC Hydro, Rio Tinto and Solid Energy New Zealand; financial institutions such as the IFC, whose Performance Standard 6 is outlined in Box 1; government initiatives such as the Netherlands No Net Loss-initiative (NNLi); the New Zealand Department of Conservation's Biodiversity Offset Programme, and regional groups such as the European Commission with its No Net Loss Initiative; intergovernmental organisations, for instance the Convention on Biological Diversity and the International Union for Conservation of Nature (IUCN); and a variety of non-governmental organisations collaborating directly with the private sector in the field, including, for example, Birdlife International, Fauna and Flora International, and The Nature Conservancy, with its Development by Design approach. Their experiences, tools and approaches can also help developers design and implement offsets that conform to the BBOP Standard.

To help assessors and auditors determine compliance with the PCIs, Guidance Notes will be available in a separate document (see **http://bbop.forest-trends.org/guidelines/Standard_Guidance_Notes**). The Guidance Notes are organised in the following fashion: First, each Indicator (with associated Principle and Criterion) is set out in a text

box. The Guidance Notes for that indicator follow, with an explanation or interpretation that defines terms used in the Indicator and provides some examples or descriptions to illustrate characteristics of the Indicator. The interpretation also offers guidance on the kinds of evidence or factors to be considered in evaluating the Indicator and what constitutes good practice in a particular area (for instance, suitable metrics, or what to look for in plans). Following the interpretation of each indicator, key questions are listed that will need to be answered for assessors to be satisfied that the Indicator has been met, with related conformance requirements for each question. As a corollary, footnotes to the conformance requirements offer examples of the circumstances that would likely constitute non-conformance. A table at the back of the document shows the connections between the Indicators.

The Guidance Notes are not intended to provide a prescriptive or complete set of targets to be met in order for a given offset to satisfy the PCI, but rather to offer indicative information for assessors and auditors reviewing and evaluating evidence for conformance. As is frequently stressed throughout the Guidance Notes, there is no single best approach to the design and implementation of biodiversity offsets. The philosophy of BBOP members has always been to take a principles-based and flexible approach. Despite the detail in the Criteria, Indicators and 'conformance requirements' in the Guidance Notes, assessment of a biodiversity offset against the Standard will inevitably involve value judgements on the part of the assessor as to whether the offset complies with the PCI, for instance on the selection of appropriate experts and methods. Given the numerous different approaches and methods offset planners may take, Principle 9, concerning transparency, is particularly important. The assessor needs to be satisfied that the developer has explained the choices made concerning offset design and implementation, and offered a rationale for these choices. The conformance requirements for many Indicators thus require the developer to explain the rationale for the approach taken on a particular issue. Given the variety of possible situations to which this Standard may be applied, and the fact that some Indicators may not be relevant in a particular context, assessors may also find it helpful to consider a 'comply or explain' philosophy to the more detailed conformance requirements in the Guidance Notes, so that if a particular suggestion is inapplicable, the developer can explain why this is the case and offer an alternative approach to satisfying the Principle concerned.

The current view of BBOP members is that, to meet the Standard, a biodiversity offset needs to conform to the Indicators. Assessors and auditors should not insist on perfection in satisfying the Principles, Criteria and Indicators, but major failures in any individual Principle or Criterion would disqualify a biodiversity offset from meeting the Standard. The issue of the level of conformance with the PCI needed for a particular biodiversity offset to meet the Standard, and how this conformance should be measured and determined, will remain under development for the immediate future, while the Standard is trialled and improved.

One feature of biodiversity offsets is that their implementation, and even their design, can be a long-term undertaking. As is the case with a number of other standards, assessors may find it helpful to consider two stages of assessment: 'validation' of biodiversity offset design, when a Biodiversity Offset Management Plan has been prepared that describes a biodiversity offset which, if satisfactorily implemented, should satisfy the PCI; and 'verification' of biodiversity offset implementation, with periodic assessments as to whether the Biodiversity Offset Management Plan is being properly implemented.

Some assessors may not have specific expertise in the emerging and quite detailed scientific and technical aspects of biodiversity offset design and implementation.[6] And they may well not have the time to undertake detailed

[6] Who is the 'assessor' or 'auditor' mentioned in this document? How is it possible to know whether they are competent and have done a good job? A developer wishing to show that a biodiversity offset has been independently audited against the Standard will need to select an individual or organisation with appropriate skills. Organisations experienced in auditing against other environmental standards involving biodiversity assessments (e.g. FSC, RSPO, etc) should be able to adapt to the more quantified approach involved in assessments against the BBOP Standard. A system of accreditation for auditors (certifiers) would help spread

research to establish whether the selection by the developer of a particular approach or methodology is appropriate. Consideration of peer review (for instance, the establishment by the developer of a panel of experts or steering committee) may help assessments. By way of illustration, two examples of issues on which such expert opinion may be valuable are in the ranking of biodiversity components according to conservation priority (Indicator 4-2-1) and in the determination of adequate provision for risk and uncertainty (Indicator 4-3-1). With such situations in mind, Indicator 9-1-2 also makes provision for an independent review panel, steering committee or other mechanism for peer review.

Offset or compensation? What if my project does not satisfy all the PCIs?

BBOP defines a biodiversity offset as a no net loss (or net gain) conservation outcome (see the **Box 3**, to the right). Consequently, to meet the Standard, all the Principles and Criteria need to be satisfied, as evidenced by conformance with all the Indicators, unless the developer can justify that a given Indicator is inapplicable in its particular setting.

Box 3: 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.

However, we recognise that the Standard represents new and emerging best practice, and many conservation projects are either not designed to meet all the PCI, or for a variety of reasons, are simply unable to do so.

Typical reasons why it may not be possible for a project to conform to all the PCIs include the following:

- The conservation actions were not planned to achieve no net loss.
- The residual losses of biodiversity caused by the project and gains achievable by the offset are not quantified.
- No mechanism for long term implementation has been established.
- It is impossible to offset the impacts (for instance, because they are too severe or pre-impact data are lacking, so it is impossible to know what was lost as a result of the project).
- The compensation is through payment for training, capacity building, research or other outcomes that will not result in measurable conservation outcomes on the ground.

Figure 3 illustrates the continuum from a very basic form of compensation, through compensation which is close to an offset, to the type of compensation which is a full offset that can realistically expect to achieve a net gain.[7]

Figure 4 shows a flow diagram that can be used to consider whether the outcome in a given setting is a biodiversity offset, or a different form of compensation.

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consistent, best practice in assessing offsets against the BBOP Standard. Such an accreditation system, with associated training, is foreseen for the future.

[7] BBOP members have spent most time working on biodiversity offsets, and have yet to discuss other forms of compensation in much detail. In the future, BBOP may be able to offer ideas on different kinds and qualities of compensation.

Figure 3: The Compensation-Offset Spectrum

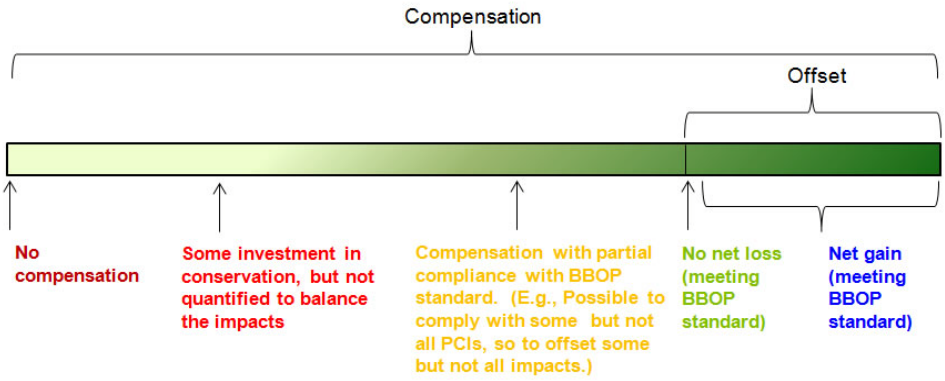
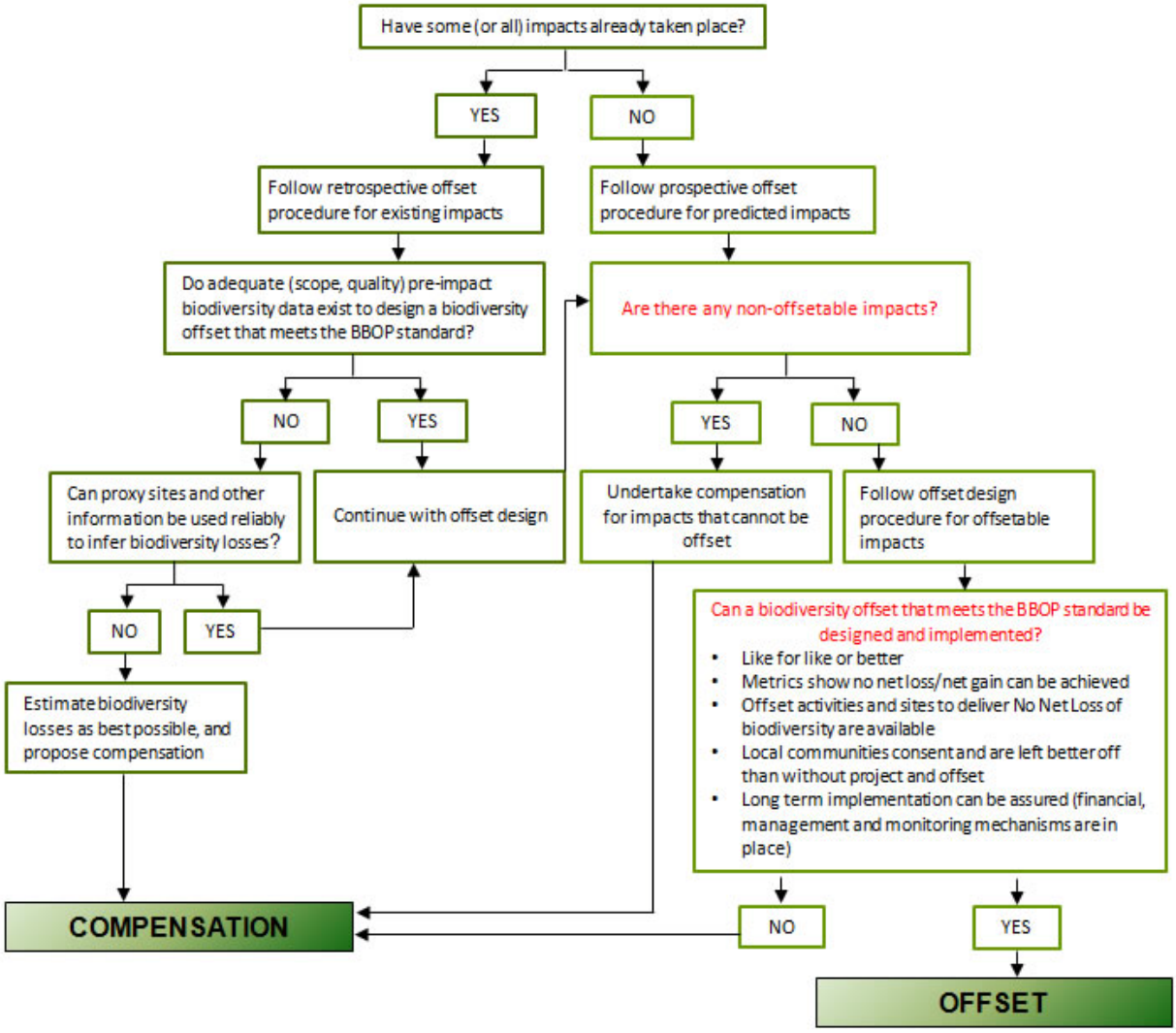


Figure 4: Distinguishing a Biodiversity Offset from Compensation

This decision tree implies a binary 'yes/no' answer at various steps, although in reality there can often be a continuum of responses. For instance, for a single project the answer may be 'yes' for some impacts, and 'no' for others. However, even in situations where compensation rather than an offset is undertaken, developers are encouraged to get as close as possible to a no net loss outcome, so as best to manage their biodiversity risks.



Relationship with ecosystem services

Biodiversity supplies the ecosystem services upon which human life depends. Ecosystem services are the benefits people obtain from functioning ecosystems. They are commonly classified as being either 'provisioning' (food, fibre, water, fuel, genetic resources, etc), 'regulating' (air quality, climate regulation, pest and disease control, etc), 'cultural' (spiritual, aesthetic, educational, etc), or 'supporting' (soil formation, nutrient cycling, etc). Biodiversity both supplies ecosystem services and depends upon them for its persistence. Human survival and well-being depend on ecosystem services, and thus also on the healthy functioning of the ecosystems and biodiversity on which they are based.

As biodiversity underpins ecosystem services, the focus of the Standard is on ensuring no net loss of biodiversity, but there are important links to ecosystem function and services:

- A good offset design process will take into consideration the loss and gain of biodiversity at all levels of organisation, and also how changes in the composition, structure and functioning of biodiversity might influence the provision of ecosystem services to different stakeholders. There are numerous ways of doing this, as outlined in the BBOP Handbooks.
- Key biodiversity components can include biodiversity components selected because they provide important ecosystem services, helping ensure the offset design delivers a 'like for like or better' outcome in terms of ecosystem services.
- Loss-gain metrics can be selected to include methods for calculating impacts on particular ecosystem services and gains (through the offset) in those ecosystem services.
- An important component of successful biodiversity offsets can be the development of a package of benefits to indigenous peoples and local communities to compensate them for the residual impact of the development project and the offset on their use and enjoyment of biodiversity, and to secure their support and involvement in the implementation of the offset. These benefits could range from provision of biodiversity components (e.g. medicinal plants, fuel wood) to financial compensation.
- Most methods used internationally in biodiversity offsets for calculating loss and gain use a combination of biodiversity components as proxies, rather than economic valuation. However, some methods of economic valuation are used, and the BBOP Cost Benefit Handbook suggests a range of tools that can help ensure that people are left at least as well off as a result of the project and offset, and preferably better off.
- One potential mechanism for securing the conservation outcomes needed for a biodiversity offset is payments for ecosystem services (PES). A range of people and organisations, from indigenous peoples and local communities, to farmers, NGOs, local authorities and protected area management boards, can be paid to deliver the specific conservation outcomes needed for the biodiversity offset to achieve no net loss (or a net gain).

The Economics of Ecosystems and Biodiversity (TEEB) study draws attention to the global economic benefits of biodiversity, highlighting the growing costs of biodiversity loss and ecosystem degradation through a range of publications. These mention biodiversity offsets and conservation banking in volumes aimed at companies, policy-makers, local authorities and for the public. For instance, 'TEEB for business' recommends that companies: 'Take action to avoid, minimise and mitigate BES risks, including in-kind compensation ('offsets') where appropriate'. (See **http://www.teebweb.org/**)

History, trialling and next steps

The BBOP Principles were developed by members of the BBOP Advisory Group between 2006 and 2009, and agreed by all Advisory Group members in February 2009. The Criteria and Indicators set out below as well as the accompanying Guidance Notes were developed in the following manner:

- Principles, Criteria and Indicators architecture discussed and agreed at the BBOP's seventh meeting in September 2009;
- Development of PCIs during discussions at the Assurance Working Group (AWG) teleconference in Jan 2010; in the combined Assurance and Guidelines Working Group meeting in Cambridge from 15–18 March 2010; during the AWG teleconference in July 2010; at BBOP's eighth meeting in Paris in September 2010; and in a meeting of BBOP's Assurance and Guidelines Working Groups in London on 31 March and 1 April 2011. First draft of Guidance Notes prepared.
- Internal consultation among BBOP Advisory Group members and redraft of the PCI and Guidance Notes in April-May 2011
- External consultation (involving non-members) in June-July 2011 and redraft of the PCI and Guidance Notes in August 2011.
- Final discussions of the draft Standard (PCI) and Guidance Notes at BBOP's ninth meeting in October 2011.
- Final (minor) changes to the draft Standard and Guidance Notes in November and December 2011.
- Launch of the Standard in January 2012.

Experience gained from applying the Standard in 2012-2013 will be used by BBOP members to develop a revised standard in 2014.

The BBOP Secretariat would be interested to hear from any organisation that has used the Standard or would be prepared to try it out at a project site. Please contact **bbop@forest-trends.org**.

Part 2: 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[8] 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[9]	***Adherence to the mitigation hierarchy: A biodiversity offset is a commitment to compensate for significant residual adverse impacts on biodiversity identified after appropriate avoidance, minimisation 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 minimise 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 minimise 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.

[8] 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.

[9] 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.

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 minimise 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.
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, characterised, 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, characterised 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[10] in the type and condition, the location, and if possible, the timing of biodiversity losses and gains, and explicitly consider the key biodiversity components.
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.

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

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.
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.[11]

[11] 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.

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.
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 recognised 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, recognise customary arrangements and, as appropriate, respect the internationally and nationally recognised 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.
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.

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