# Biodiversity Offsets

An opportunity for an adequate management of environmental impacts in Peru



# Development, promotion of investment and environmental sustainability

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### Acronyms

- EIS: Environmental Impact Study
- EIS-d: Detailed Environmental Impact Study
- OEFA: Agency for Environmental Evaluation and Control
- SEIA: Environmental Impact Assessment System
- SENACE: National Service of Environmental Certification for Sustainable Investment

The Government's commitment to implementing measures to promote private investment is at the basis of solid economic growth in Peru over the past 15 years. At the same time, the Government is also supporting environmental protection measures towards sustainability. These converging trends in policy orientation

> opens the opportunity to discuss how to implement new environmental management tools some of which over time have not been fully understood in their true essence and objectives nor put into practice.

We refer to environmental, biodiversity and ecosystem offset tools, which if applied correctly would allow mitigating the inevitable environmental impacts generated by large investment projects.

One important commitment by the Peruvian Government is to have a proposal of biodiversity offset guidelines to provide orientation to the holders of investment projects, for the elaboration and implementation of biodiversity offset plans. This is part of a consensus process among all sectors of Government reached through a Multisectorial Commission Report (Supreme Resolution 189-2012-PCM), which proposes environmental and social regulations/ safeguards for the development of economic extractive activities in the country. On April 2013 through Ministerial Resolution 068-2013-MINAM, a draft proposal on "Guidelines for the elaboration and implementation of the Environmental Offset Plan under the framework of SEIA (the national biodiversity impact assessment system)" was published. In our opinion this is a positive measure to promote conservation and/or recovery of the quality and functionality of ecosystems affected by the execution of large investment projects.

To date, this regulation is still under analysis and in the midst of a dialogue process. The Peruvian Society for Environmental Law (SPDA) considers its approval important in order to improve environmental management in the country. We are also aware that its implementation must be progressive, taking into account the challenges it represents at all institutional levels and the need to generate technical information and experiences.

In this context, SPDA is making this booklet available for citizens to better understand information on essential elements that are part of biodiversity offsets, as well as scenarios for implementation. The booklet also offers some recommendations on how to operationalize the process of this instrument.

# I. ESSENTIAL CONCEPTS

### What is an biodiversity offset?

This is an environmental management tool which includes measures and actions that generate environmental benefits proportional to significant environmental impacts caused by the development of investment projects.

Biodiversity offsets must operate when efficient prevention, mitigation, recovery and restoration measures are not adopted under the principle of mitigation hierarchy, which we will address later.

In the case of Peru, the SEIA norms provide that the biodiversity offset plan be a component of the environmental management strategy in the Detailed Environmental Impact Study.

#### .) Why are biodiversity offsets important?

Because in the context of investment projects, the generation of significant negative environmental impacts is inevitable, clear offset measures must be adopted on a case by case. Therefore, offsets serve to guarantee the maintenance of biodiversity and functionality of ecosystems, and, if possible, to obtain a net gain for biodiversity and ecosystem values.

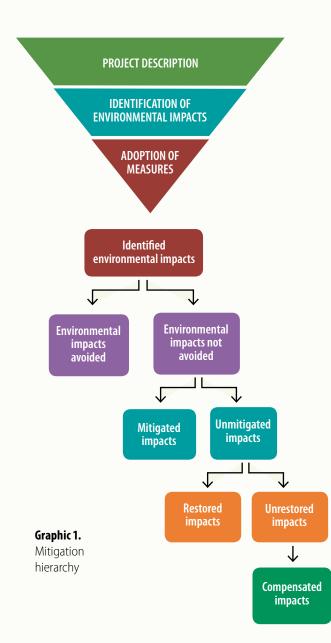
An biodiversity offset properly used shall contribute to the improvement of the SEIA and environmental management in the country.

## c. What an biodiversity offset must not be used for?

An biodiversity offset must not be understood as a license or enablement that negatively affects the ecosystems, nor be used by an individual to avoid incurring in costs associated to the prevention, mitigation, restoration or rehabilitation of ecosystems.

## d. What are the main principles that provide guidance for biodiversity offsets?

The guiding and integrated principles applied to govern biodiversity offsets are the following: (Business and Biodiversity Offsets Programme, 2012):<sup>1</sup>



- **Mitigation hierarchy:** Environmental offset actions shall be directed towards compensating significant adverse residual impacts on biodiversity, identified after adopting the appropriate measures to avoid, minimize and rehabilitate the site, according to a mitigation hierarchy (Graphic 1).
- **Ecological equivalence:** Implies that biodiversity offset areas are equivalent in terms of biodiversity and functionality to areas impacted due to the execution of an investment project.
- Zero net loss of biodiversity and functionality of ecosystems: Offsets must be designed and executed in order to achieve measurable results and in a reasonable manner expect zero net loss; preferably, a net gain of biodiversity.
- Additional results: Consists of reaching conservation results above and beyond those incurred without offsets. The design and implementation of offset schemes should avoid the displacement of activities that cause damage to biodiversity to other locations.
- **Participation of actors:** The effective participation of actors in decision-making over an offset for the loss of biodiversity, including evaluation, selection, design, monitoring and implementation, should be supported and encouraged.
- **Transparency:** The design and implementation of a structure for environmental offsets must be undertaken in a transparent and timely manner.

#### e.) How should biodiversity offsets materialize?

Biodiversity offsets shall materialize through the elaboration and approval of an biodiversity offset plan, as a component of the environmental management strategy of the EIA-d, which contains environmental offset measures and/or actions.

# Who should monitor compliance of the biodiversity offset plan?

The biodiversity offset plan is a component of the investment projects environmental study and therefore the compliance of commitments contained in the plan is subject to environmental verification and the application of administrative sanctions in the case of non-compliance.

At present, OEFA is the body in charge of environmental control and sanctions, with regards to medium and large scale mining sectors, hydrocarbons, electricity, fisheries and industries (paper, cement, breweries and leather).

In order to achieve appropriate environmental verification and support a scenario of environmental protection and legal certainty for the operators, the biodiversity offset plan commitments must be objective, precise and measurable. These must avoid generic statements which can give way to confusion and multiple interpretations. The holder must also include a monitoring program with specific measures to demonstrate the advances and results of an offset.

The idea is to avoid situations of environmental sanctions, promoting proper legal conduct and ensuring compliance of the objectives of each biodiversity offset plan.

## • Which EIA category requires an biodiversity offset plan?

According to that provided in Annex IV of the SEIA Regulation of the Law, the biodiversity offset plan is part of the EIA-d environmental management strategy (Category III), when applicable. Let us remember that in accordance to SEIA norms, there are three types of categories for environmental studies provided for investment projects, according to the environmental significance of such projects:

| Category   | Criteria of environmental significance   |
|--|--|
| Category I<br>Environmental<br>Impact Declaration                  | Includes projects executed that do not produce significant negative environmental impacts.   |
| Category II<br>Semi-detailed<br>Environmental<br>Impact Assessment | Includes projects executed that may<br>produce moderate environmental<br>impacts of which the negative<br>effects may be eliminated or<br>minimized through the adoption of<br>easy applicable measures.   |
| Category III<br>Detailed<br>Environmental<br>Impact Assessment     | Includes projects whose<br>characteristics, magnitude and/or<br>locations, may produce significant<br>negative qualitative and quantitative<br>environmental impacts, requiring<br>a thorough analysis in order to<br>revise the impacts and propose<br>an environmental management<br>strategy. |

Given the new institutional framework in Peru regarding environmental certification, we must take into account that when the process of transfer of capacities from sectors to SENACE is concluded, SENACE will be responsible for the EIA-d review and approval process. Understandably, approval of the environmental offset plan must also be under the competences of SENACE.

# II. KEY POINTS ON THE APPLICATION

#### .) What areas are eligible for an offset?

The offset should apply in those areas ecologically equivalent to the impacted area by the investment project before suffering the impact, ensuring the maintenance of ecosystems and their values, troughout the national territory.

These areas must be located preferably within the area of influence or areas connected to the project.

We recommend that unique ecosystems are not sacrificed, avoiding intervention and impact. Biodiversity offsets must not be used as an instrument for every investment project; each particular case must be evaluated individually.

The idea is that the operator does not select the easiest site, nor monopolize the sites for an biodiversity offset.

## b. What criteria is used to determine the offset areas?

We consider that the location of areas must be determined taking into account the following criteria, applied in a joint and concurrent manner, according to each case: proximity of the projects influence area, connectivity to reduce fragmentation, existence of threatened habitats, potential to ensure conservation profits, potential for environmental benefits for the population, among others.

In order to facilitate the identification process for biodiversity offset areas, we consider important that the Government creates and makes available an information tool such as a portfolio of prioritized areas and available for an environmental offset including information on optimum sites to undertake the corresponding measures and actions. Furthermore, the information generated must be used for territorial planning, ecological – economic zoning and in general any process undertaken by the State which provides official information.

Preferably information on the legal status of such areas must be included, as well as their overlap with other rights and assigned uses of the site and projection.

## What type of actions may be adopted for biodiversity offsets?

|   | Conservation actions  | Restoration actions  |
|---|---|--|
| What are they?  | Actions aimed<br>towards the<br>maintenance<br>and protection<br>of ecosystems<br>under a situation<br>of threat. | Actions aimed<br>towards<br>reestablishing<br>degraded<br>and altered<br>biodiversity<br>and ecological<br>values. |
| When can<br>we consider<br>offset has been<br>achieved? | When<br>degradation<br>or the loss of<br>biodiversity<br>and ecosystem<br>functions are<br>prevented.             | When a<br>good state of<br>biodiversity<br>conservation<br>and function of<br>ecosystems has<br>been achieved.     |

## When is the application of offset measures appropriate?

Offset measures are appropriate provided actions to avoid, minimize, rehabilitate or restore inevitable negative environmental impacts cannot be adopted, caused by the development of investment projects.

An biodiversity offset could qualify as a conditioned and residual instrument, considering that the holder of a project must ensure the compliance of prevention, mitigation and restoration measures.

## e. Who should be responsible for executing the biodiversity offset plan?

The holder of the investment project must be responsible for complying with the biodiversity offset plan.

The offset plan may be implemented directly or by contracting a third party. It is worth mentioning that if the biodiversity offset plan is implemented by a third party, this does not mean under any circumstance, the transfer of legal and/or financial responsibility, which should be expressly defined in the agreement signed between the operator and his contractor.

Likewise, the third party operator must demonstrate technical capacity and experience in order to ensure an efficient implementation of the biodiversity offset plan.

# f. What happens if the project holder transfers the ownership?

We consider that if the ownership of an investment project is transferred, the new owner must prove to the competent authority that it has the technical and financial capacities needed to comply with the biodiversity offset plan.

## III. RECOMMENDATIONS FOR THE IMPLEMENTATION OF BIODIVERSITY OFFSETS

### a. Gradualism

The implementation process of biodiversity offset tools must be undertaken in a progressive and gradual manner, following the same approach of the implementation process of new environmental authorities, as for example SENACE.

Gradualism responds to the need of ensuring compliance of previous conditions before demanding the enforceability of any requirement or instrument.

#### b. Generation of tools

- Guidance and technical instruments for operators or the holder of an investment project, to provide orientation during the elaboration and implementation process of the environmental offset plan.
- Portfolio of priority areas available for an biodiversity offset, containing information on the areas characterization, other rights granted or uses assigned, including a projection to intervene the zone.
- A permanent updated inventory for public access of the areas where an biodiversity offset has been approved, in order to monitor adequate conservation of the areas and avoid the monopolization of compensation areas.

- Technical instruments that include methodologies to carry out uniform characterization processes and the qualitative and quantitative valuation of ecosystems and environmental impacts.
- Other instruments, methodologies and/or protocols to ensure the certainty of the processes and guarantee the technical quality of environmental offset plans.

#### c. Generation of experiences

 Implies the need to generate technical information on the basis of experience, from lessons learned derived from the practical implementation of study cases applied. This allows systematization of case studies and real/practical information that contributes to the environmental offset plan and improves technical instruments required and/or supports approval of the necessary new tools.

#### d. Institutionality

 Implies the need for clarity regarding the organism responsible for approving biodiversity offset plans, approval of legal and technical instruments, the funding and administration of the infrastructure of required

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information and environmental control of commitments derived from environmental offset plans.

- Implies the need to undertake efficient and timely procedural agreements oriented towards reaching an evaluation process of plans, avoiding the delay in procedures.
- Implies the generation and/or capacity strengthening for evaluators of biodiversity offset plans, in order for them to respond efficiently and with technical solvency, to matters related to designing and executing the plans.
- Promote the development of financial mechanisms and alternatives to ensure sustainability the offsets.

## IV. KEY MESSAGES IIIII REGARDING BIODIVERSITY OFFSETS

- Biodiversity offsets must be applied as residual mechanisms after undertaking actions mainly regarding avoidance and/or prevention.
- Biodiversity offsets must be undertaken for residual environmental impacts and by no means for impacts generated during an investment project.
- Given the opportunity in which an biodiversity offset plan must be elaborated, the measure must be anticipated and the main action is prevention.
- The maximum objective is the compliance of biodiversity offset plans and not the establishment of sanctions.

## ANNEX 1

| N O R M   | LEGAL PROVISION   |
|---|---|
| General Environmental<br>Law – Law No. 28611  | Article VI The principle of prevention  |
|   | The specific objectives of environmental management are to prevent, monitor and avoid environmental degradation. When the causes are impossible to eliminate, the corresponding mitigation, recovery, restoration and eventual offset measures are adopted.   |
|   | Article VIII The principle of cost internalization  |
|   | Every natural, legal, public or private person must assume the cost of risks or damages caused to the environment.  |
|   | The cost of prevention actions, verification, restoration, rehabilitation, repair and eventual offset related to protecting the environment and its components from the negative impacts inflicted by human activities, must be assumed by those who cause the damage.  |
|   | Article IX The principle of environmental responsibility  |
|   | Whether degradation of the environment and its components is caused by natural, legal, public or private persons, they are required to inexcusably adopt restoration, rehabilitation or repair measures as appropriate, or if the above is not possible, compensate in environmental terms for the damage generated, without prejudice to other administrative, civil or penal responsibilities that may exist. |
| Law for the National System<br>of Environmental Impact<br>Assessment – Law No. 27466                        | Article 10 Content of the Environmental Management Instruments<br>10.1. In accordance with that established in the Regulation under the present Law and with the terms of   |
|   | reference approved in each case, environmental impact studies and as appropriate the other environmental management instruments must contain:   |
|   | []<br>c) The environmental management strategy or the definition of environmental targets, including, as the case<br>may be, the management plan, contingency plan, offset plan and abandonment or closing plan.<br>[]  |
| Regulation of Law No. 27466,  | Article 3 SEIA Principles   |
| Law for the National System of<br>Environmental Impact<br>Assessment – Supreme Decree<br>No. 019-2009-MINAM | SEIA is governed by the principles established in Law 28611, General Environmental Law, and the following principles:   |
|   | e) Efficiency: Implies the capacity to make proposed policies, plans, programs and investment projects environmentally viable, enabling their objective, through the determination of prevention, control, mitigation, recovery and eventual offset measures, in accordance with economy standards, simplicity and promptness, as well as existing legislation and due protection of the public's interest.     |

| N O R M   | LEGAL PROVISION  |  |
|---|--|--|
|   | <ul> <li>Annex I - Definitions</li> <li>Environmental certification: A resolution issued by the competent authority under which the environmental management instrument is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the environmental resolution is approved (DIA, EIA-sd or EIA-d), certifying that the envited resolution is approved (</li></ul> |  |
|   | proposed project has complied with substantive requirements established in the framework of SEIA.<br>Furthermore, environmental certification provides the commitments a holder must comply with to<br>prevent, mitigate, correct, compensate and manage the negative environmental impacts generated.   |  |
|   | • <b>Biodiversity offsets:</b> Measures and actions that generate proportional environmental benefits for the damage or harm caused to the environment from the development of projects; provided efficient prevention, correction, mitigation, recovery and restoration measure cannot be adopted.  |  |
|   | Annex IV - Basic Terms of Reference for Detailed Environmental Impact Studies (EIS-d), Category III  |  |
|   | Mechanisms and actions must be considered for the implementation of activities and commitments the holder of the project must comply with during its execution time; as provided in Law No. 27446, the present document and other applicable complementary norms.  |  |
|   | The Environmental Management Strategy must consider at the very least the following: []  |  |
|   | c.) Offset plan, if applicable and in accordance with that provided in the General Environmental Law – Law No. 28611.  |  |
| Regulation for the  | Article 38 Functions of the Bureau of Evaluation, Assessment and Financing of Natural Heritage   |  |
| Organization and Functions<br>of the Ministry of the<br>Environment – Supreme | The General Directorate of Evaluation, Assessment and Natural Heritage Funding is responsible for the following functions:   |  |
| Decree No. 007-2008-MINAM   | I. Formulate and propose national policy related to environmental services and their offset, promoting the implementation and design of funding mechanisms, payments and supervision of environmental services.  |  |

II. Implement and propose guidelines for the management, sustainable use and offset of environmental services, promoting the implementation and design of funding mechanisms, compensation and supervision of environmental services.

#### Policy and Environmental Management Program - SPDA

The Policy and Environmental Management Program of SPDA encourages and contributes to the development of public policies and legal tools aimed towards the overall improvement of environmental management and institutional development in Peru, promoting sustainable development based on a transectorial and decentralized approach.

The Program seeks to consolidate the establishment of coherent and integrated environmental public policies, as well as promote responsible and informed dialogue for society on key matters such as natural resources, extractive industries and productive activities, strategic environmental evaluation, land-use planning, environmental impact assessment and environmental monitoring, citizen participation, prior consultation, among other priority issues on the national environmental agenda.

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152 kg. of tree fiber saved 2,586 lt. liters of water saved 906 kg. solid residues not generated 18 kg. greenhouse gases avoided 238 KWH of energy not consumed 184 km not covered in a standard automobile



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