



**REPORT ON COMPREHENSIVE
MANAGEMENT OF BIODIVERSITY
AND ECOSYSTEM SERVICES OF ISA
AND ITS COMPANIES**

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CONEXIONES QUE INSPIRAN

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REPORT ON COMPREHENSIVE MANAGEMENT OF BIODIVERSITY AND ECOSYSTEM SERVICES OF ISA AND ITS COMPANIES

1 National and International Regulatory Framework

1.1 Kunming-Montreal Global Biodiversity Framework¹

The Framework was approved on December 18, 2022, in Montreal, Canada, where a vision for 2050 and a mission for 2030 were set out.

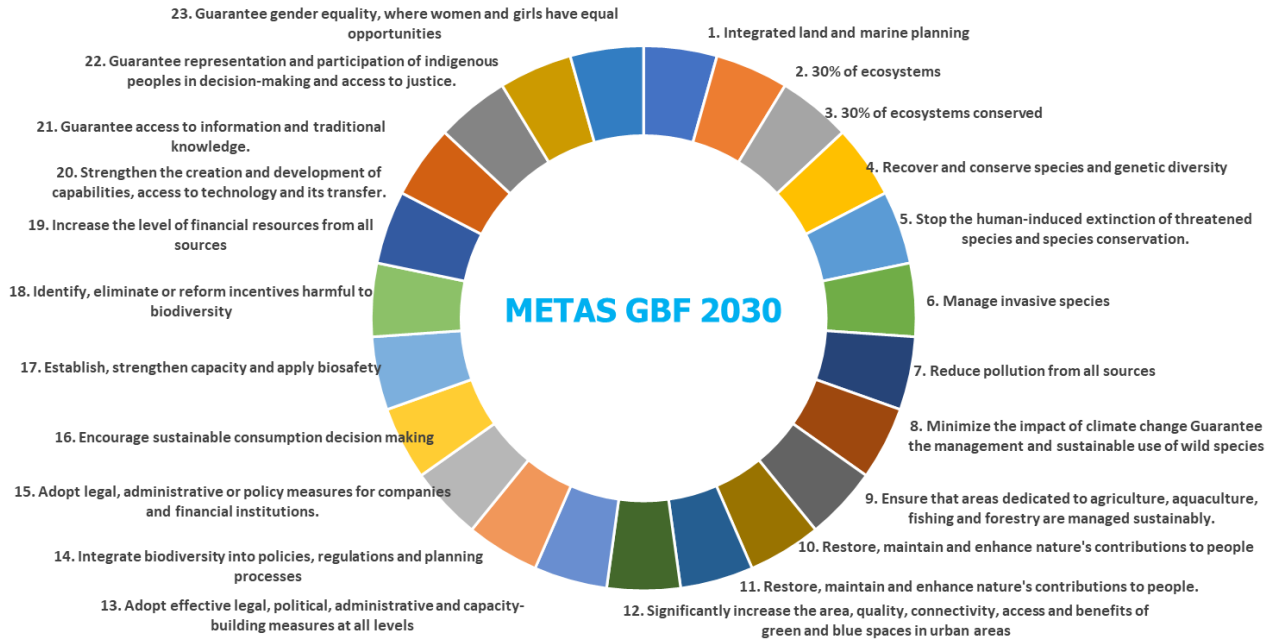
The vision of the Framework is that of a world in which people live in harmony with nature where: *"By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and providing essential benefits for all people"*. Four objectives were established for the vision:

- **Objectives A:** Restore integrity, connectivity and resilience of ecosystems and biodiversity, stop species extinction, and maintain genetic diversity.
- **Objectives B:** Biodiversity is used and managed sustainably and nature's contributions to people are valued, maintained, and enhanced by restoring ecosystem functions and services.
- **Objectives C:** Monetary and non-monetary benefits from the utilization of genetic resources are shared in a fair and equitable manner.
- **Objectives D:** Financial and technical means of implementation - capacity building, scientific and technical cooperation, and access to and transfer of technology - to implement the Global Biodiversity Framework.

The mission of the Framework for the period up to 2030, towards the vision for 2050, consists of: *"Take urgent action to halt and reverse biodiversity loss in order to set nature on the path to recovery for the benefit of people and the planet, conserving and using biodiversity sustainably, and ensuring the fair and equitable sharing of benefits arising from genetic resources, while providing the necessary means for implementation."* For the 2030 mission, 23 goals were established:

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1.2 National Regulatory Framework

We comply with and respect the legislation established in each country where we are present, as well as all agreements, treaties and voluntary commitments acquired by ISA and its companies.

1.2.1 Regulatory Framework in Colombia

1.2.1.1 Resolution 0256 of 2018:

Resolution 0256 of 2018 approves the update of the offset manual for the biotic component, allowing us to design measures to manage the negative impacts of projects. The purpose of the offset manual is to guide the compensation of impacts, as required by law, for the execution of projects, works or activities within the framework of environmental licenses, requests for permits or authorizations for single forest harvesting of natural forest and requests for temporary and definitive removal of national or regional forest reserves due to changes in land use.

This establishes the procedure and mechanisms to obtain "zero net loss" or "net improvement".

1.2.2 Regulatory Framework in Peru

Article 6 of the General Environmental Law (Law 28611) states that the main objective of environmental management is to monitor and prevent environmental damage.

According to the Environmental Offset Guidelines (R. M. No. 398-2014-MINAM), environmental offsetting is defined as measures and actions that bring environmental benefits proportional to the environmental damages caused by projects, provided that

effective prevention, correction, mitigation, recovery, and restoration measures cannot be taken.

1.2.3 Regulatory Framework in Brazil

1.2.3.1 Federal Decree 4340/2002

Federal Decree 4340/2002 establishes that regarding environmental offsets (as defined in Law 9,985/2000), the environmental authority shall establish the degree of impact according to the environmental impact study (EIA) carried out in the environmental licensing process.

Negative and non-mitigable impacts and potential risks that could compromise the quality of life in a region or cause damage to natural resources are considered.

Law 12,651 of 2012 regulates the protection of native flora and establishes that natural or legal persons who use forest raw materials obtained from the removal of native vegetation or who are authorized to remove native vegetation are obliged to reforest.

1.2.3.2 Law 6,938/81

The legal basis for environmental licensing is based on Law 6,938/81, which sets forth the National Environmental Policy and establishes a set of rules for environmental preservation.

1.2.4 Regulatory Framework in Chile

According to Supreme Decree 40 of 2012 (MMA), and the "Guide for Biodiversity Offsetting in the SEIA (Environmental Impact Assessment System) of 2014" (MMA-SEA), offsetting measures are the basis of the mitigation hierarchy and can only be applied when it is not possible to mitigate or remediate a significant impact.

Biodiversity offsets require the implementation of measurable actions that compensate for the residual impacts of projects on biodiversity (after implementing mitigation and remediation measures), focused on producing a positive and equivalent alternative effect for no net loss or a net gain of biodiversity.

1.2.5 Regulatory Framework in Bolivia

Article 1 of the general environmental law (Law 1333) establishes the objective of protecting and conserving the environment and natural resources by regulating human actions involving nature and promoting sustainable development, thus improving the quality of life of the population.

2 COMMITMENT TO BIODIVERSITY PROTECTION

The construction and operation of infrastructure projects generate environmental impacts, consume resources, and emit substances into the environment. Aware of this, ISA has the ISA 2030 Strategy, which is oriented to the creation of sustainable value, and seeks to generate positive social and environmental impact by contributing significantly to the care of the planet, to the fulfillment of global biodiversity goals and the achievement of the Sustainable Development Goals, as well as to minimize the environmental impacts of the business and promote positive initiatives regarding the environment in the countries where ISA and its companies have operations.

Through the Corporate Environmental Policy² and the integral strategy for biodiversity and ecosystem services, ISA and its companies are committed to managing impacts, contributing to the conservation and restoration of ecosystems and biodiversity, and generating greater benefits in terms of ecological connectivity and ecosystem services that favor the communities. As well as minimizing interventions, ecosystem fragmentation and loss of wildlife habitat.

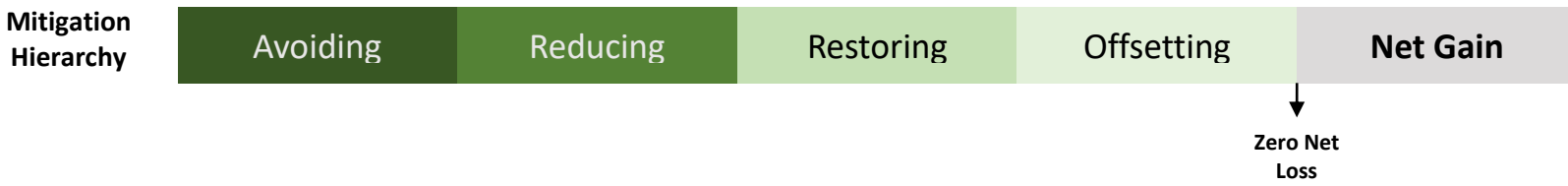
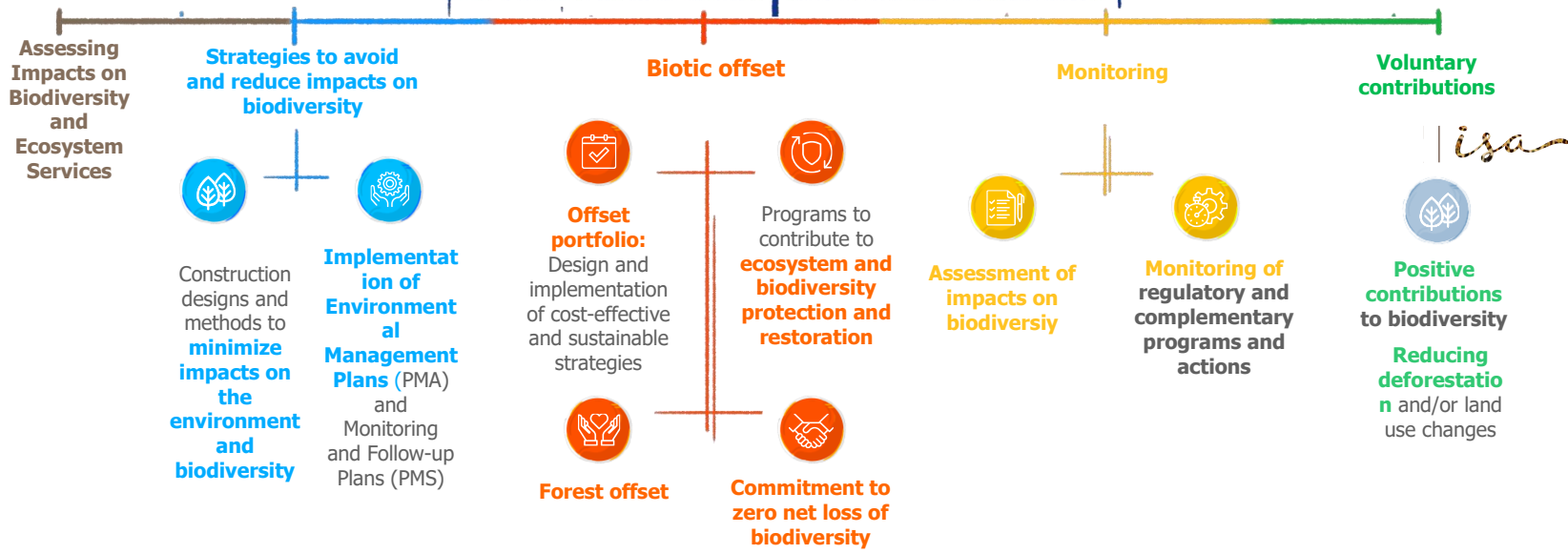
In addition, with the Conexión Jaguar Program, we voluntarily seek to generate positive contributions to nature and contribute to the fight against deforestation by supporting nature-based solutions projects aimed at the conservation and restoration of ecosystems and their biodiversity, the mitigation of climate change and the improvement of the living conditions of the communities present in the areas of influence of the projects.

To this end, ISA and its companies have defined the following goals, actions, and programs:

² Approved at ISA's Board of Directors meeting number 894 May 24, 2023

Comprehensive management of biodiversity*

* According to the regulations in force in each country



3 Commitment to applying the mitigation hierarchy

ISA and its companies are committed to applying the mitigation hierarchy in order to minimize negative impacts on nature and its biodiversity, through processes that seek to avoid, reduce, restore and offset the impacts generated on natural ecosystems and biodiversity.



Chart 1. Mitigation Hierarchy.

Source: Adapted from The Impact Mitigation Hierarchy (DEA et al., 2013)

4 Biodiversity and ecosystem services impact assessment (ESs)

4.1 General methodology for impact assessment

- 1) **Definition of area of influence:** The area of influence is the area in which the environmental impacts caused by the development of the project, work, or activity on the different environments (abiotic, biotic, and socioeconomic) and in each of the components are manifested and transcend.

The identification and delimitation of the area of influence of the components of the biotic environment takes into account the spatial and temporal scales and takes the ecosystem as the minimum unit of analysis. It should be noted that it is not limited

to the project intervention area, where the impacts may be immediately evident, but extends beyond, depending on the potential impacts that the project may generate.

- 2) **Characterization of the biotic environment and ecosystem services (ESs):** Once the area of influence has been defined, qualitative and quantitative information is collected on the ecosystems present there, determining their functionality and structure, which allows to know the current characteristics of the environment in the area of influence of the project, and subsequently, to make an adequate comparison of the variations of these characteristics during the development of the different activities that are part of the project phases. This characterization also includes the identification of strategic and sensitive ecosystems and protected areas at the local, regional, and national levels. In addition, the ESs provided by the ecosystems present in the area of influence are identified and described.
- 3) **Analysis of the ecosystem services (ESs):** Establish the relationships between ecosystem processes, ecosystem functions, biological structures and ESs, highlighting which processes allow the development of which functions, which functions are linked to which structures, and which structures provide which ESs; for example, the accumulation of nitrogen in organic matter (process) in plants (structure), allows the removal and retention of nutrients (function), which in turn, allows the purification of water (service); it is necessary to set appropriate spatial and temporal scales for the study of ESs.
 - Determining the status of ESs by defining and using technical indicators
 - Identification of type and calculation of number of direct beneficiaries
 - Evaluation of the dependence of the communities on ESs and classification of said dependence in categories (high, medium, or low)
 - Evaluation of the dependence of the communities on ESs and classification of said dependence in categories (high, medium, or low)
 - Evaluation of ESs dynamics
- 4) **Assessment of impacts on biodiversity and ESs:** The identification and evaluation of impacts is carried out through the application of the "Methodological Guide for Environmental Impact Assessment" by Conesa Fernández - Vítora 2010, as well as the "General Methodology for the preparation and presentation of environmental studies" of the Ministry of Environment and Sustainable Development 2018³. This assessment makes it possible to identify the significant impacts that could be generated on biodiversity and ESs as a result of the construction and operation of the projects and to propose the management and monitoring measures necessary to prevent/avoid/correct/mitigate or compensate for them.

Initially, the starting point is the characterization of the area of influence of each of the environments, which expresses the general conditions of the area without the

³ According to the regulations in force in each country.

effects of the Project and constitutes the basis for analyzing how the Project will modify it. The above indicates that two (2) scenarios are analyzed: The determination of environmental impacts Without and With Project, following the steps described below:

The first step is to identify those elements, qualities and processes that are part of the environment and that can be modified, i.e. environmental aspects.

Second, the environmental impacts are identified and rated using a scale of values that determine the degree or importance of the alteration that could be generated by current anthropic activities and the implementation of the project.

The results of the impact workshops conducted with the communities of the project's area of influence are taken into account throughout the impact identification and assessment process.

The attributes to be evaluated during the impact assessment correspond to:

- Impact classification
- Impact intensity
- Extent of impact
- Moment of impact
- Persistence of impact
- Impact reversibility
- Impact recoverability
- Impact synergy
- Accumulation of impact
- Effect of impact
- Periodicity of impact

ISA and its companies have manuals, procedures, and tools to manage the impacts identified during the Environmental Impact Assessment (EIA), which is the basic decision-making tool for projects requiring an environmental license and is available to the public (see Chart 2).

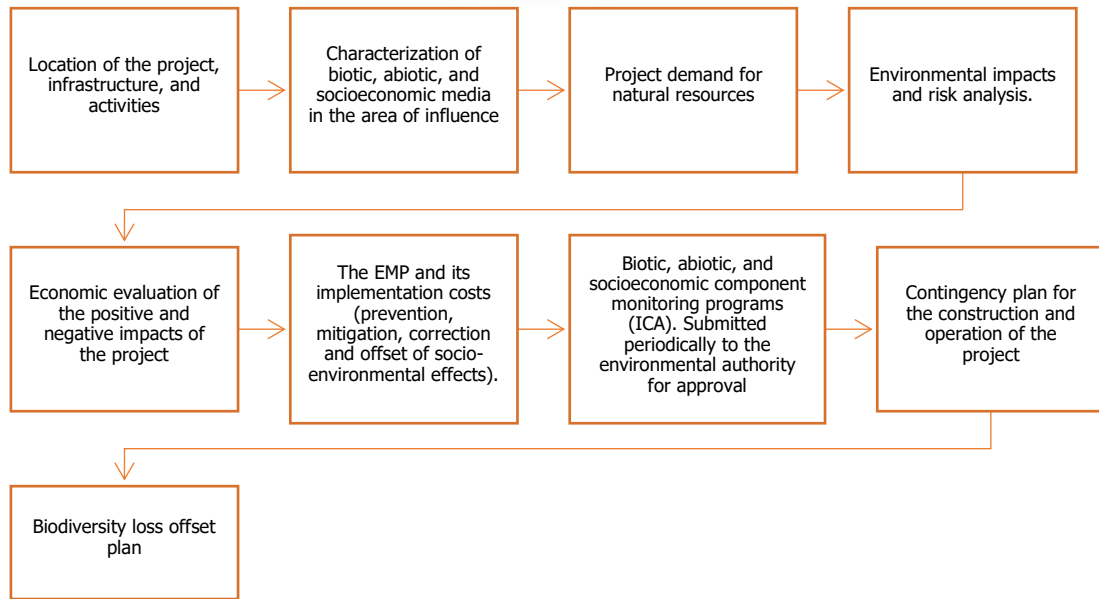


Chart 2. Steps for the Environmental Impact Assessment (EIA)

4.2 Main impacts on biodiversity identified for Power Transmission and Roads business units

The construction of roads and transmission lines are linear projects that pass through a significant number of ecosystems. For their construction and operation, it is necessary to identify and assess the significant impacts that could be generated on biodiversity, as well as the actions aimed at preventing, mitigating, and compensating the impacts on natural ecosystems throughout the life cycle of the assets.

Biodiversity impacts identified for the Energy Transmission and Roads business units are as follows:

- Modification of the vegetation cover.
- Modification of ecosystem connectivity.
- Impact on fauna species.
- Impact on individuals of endemic, threatened, protected, or ecologically, economically, and culturally relevant flora species.
- Intervention of strategic ecosystems and sensitive areas.
- In energy transmission projects it is necessary to intervene vegetation present in the easement strip, tower sites, accesses and cable laying areas.
- In some sectors adjacent to the highway, land uses are changed, contributing to the transformation of ecosystems to be used for industrial, commercial, or residential development.

These impacts are generated during project construction and operation activities. For the Energy Transmission business unit, land use changes are permanent only at tower sites and substations; in the easement areas these changes can be permanent or temporary.

It is important to note that during the environmental impact assessment, depending on the characteristics of the projects, location, vegetation cover, and other aspects evaluated, the result of the assessment shows that the significant impacts on biodiversity are irrelevant or moderate, as in the case of REP/CTM.

5 Biodiversity and Ecosystem Services (ESs) Risk Assessment

Risk management in ISA and its companies has a short- and medium-term vision with corporate risk management, in the long term there are emerging risks and additionally there is business continuity management.

The assessment of risks to biodiversity is approached, in the short and medium term, from the risk typologies "Environmental" and "Natural phenomena and extreme climatological changes", through a Top-down and Bottom-up approach considering:

- the results of the analysis of environmental impacts and aspects (ISO 140001), and
- comprehensive biodiversity management (- ISA paragraph 4.1 and 4.2) where the ecosystem services provided by nature are analyzed, within which priority is given to regulation services (climate, erosion control, wind protection, flood control, erosion rates and mitigation of mass movements) and in which disaster risk management acts as a protection measure and business continuity management.

In the long term, from the emerging risks, the loss of biodiversity is evaluated with an impact on the organization mainly in terms of stricter regulations, the need for greater investment and potential project delays. However, it also offers opportunities to implement actions that harness the power of nature to address some of our challenges

ISA's comprehensive risk management (ERM) identifies, analyzes, evaluates, monitors, and continuously communicates the risks to which ISA and its companies are exposed, in order to manage the impacts on the achievement of business objectives and financial and reputational resources. ISA identifies its risks, estimates their probability of occurrence and the consequence in different scenarios, defines and implements prevention and mitigation actions, through an interdisciplinary group with representatives of the asset's life cycle (supply, design, construction, operation, and maintenance), on a quarterly basis.

In emerging risks, risks that may significantly affect the business models of ISA and its companies are identified based on trends. This exercise has an annual frequency, with a review of assumptions every six months.

6 Assessment of dependencies on biodiversity and ecosystem services (ESs)

ISA INTERCOLOMBIA and ISA, during 2023, conducted a first pilot to identify the dependencies of the business on nature and biodiversity. This exercise was carried out, in the Sabanalarga Bolívar 500 kV Transmission Line project, under the guidelines established in the terms of reference TdR-17 of 2018 and General Methodology for the Preparation and Presentation of Environmental Studies of 2018. Here we identified the ecosystem services provided by the different ecosystems located in the area of influence of the projects under construction and operation and estimated the demand for resources.

Ecosystem services are grouped into 4 types:

- **Cultural ecosystem services:** non-material benefits obtained from ecosystems, through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences.
- **Ecosystem provisioning services:** goods and products obtained from ecosystems, such as food, fiber, timber, water, and genetic resources.
- **Regulatory ecosystem services:** benefits resulting from the regulation of ecosystem processes, including maintenance of air quality, climate regulation, erosion control, human disease control, and water purification.
- **Supporting ecosystem services:** ecological services and processes necessary for the provisioning and existence of other ecosystem services, including primary production, soil formation and nutrient cycling, among others.

These services were classified considering the degree of dependence of the project on ecosystem services (see Table 1).

Table 1. Criteria for defining the degree of dependence of the project on ecosystem services.

DEGREE OF DEPENDENCE OF THE PROJECT ON ECOSYSTEM SERVICES	
High dependence	The activities that are an integral part of the project directly require ecosystem services.
Medium dependence	Some secondary activities that are an integral part of the project directly require ecosystem services.
Low dependence	The main or secondary activities of the project do not directly require the service.

6.1 Dependences identified in the Project

As a result of this exercise, a medium-high dependence on regulation and support services such as flood control, water flow regulation, erosion rate control, mass movement attenuation, wind protection is identified (see Table 2).

Table 2. Ecosystem services in relation to project impact

Type of ecosystem services	Ess Identified*	dependencies of the communities on ESs	dependencies of the business on ESs	Impact of the project on ESs	Trend of ESs
Ecosystem provisioning services	water	Half	Low	Low	Stable
	sand and rock	Low	Low	Low	Stable
	Wood	Half	Low	High	Stable
	Fibers and resins	Low	Low	Low	Stable
	Biomass	Low	Low	High	Stable
	Meat and skins	Low	Low	Low	Stable
	Medicinal plants	Low	Low	Half	Stable
	Natural ingredients	Low	Low	Low	Stable
	Cattle raising	Low	Low	Low	Stable
	Agriculture	Low	Low	Low	Stable
Supporting and Regulatory ecosystem services	Landscape	Half	Half	Half	Stable
	Erosion control	Low	Low	Low	Stable
	Climate regulation	Low	Low	Low	Stable
	Regulatory ecosystems	Low	Low	Low	Stable
Cultural ecosystem services	Recreation and tourism	Low	Low	Low	Stable
	Spiritual and religious	Low	Low	Low	Stable

7 Managing impacts on biodiversity and ecosystem services using the mitigation hierarchy

7.1 Actions to avoid and reduce impacts:

- **Restriction analysis:** At the project planning stage, areas with biodiversity restrictions that are included in the ARPEX are identified.

The ARPEX helps select and prioritize bids in the group's business portfolio through an environmental, social and land analysis of future projects, using GIS technology to generate mitigation actions. This tool is designed for all expansion plan projects in countries where ISA is present.

The ARA helps select a preliminary project path for bid preparation, considering environmental, engineering, and property aspects. These processes help prioritize projects that reduce impacts on biodiversity.

- **Design alternatives:** for the construction of the projects, design alternatives are evaluated to avoid or minimize the impact on strategic ecosystems and areas of great value for biodiversity, classified according to the International Union for Conservation of Nature (IUCN) in categories I to IV, this is useful to analyze the alternatives of the routes of the projects, **achieving a layout with the least possible impact** on biodiversity, considering the geographical, environmental, biotic, abiotic and socioeconomic characteristics, the analysis of the effects and risks of the project, among other factors.

National and regional databases of endangered species, such as the IUCN Red Books and the CITES species list, were consulted for the physical-biotic characterization of the project's area of influence.

This provides us with the necessary elements to select the alternative that optimizes and rationalizes the use of natural resources and avoids or minimizes the potential risks, effects, and negative impacts. This practice is carried out in the companies ISA INTERCOLOMBIA, ISA TRANSELCA, ISA CTEEP, and ISA REP.

- **Design of variable forest exploitation strips:** the areas in which the intervention of tree individuals will be carried out are defined through the modeling of variable strips. These strips are delimited by the possible interferences between the conductor and the projected height of the tree individuals, generating the reduction of the area to be intervened with forest exploitation (reduction with deforestation). This analysis is fundamental when interventions must be carried out in protected areas, areas with conservation initiatives, AICAs or ecosystems with ecological importance. This analysis is applied at all stages of the projects, as part of the commitment to reduce deforestation in the construction phase and contribute to the creation of sustainable value. This practice is carried out in ISA INTERCOLOMBIA companies.
- **Evaluation of the height of the structures (towers):** during the formulation of the projects, the relevance and timeliness to implement structures (towers) with

greater heights to mitigate biotic intervention and minimize impacts on the flora and fauna component is evaluated, especially in ecosystems of high value for the protection of biodiversity and in areas that have restrictions by the environmental authorities. The reduction of impacts is achieved by increasing the distance of the towers from the ground, allowing the coexistence of the infrastructure and existing vegetation. This practice is carried out in the companies ISA INTERCOLOMBIA, ISA INTERCHILE, ISA TRANSELCA, ISA CTEEP.

- **Alternative construction methods:** In order to reduce or avoid impacts and interventions on vegetation cover and sensitive ecosystems and reduce pruning and felling of tree species along the easement, alternative construction methods are implemented, such as cable laying with drones or helicoptering and the use of gantries, minimizing ecosystem fragmentation and loss of habitat for wildlife. This practice is carried out in the companies ISA INTERCOLOMBIA, ISA INTERCHILE, ISA CTEEP.
- **Forest exploitation planning and maintenance of easement strips** in the operation and maintenance of strategic areas of importance for biodiversity and considering the characteristics of the species, ecosystems and topographic conditions, technical pruning is prioritized and, when this is not possible, the last measure is the harvesting of trees. ISA INTERCOLOMBIA, ISA TRANSELCA, ISA BOLIVIA, ISA INTERCHILE, ISA CTEEP
- **Sustainable easements:** Promote and provide support for communities to use easement strips for ornamentation and landscaping, develop community vegetable gardens, and engage in social participation. ISA INTERCOLOMBIA.
- **Environmental Management Plans (EMP)** During construction and operation of the projects, measures are implemented to avoid, mitigate, and reduce impacts on fauna, flora, connectivity, and ecosystems of great value for biodiversity conservation, some of the measures include:
 - Wildlife rescue and repelling
 - Rescue and relocation of endemic or endangered species and germplasm rescue
 - Follow-up and monitoring of the rescue, transfer, and relocation of vascular epiphytes.
 - Installation of flight diverters
 - Implementation of wildlife crossings

The effectiveness of some of these measures is monitored periodically in the projects with actions such as:

- Periodic monitoring at permanent fauna and flora stations (plots) in the easement strip.

- Monitoring of the effectiveness of flight diverters once the operational phase of the project begins.
- Semiannual wildlife monitoring

The implementation of environmental management plans is carried out by the companies ISA INTERCOLOMBIA, ISA REP, ISA INTERCHILE, ISA CTEEP.

- **Implementation of anti-collision measures for avifauna:** Installation and monitoring of anti-collision devices for avifauna. Structures installed by ISA INTERCOLOMBIA, ISA INTERCHILE.
- **Environmental Guidelines Adaptation Plan (PAGA):** for the operation and maintenance of road infrastructure projects, Ruta Costera, actions are implemented to avoid, mitigate, and reduce the impact on fauna, flora, connectivity, and ecosystems of great value for the conservation of biodiversity, during the construction and operation stages. It includes, among others:
 - Establishment of wildlife rescue and repelling measures, construction, monitoring and adaptation of wildlife crossings, and installation of preventive signs regarding the presence of wildlife.
 - Awareness-raising workshops with related personnel and communities; recording and analysis of wildlife roadkill and specific wildlife studies, such as the blue crab, and roadside campaigns.

7.2 Actions to restore and regenerate impacts

- **Environmental Management Plans (EMP):** During the construction and operation of the projects, measures are implemented to restore the impacts, which were not possible to avoid, on fauna, flora, connectivity, and ecosystems of great value for biodiversity conservation, some of the measures include:
 - Carry out ecological rehabilitation and regeneration as a measure to mitigate impacts on non-vascular epiphytes (lichens, fungi, among others).
 - Develop a program for the prevention and control of erosion and protection of soils; protection of wetlands, water bodies, and watercourses; and prevention and combat of forest fires.
 - Conduct environmental education programs.

Measures implemented by ISA INTERCOLOMBIA, ISA REP, ISA INTERCHILE, ISA CTEEP.

- **Landscape restoration:** Restore the landscape by means of revegetation techniques such as hydroseeding or broadcast seeding and planting trees in flat areas, including maintenance. Activity carried out by RUTA COSTERA and ISA INTERVIAL.

- **Slope revegetation:** Embankment cutting and construction of hydraulic works, ditches, and crest ditches, to prevent erosion and keep the intervened areas stable. Activity carried out by RUTA COSTERA

7.3 Actions to compensate for impacts

Applying the mitigation hierarchy in the construction and operation of projects, negative impacts or effects that cannot be avoided, corrected, mitigated, or substituted and that lead to loss of vegetation cover and/or loss of biodiversity in natural terrestrial ecosystems and secondary vegetation are compensated through different biotic compensation strategies.

- **Biotic offsets:**
 - Commitment to Zero Net Loss of Biodiversity
 - Compensation portfolio: Formulation and implementation of cost-effective and sustainable strategies, with guarantees of permanence over time, linked to communities and regions.
 - Ensure no net loss of biodiversity and comply with national and regional conservation goals. Activity carried out by ISA INTERCOLOMBIA
- **Programs to contribute to ecosystem and biodiversity protection and restoration:**
 - Implementation of ecosystem restoration strategies, tree planting, and rehabilitation of water bodies.
 - Purchase of land in protected areas in order to submit the declaration of protected areas to the environmental authority, thus allowing the recovery of ecosystems similar to those impacted, ecological connectivity, and ecosystem services. Activity carried out by RUTA COSTERA
- **Forest offset:** Offset impacts that could not be avoided or reduced through reforestation and revegetation. Activity carried out by ISA INTERCOLOMBIA, SA TRANSELCA, ISA CTEEP

7.4 Actions to monitor and evaluate actions implemented

- **Environmental Monitoring Plans (PMS):** In order to evaluate the actions implemented, ISA and its companies have plans to monitor and evaluate the progress and success of the measures, among these plans are:
 - Monitor the rescue, transfer, and relocation of vascular epiphytes (orchids and bromeliads) non-vascular epiphyte offset.
 - Rescue, reposition, transfer, and relocate individuals of endemic, threatened, banned or ecologically, economically, and culturally relevant tree species.
 - Manage vegetation during construction and operation.
 - Install bird flight diverters.
 - Manage wildlife, landscaping, and ornamentation.
 Activity carried out by ISA INTERCOLOMBIA, ISA INTERCHILE, ISA REP ISA CTEEP and ISA TRANSELCA.

- **Follow-up of wildlife crossings:** Recording of wildlife roadkill in order to identify the locations with the highest incidence and take corrective actions. Activity carried out by RUTA COSTERA

7.5 Commitment to making positive contributions to nature

- **Conexión Jaguar Program:** ISA and its Companies voluntarily seek to generate positive contributions to biodiversity through the Conexión Jaguar Program, developed to contribute to biodiversity conservation, climate change mitigation, the development of rural communities and the connectivity of the natural habitats of the jaguar (*Panthera onca*) in Latin America.

As there is no presence of jaguars in Chile, we work in the conservation of the puma (*Puma concolor*), the second largest feline in America. Both the puma and the jaguar are umbrella species, who are an important part of the ecosystem balance: they protect biodiversity, water, and forests, guaranteeing the survival of the species that coexist with them and their associated habitats (See Chapter Conexión Jaguar Program.)

8 Goals and commitments

At ISA, we are aware of the existence of sensitive species and fragile ecosystems throughout the megadiverse territory of the countries in which we operate, and therefore we have the following commitments to protect biodiversity:

8.1 Commitment to compensation for biotic impacts

The following goals and commitments related to future offsets and reforestation are in place:

- **No net loss of biodiversity:** the objective is to compensate for the loss of biodiversity in natural terrestrial ecosystems and secondary vegetation, in such a way as to guarantee the effective conservation of an ecologically equivalent area where it is possible to generate a permanent conservation strategy and/or its ecological restoration so that when compared to the baseline it is ensured that there is no net loss of biodiversity.

Goal: 16,612 hectares by the year 2040

During this period, 3,112 hectares of mangrove ecosystem, tropical dry forest, tropical forest, woodland/scrubland, flowering desert (ephemeral grassland), Belloto del Norte preservation forest, Lúcumo preservation forest, Guayacán preservation forest and Algarrobo preservation forest were protected and are in the process of restoration (see Table 3)

Tabla 3. Biotic Offsets (No Net Biodiversity Loss-)

Companie	Project name	Location	Scope of offset	Area to be offsetted	Year of fulfillment of the obligation	Condition of the area at the end of the period
ISA INTERCOLOMBIA	Interconexión Costa Caribe 500 kV - CECO	Córdoba (Bolívar) Pueblo Nuevo (Córdoba) Santa Bárbara (Magdalena) Ovejas (Sucre)	No Net Biodiversity loss	2721	2040	In property securing
ISA INTERCOLOMBIA	Interconexión Noroccidental a 500KV - ANPO	Anorí (Antioquia)	No Net Biodiversity loss	908	2039	In property securing
ISA INTERCOLOMBIA	Interconexión Noroccidental a 500KV - AMA	Amalfi, Anzá, Liborina, Medellín (Antioquia)	No Net Biodiversity loss	1261	2037	In property securing
ISA INTERCOLOMBIA	Interconexión Noroccidental a 500KV - ANCE	Puerto Libertador, San José de Uré (Córdoba) Tarazá (Antioquia)	No Net Biodiversity loss	2716	2036	In property securing
ISA INTERCOLOMBIA	Interconexión Noroccidental a 500KV - POSO	Amalfi, Yondó (Antioquia) Cimitarra (Santander)	No Net Biodiversity loss	2424	2037	In property securing
ISA INTERCOLOMBIA	Interconexión Noroccidental a 500KV - SE PORCE III	Anorí (Antioquia)	No Net Biodiversity loss	17	2028	In property securing
ISA INTERCOLOMBIA	Línea de transmisión Copey Cuestecitas - Copey Fundación - COCU	Valledupar (Cesar)	No Net Biodiversity loss	1544	2040	In property securing
ISA INTERCOLOMBIA	Línea de Transmisión Sabanalarga - Bolívar a 500 kV - SABO	Piojó (Atlántico)	No Net Biodiversity loss	427	2035	In property securing
ISA INTERCOLOMBIA	LT Betania – Mirolindo 230 Kv - BEMI	Aipe (Huila) Natagaima (Tolima)	No Net Biodiversity loss	324	2040	In property securing
ISA INTERCOLOMBIA	LT Cuestecitas – Majayura 230 Kv - CUWI	Riohacha (La Guajira)	No Net Biodiversity loss	128	2040	In property securing
ISA INTERCOLOMBIA	LT La Loma - Sogamoso 500 kV - SOLA	NA	No Net Biodiversity loss	1373	2033	Compensation plan under evaluation by the Environmental Authority
ISA INTERCOLOMBIA	LT Montería – Urabá 230 kV y SE asociada	San Pedro de Urabá (Antioquia) Cereté (Córdoba)	No Net Biodiversity loss	34	2036	In property securing and in establishment
ISA INTERCOLOMBIA	LT Sochagota – San Antonio 230 Kv - SOSA	Paipa (Boyacá)	No Net Biodiversity loss	1	2029	In establishment

Companie	Project name	Location	Scope of offset	Area to be offsetted	Year of fulfillment of the obligation	Condition of the area at the end of the period
ISA INTERCOLOMBIA	SE Caracolí a 220 kV y líneas de transmisión asociadas - COLI	Usiacurí (Atlantico)	No Net Biodiversity loss	166	2040	In property securing
ISA INTERCOLOMBIA	SE Sogamoso 500 kV - SOGA	San Vicente de Chucurí (Santander)	No Net Biodiversity loss	10	2040	In property securing
ISA CTEEP	Projeto Triangulo Mineiro - IEMG	Minas Gerais	No Net Biodiversity loss	39,45		Obligation completed
ISA CTEEP	LT 345 kV Nova Ponte – Araxá 3 C1; LT 345 kV Nova Ponte – Uberlândia 10 C1; Trecho de Linha de Transmissão em 345 kV entre a SE Monte Alegre de Minas 2 e a LT Itumbiara – Porto Colômbia / Subestação de Energia 345/138 kV Araxá 3; Subestação de Energia 345/138 kV Uberlândia 10 C1; Subestação de Energia 345/138 kV Monte Alegre de Minas 2					
ISA CTEEP	IE Aguapei	São Paulo	No Net Biodiversity loss	4,95	2023	Maintenance
ISA CTEEP	Subestação de Bagaçu 440/138kV e Seccionamento da LT 440 kV Ilha Solteira - Bauru e LT 138kV Valparaíso - Nova Avanhandava / Subestação Alta Paulista 440/138 kV, LT Flórida Paulista - Alta Paulista (300m), LT 138 kV Alta Paulista - Presidente Prudente (300m), LT 440 kV Taquaruçu - Alta Paulista (50,35 km) e LT 440 kV Alta Paulista - Marechal Rondon (50,28 km)					
ISA CTEEP	IE Itaunas	Espírito Santo	No Net Biodiversity loss	4	2024	Maintenance
ISA CTEEP	LT 345 kV SE Viana 2 - SE João Neiva 2 e Subestação 345 kV João Neiva 2					
ISA CTEEP	IE Itaunas	Espírito Santo	No Net Biodiversity loss	0,12	2024	Maintenance
ISA CTEEP	LT 345 kV SE Viana 2 - SE João Neiva 2 e Subestação 345 kV João Neiva 3					
ISA CTEEP	Projeto Triangulo Mineiro - IEMG	Minas Gerais		6,08	2026	Maintenance

Companie	Project name	Location	Scope of offset	Area to be offsetted	Year of fulfillment of the obligation	Condition of the area at the end of the period
ISA CTEEP	LT 345 kV Nova Ponte – Araxá 3 C1; LT 345 kV Nova Ponte – Uberlândia 10 C1; Trecho de Linha de Transmissão em 345 kV entre a SE Monte Alegre de Minas 2 e a LT Itumbiara – Porto Colômbia / Subestação de Energia 345/138 kV Araxá 3; Subestação de Energia 345/138 kV Uberlândia 10 C1; Subestação de Energia 345/138 kV Monte Alegre de Minas 2		No Net Biodiversity loss			
ISA CTEEP	ISA CTEEP - LT 138 kV Rosana - Presidente Prudente	São Paulo	No Net Biodiversity loss	1,3	2025	Maintenance
ISA CTEEP	ISA CTEEP - LT 138 Kv Taubate - Paraibuna - Caraguatatuba	São Paulo		17,6	2025	Maintenance
ISA CTEEP	Projeto Triangulo Mineiro - IEMG					
ISA CTEEP	LT 345 kV Nova Ponte – Araxá 3 C1; LT 345 kV Nova Ponte – Uberlândia 10 C1; Trecho de Linha de Transmissão em 345 kV entre a SE Monte Alegre de Minas 2 e a LT Itumbiara – Porto Colômbia / Subestação de Energia 345/138 kV Araxá 3; Subestação de Energia 345/138 kV Uberlândia 10 C1; Subestação de Energia 345/138 kV Monte Alegre de Minas 2	Minas Gerais	No Net Biodiversity loss	16,85	2026	Maintenance
ISA CTEEP	Projeto Triangulo Mineiro - IEMG					
ISA CTEEP	LT 345 kV Nova Ponte – Araxá 3 C1; LT 345 kV Nova Ponte – Uberlândia 10 C1; Trecho de Linha de Transmissão em 345 kV entre a SE Monte Alegre de Minas 2 e a LT Itumbiara – Porto Colômbia / Subestação de Energia 345/138 kV Araxá 3; Subestação de Energia 345/138 kV Uberlândia 10 C1; Subestação de Energia 345/138 kV Monte Alegre de Minas 2	Minas Gerais	No Net Biodiversity loss	17,55	2026	Maintenance
ISA CTEEP	Projeto banco de baterias - SE Registro	São Paulo	No Net Biodiversity loss	0,017	2022	Maintenance

Companie	Project name	Location	Scope of offset	Area to be offsetted	Year of fulfillment of the obligation	Condition of the area at the end of the period
ISA INTERCHILE	Plan de Expansión Chile LT 2x500 kV Cardones - Polpaico	Región de Atacama, Región de Coquimbo, Región de Valparaíso, Región Metropolitana.	1 a 1	114	2030	In establishment
RUTA COSTERA	Canal Mallorquín		No Net Biodiversity loss	2,6		Not started
RUTA COSTERA	Canal Mallorquín		Ban offset	0,5		Not started
RUTA COSTERA	Unidad Funcional 1 y 2	Ciénaga de la Virgen	Ban offset	35,4		Monitoring and follow-up
RUTA COSTERA	Unidad Funcional 6	Atlántico	Ban offset	235		In property securing

- **Other offsets**

These offsets correspond to obligations associated with the harvesting of isolated trees, the imposition of management measures for bans, and the subtraction of reserves, among others.

Stage	Area to be compensated (ha)	Year of fulfillment of the obligation
Not started	24.36	2029
In formulation of the offset plan	285.9	2029
In approval of the plan by the Environmental Authority	358.3	2033
Plan approved by the Environmental Authority - Preparation	889.75	228 review SOGA
In process of property securing	275.59	2032
Establishment (Sowings)	180.6	2027
Maintenance	155.5	2029
Monitoring and follow-up	2.27	2026
Pending closure by the environmental authority	2.1	2024
Obligation completed and with administrative act of closure by the Environmental Authority.	384.5	2024
TOTAL	2,558.9	2032

8.2 Commitment to reduce deforestation and vegetation cover intervention

ISA and its companies seek to minimize environmental impacts and risks, especially for biodiversity; therefore, actions were established to reduce the intervention of vegetation cover during the life cycle of the assets, and efforts are made to reduce by 10% the intervention of vegetation cover for the construction of projects.

This commitment to reducing land use changes is covered by the technical specifications of the contracts of the projects under construction, the HSE manual for contractors and in the approval of the environmental authority in the license. In this way, suppliers are part of the commitment.

- Project goal: reduce by 10% the intervention of vegetation cover in the construction of projects.

Progress: The Northwestern Interconnection Project (SITU) achieved a 34% reduction in the area to be intervened compared to the approved environmental license (See Table).

Table 4. Progress in the reduction of vegetation cover intervention.

Project	Baseline ha*	Number of hectares requested in the EIA to intervene in the construction of the project**	Number of hectares actually intervened in the construction and operational stage	Reduction in vegetation cover intervention (% obtained)
SITU - AMA	353.56	246.34	149.54	39%
SITU - ANCE	796.87	344.23	214.43	38%
SITU - ANPO	364.18	144.48	86.92	40%
SITU - POSO	758.91	477.43	334.44	30%
SABO	920	537.63	Under analysis	
CECO	1,323.4	1,002.54	Under analysis	
COCU	1,141.5	806.24	NO PES*	
CUWI	98.4	34.13	NO PES*	
SOLA	1,319.06	491.45	NO PES*	

*NO PES: Projects that are still in the licensing or construction stage and have not yet been put into service; therefore, the actual harvesting data is not yet available.

It should be noted that the baseline corresponds to the area of vegetation (natural and semi-natural ecosystems and wooded pastures) present in the easement strip, which would be impacted if the project had implemented conventional clearing and construction methods, where all of the vegetation present in this area would be intervened.

The second column of Table 4, the area requested to the Environmental Authority for forest harvesting permit in the Environmental Impact Assessment - EIA, corresponds to the vegetation that after having carried out the growth projection analysis, technical conditions of the line, environmental restrictions, among others; it is concluded that it is necessary to intervene, because it exceeds the safety distance required for the operation of the project or it is located in areas necessary for the construction of the project.

The third column of the table contains the area actually used during the construction process.

Lastly, the actual reduction percentage is obtained by comparing the area actually intervened during the construction process with the area requested and granted in the project's environmental license.

8.3 Commitment to the major challenges of global interest in climate change and biodiversity

- Contribute to Target 15 of the Global Biodiversity Framework:** Currently, ISA is working on a voluntary basis to report to Taskforce on Nature-related Financial Disclosures (TNFD). The TNFD is a global financial market-led initiative whose

mission is to develop and provide a framework for reporting, managing, and disclosing the risks and opportunities associated with nature, with the ultimate goal of supporting the shift in global financial flows in favor of positive outcomes for nature.

Additionally, ISA adhered to the COP15 Business Statement on the mandatory assessment and disclosure of risks and opportunities associated with nature, promoted by Business for Nature (BfN).



- **ANDI's Biodiversity + Business Roadmap:** ISA and ISA INTERCOLOMBIA are part of the group of companies committed to promote the integration and effective management of biodiversity in the business model in order to contribute to the fulfillment of the goals of the Kunming-Montreal Global Biodiversity Framework.

8.4 Commitment to making positive contributions to nature

ISA assumes a proactive participation in the protection and conservation of natural resources and works to generate positive contributions to nature, therefore, through the **Programa Conexión Jaguar** we have the following goals for 2030:

- Support at least 20 rural initiatives in Latin America
- Effective protection of approximately 400,000 hectares across the Jaguar Corridor
- Reduction of 9 million tCO₂ (in the lifetime of the project)
- Promote the development of rural communities in the area of influence of the projects



The Program also seeks to contribute to the fulfillment of the global goals of the 2030 agenda, such as the Paris Agreement, the Biodiversity Convention, and the Sustainable Development Goals (SDGs) - specifically Goals 13, 15 and 17: Climate Action, Terrestrial Ecosystem Life, and Partnerships to achieve the goals.

8.4.1 First results in Latin America

To date, 9 alliances have been formalized in Latin America to explore the development of projects, which contribute to:

- The conservation and/or restoration of more than 800,000 hectares of land

- A potential reduction of 6.4 million tCO₂e during the credit period of the projects⁴, of which 564,530 tCO₂e have already been verified
- Improvement of the soil and water conditions
- Support for some 320 families in Colombia, Peru, and Brazil with various activities

8.5 Stakeholder engagement

8.5.1 Commitment to socialize and disseminate with key stakeholders in the territory:

Socializations with the communities and different territorial stakeholders during the development of the Environmental Studies, the construction and operational stage of the projects, within the framework of the Community Participation and Information Programs - PIPC, in these spaces a disclosure of the project, the results of the biotic characterization of the area of influence, the environmental impacts identified and the management measures to be implemented is made.

This same information and participation program is implemented during the formulation and implementation of biotic compensation plans.

8.5.2 Commitment to join efforts to conserve biodiversity and natural resources

ISA and its companies are committed to join efforts with other entities to maximize the results of the different actions for the conservation of biodiversity and natural resources, currently we have the following alliances:

⁴ The credit period of the projects varies according to the characteristics of each project

Table 5. Alliances to contribute to the protection of biodiversity.

Company	Alliance	Entities involved	Objective	Main Achievements
ISA INTERCOLOMBIA	National Natural Parks Agreement	National Natural Parks and ISA INTERCOLOMBIA	Articulate joint actions and strategies that contribute to the conservation and protection of protected areas in the national natural park system, according to ISA's and Intercolombia's environmental compensation obligations.	Within the framework of the 2023 work plan for the agreement, several actions were carried out: *Start of implementation of the biotic compensation plan for the Northwestern Interconnection project: Antioquia- Cerromatoso in PNN Paramillo (National Natural Park). Several working roundtables were held to establish the action plan for the property securing stage, with the participation of several stakeholders in the territory *Sponsorship of events: Agroexpo *Implementation of the program to develop local suppliers and inclusive businesses in the buffer zones of the protected areas (Los Flamencos Flora and Fauna Sanctuary and Los Colorados Flora and Fauna Sanctuary) established as areas of interest for compliance with environmental obligations. *Accompaniment in the execution of the actions carried out within the framework of the implementation of the compensation plan for the Bolivar - Copey - Ocaña - Primavera 500 kV single circuit transmission line project in the SFF Los Colorados (flora and fauna sanctuary).
ISA INTERCOLOMBIA	Agreement with the Mayor's Office of San Juan Nepomuceno for compensation in the SFF Los Colorados	Mayor's Office of San Juan Nepomuceno and ISA INTERCOLOMBIA	Join efforts between the municipality of San Juan Nepomuceno and INTERCOLOMBIA on behalf of INTERCONEXIÓN ELÉCTRICA S.A E.S.P ISA, to execute the "Forestry Compensation Plan for the Bolívar - Copey - Ocaña - Primavera 500 kV Single Circuit Transmission Line Project and associated works, through the ecological rehabilitation of intervened areas in the Los Colorados Flora and Fauna Sanctuary.	There are final designs for the houses that will be built to relocate the families that are currently inside the protected area. CARDIQUE's approval of the designs of the wastewater treatment system for the houses Sanitation of the land where construction will take place.

Company	Alliance	Entities involved	Objective	Main Achievements
ISA INTERCOLOMBIA	Agreement with Fundación Biodiversa Colombia	Fundación Biodiversa Colombia and ISA INTERCOLOMBIA	Join efforts, as well as technical, administrative and financial resources for the implementation of preservation and restoration actions in the "Predio Peñón del Caballo" of Fundación Biodiversa Colombia, which seek to strengthen communication, promotion and education on biodiversity conservation, sustainable development and social and cultural transformation in the DRMI Ciénaga de Barbacoas; and contribute to the protection of the habitat of the Jaguar (<i>Panthera onca</i>) as a fundamental contribution to the purpose of ISA's Conexión Jaguar Corporate Program.	On October 30, 2023, Agreement No. 4610000240 was signed between ISA INTERCOLOMBIA and Fundación Biodiversa Colombia for the implementation, maintenance, and monitoring of the biotic compensation actions of the POSO project in 353.6 hectares of the alternative called "Predio Peñón del Caballo" of Fundación Biodiversa Colombia in the DRMI Ciénaga de Barbacoas.
ISA INTERCOLOMBIA	Voluntary conservation agreement with Corporación Autónoma Regional del Atlántico (Regional Autonomous Corporation of the Atlantic)	Corporación Autónoma Regional del Atlántico and ISA INTERCOLOMBIA	To join efforts to protect, conserve and restore the strategic areas and ecosystems of the LOTE and LAS PALMITAS- MIRADOR (Atlántico) properties and thus contribute to the environmental development of the region.	Property securing of the lots where the ANLA-approved biotic compensation plan is to be implemented and signing of the conservation agreement
ISA INTERCOLOMBIA	Voluntary agreement for the conservation of the Varguitas property, Municipality of Paipa	Mayor's Office of Paipa and ISA INTERCOLOMBIA	To join efforts to protect, conserve and restore the strategic areas and ecosystems of the VARGUITAS property (Paipa, Boyacá) and thus contribute to the environmental development of the region. To comply with the obligation	Property securing of the lots where the biotic compensation plan approved by ANLA is to be implemented, signing of the conservation agreement and initiation of the conservation and restoration actions included in the plan.

Company	Alliance	Entities involved	Objective	Main Achievements
			established in: Resolution ANLA 0717 of April 06, 2022	
ISA INTERCHILE	Urban afforestation	Conexión Puma Colocolo Fundación Basura Fundación reforestemos	Plant 200 native trees around the Colocolo stadium, Metropolitan Region.	Plant 100 trees Include players, managers, and society in the process.
ISA INTERCHILE	Production of plant species with conservation problems	INIA La Cruz Vivero Comunitario de Freirina Vivero Intihuasi	Have plant species to mitigate and compensate for the impact on individuals as a result of the intervention for construction.	Production of more than 120,000 individuals
ISA INTERCHILE	Replanting of plant species	Tripan	Have plant species to mitigate and compensate for the impact on individuals as a result of the intervention for construction.	Replanting of more than 79,000 individuals
ISA INTERVIAL	Conexión Puma	Buin Zoo	Biodiversity Protection	Consider the presence in Torres del Paine, Isla Riesco, Chiloé, Nevados de Chillan. It consists of conducting studies on the presence, health, and perception of the people of the area on emblematic animals to then ensure their protection and care. among them are the Huemul, Chilote fox, Culpeo fox and Puma.
ISA INTERVIAL	Conexión Puma	Fundación Basura, Colo Colo, Reforestemos	Materializing the Conexión Puma project, carbon neutrality for Colo Colo by 2025	Waste management in soccer games, commitment to achieve carbon neutrality by 2025

Company	Alliance	Entities involved	Objective	Main Achievements
REP	Interinstitutional Cooperation Framework Agreement between the National Forestry and Wildlife Service and the REP.	SERFOR	Join efforts to promote and execute actions for mutual capacity building, scientific research, support in field work and logistics, project development, and actions aimed at the sustainable management of forest and wildlife resources.	Research on the characterization of "algarrobo" plus trees of the Prosopis genus in localities of the department of Tumbes and the Piura region.
RUTA COSTERA	FRAMEWORK AGREEMENT BETWEEN ESTABLECIMIENTO PÚBLICO AMBIENTAL CARTAGENA CONCESIÓN COSTERA CARTAGENA BARRANQUILLA S.A.S.	ESTABLECIMIENTO PÚBLICO AMBIENTAL CARTAGENA CONCESIÓN COSTERA CARTAGENA BARRANQUILLA S.A.S. EPA AND	Join efforts to advance joint actions in areas of mutual interest in the areas of research, conservation and preservation of biodiversity, promotion, and dissemination of environmental education in the District of Cartagena de Indias, in accordance with national, international, and regional priorities.	Collaborate in the execution of educational campaigns in the area of influence of the Project of Ruta Costera, such as environmental days, recreational-pedagogical campaigns, among others.
SIER	Hass Carbon	Forestry Consulting Group	Generation of carbon credits in sustainable crops that do not contribute to the deforestation of ecosystems.	2,100 hectares
SIER	Sustainable Colombia Palm	Energy Handmade	Generation of carbon credits in sustainable crops that do not contribute to the deforestation of ecosystems.	4,100 hectares
SIER	Sustainable Guatemala Palm	Energy Handmade	Generation of carbon credits in sustainable crops that do not contribute to the deforestation of ecosystems.	3,500 hectares

9 Compliance with the current regulations

The Environmental Policy of ISA and its companies approved in ISA Board of Directors number 894 of May 24, 2023, states that *"We extend in a binding manner, and promote compliance with these statements and other environmental obligations to suppliers, contractors, subcontractors, and other business allies throughout the life cycle of the assets. We seek a due diligence process for contractors and alliances, extending our policy to ensure the best environmental practices through actions such as: o Pollution prevention and proper waste management. o Energy management and Greenhouse Gas emissions. o Efficient resource management. o Protection of natural ecosystems and biodiversity"*; therefore, our commitment to compliance with current environmental regulations extends to our value chain.

9.1 HSE Manual

All activities that are executed within the framework of a contract must be carried out taking as a reference the legislation in force, contractual documents, policies, and guidelines to avoid deviations and non-compliance in the areas of safety, occupational health and environmental management that may arise. For this reason, ISA and its companies have the HSE Manual, which is part of the contractual documents, so all the considerations set forth in this document are mandatory.

This Manual does not limit the Contractor's responsibilities, although it guides the Contractor on some specific issues, they are not the only ones that must be fulfilled. These requirements are complementary to the environmental management plans, current legislation, technical specifications and other standardized documents on safety, occupational health and environmental management that must be applied; in turn, the Contractor must ensure that all the requirements defined in the manuals are applied by its own Contractors.

Paragraph 6 of the manual establishes the environmental management requirements, which include those associated with the biotic component. In general terms, it is indicated that: *"Contractors must ensure in the execution of their activities the efficient use of natural resources, carry out actions that seek to minimize the carbon footprint and contribute to the protection of biodiversity. The contractor shall carry out training and sensitization processes for its workers on environmental care"*.

HSE Manual ISA and ISA INTERCOMBIA ([Microsoft Word - Manual HSE Contratista versi\363n 7.docx](#)) (isaintercolombia.com).

10 Operations in areas with high biodiversity value

All projects have environmental management and monitoring plans pursuant to each country's legislation. Some projects were built in areas declared protected after the construction of the project.

Company	Total number of substations and total area used for operational activities	Number of substations and area located in areas with high biodiversity value
ISA INTERCOLOMBIA	49 substations – 42,598 hectares	30 substations – 13,026 hectares
ISA TRANSELCA	12 substations – 5,046 hectares	0 substations – 0.0512 hectares
REP	87 substations – 40,142.9 hectares	0 substations - 0 hectares
CTEEP	134 substations – 79,994 hectares	0 substation – 1,062 hectares
INTERCHILE	3 substations – 4,997 hectares	1 substation - 141.46 hectares
ISA BOLIVIA	5 substations - 2,073 hectares	0 substations - 0 hectares
Total	290 substations - 174,851 hectares	32 substations – 14,230 hectares

11 CONEXIÓN JAGUAR PROGRAM

Conexión Jaguar is a sustainability program developed by ISA and its companies to contribute to biodiversity conservation, climate change mitigation, the development of rural communities and the connectivity of the natural habitats of the jaguar (*Panthera onca*) in Latin America.

As there is no presence of jaguars in Chile, we work in the conservation of the puma (*Puma concolor*), the second largest feline in America. Both the puma and the jaguar are umbrella species, who are an important part of the ecosystem balance: they protect biodiversity, water, and forests, guaranteeing the survival of the species that coexist with them and their associated habitats.

11.1 Program development

The Program provides technical and financial support so that the best forestry initiatives managed by rural communities issue and sell certified carbon credits, under the highest international standards, to fund conservation.

Currently, Conexión Jaguar supports two types of projects: Initiatives for Reduction of Emissions from Deforestation and Degradation (REDD+) and Rural Afforestation, Reforestation and Revegetation (ARR).

To counterpart the financing of the carbon project, a smaller portion of the bonds generated will return to the Program by selling these bonds, and these resources will be invested to support new initiatives.

11.2 Why does ISA protect the jaguar?



To protect the jaguar is to protect biodiversity and the ecosystems it inhabits. The jaguar (*Panthera onca*), plays a fundamental ecological role for the balance and proper functioning of ecosystems. In the food chain it is considered a superior species, which guarantees the survival of minor species. Its disappearance would alter biodiversity by increasing herbivores populations, reducing vegetation and therefore, water sources. The Jaguar can only exist if the ecosystem is preserved.

The jaguar corridor covers the territory between Mexico and northern Argentina, areas where ISA and its companies in Latin America are present. Through Conexión Jaguar we connect life and transcend the operation of our business from connecting through infrastructure to the connectivity of biodiversity by working with rural communities to contribute to the preservation of the environment and at the same time protect the natural corridors that connect the populations of the jaguar, the "big cat of the Americas".

During the last 100 years, the jaguar's habitat, and range of distribution in South America has been reduced by less than half. A recent study by Panthera shows that there are approximately 173,000 jaguars left on the continent, less than half of the species that has historically existed throughout its distribution range, which also means that other species that coexist with the Jaguar have been lost.

11.3 Targets to 2030:

- Support at least 20 rural initiatives in Latin America
- Effective protection of approximately 400,000 hectares across the Jaguar Corridor
- Reduction of 9 million tCO₂ (in the lifetime of the project)
- Promote the development of rural communities in the area of influence of the projects



The Program also seeks to contribute to the fulfillment of the global goals of the 2030 agenda, such as the Paris Agreement, the Biodiversity Convention, and the Sustainable Development Goals (SDGs) - specifically Goals 13, 15 and 17: Climate Action, Terrestrial Ecosystem Life, and Partnerships to achieve the goals.

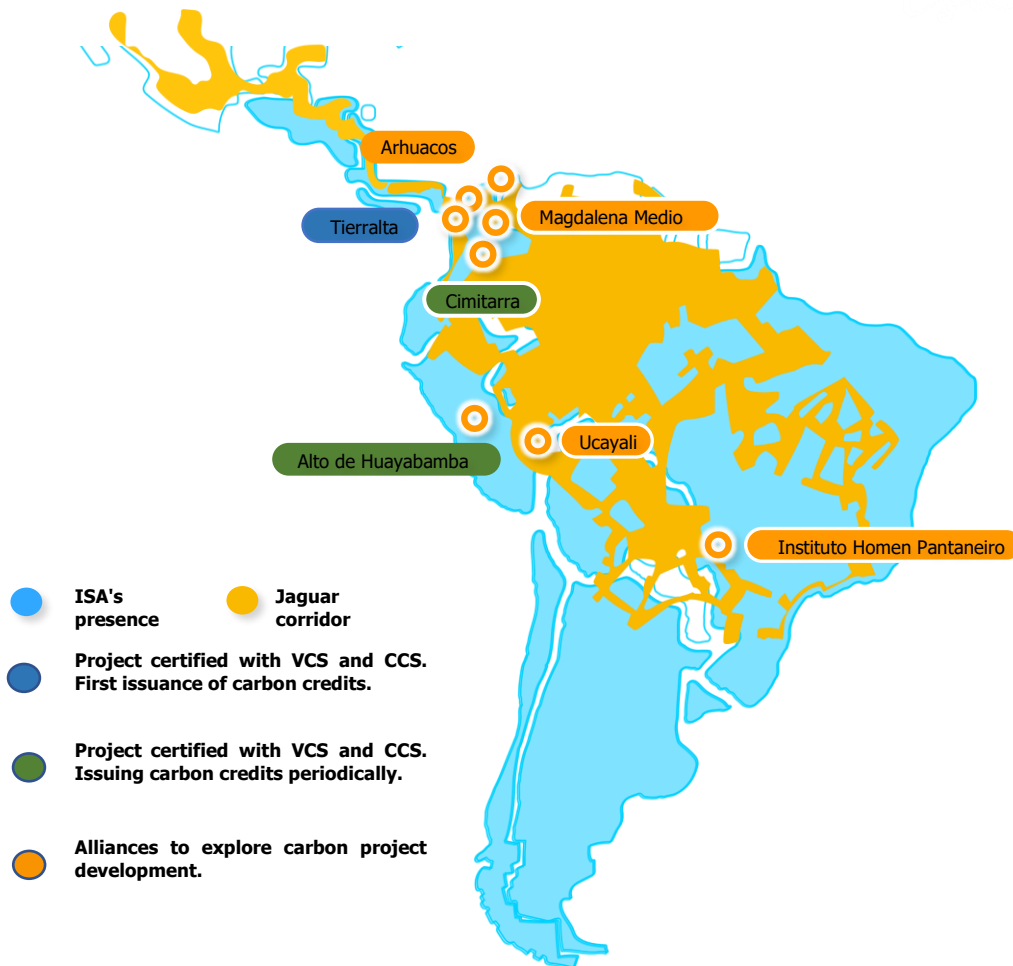
11.4 Progress

To date, 9 alliances have been formalized in Latin America to explore the development of projects, which contribute to:

- The conservation and/or restoration of more than 800,000 hectares of land
- A potential reduction of 6.4 million tCO₂e during the credit period of the projects⁵, of which 564,530 tCO₂e have already been verified
- Improvement of the soil and water conditions
- Support for some 320 families in Colombia, Peru, and Brazil with various activities

11.4.1 Projects supported

To date, the Conexión Jaguar Program has supported the following projects:



⁵ The credit period of the projects varies according to the characteristics of each project

11.5 Cooperators and allies

To increase the actions and benefits of the Program, ISA and its Companies work hand in hand with entities that are committed to generating positive impacts in Latin America. Currently, the following alliances are in place:

Project leaders:



Amazónicos por la
Amazonía



Umau Cacao

Cooperators:



Technical allies:



12 Bibliography

WWF. (September 11, 2021). <https://www.wwf.org.co/?328100/Glosario-ambiental-Quees-la-biodiversidad>

13 Annex: Key concepts

- a. Biodiversity:** biodiversity indicates the variety of life on earth, achieved through natural processes such as natural selection and analyzed in three specific areas: genes, species, and ecosystems. The latter give the name to the different axes that currently measure biodiversity (WWF, 2021).
- Genetic diversity: understood as the total number of genetic characteristics within each species. These characteristics are what maintain the biochemical information that determines its behavior and appearance.
 - Species diversity: is the variety of species within a habitat or region, i.e., the types of animals and plants that exist in a territory.
 - Ecosystem diversity: is the variety of possible relationships between species living in the same region, as well as their relationship with the surrounding habitat.
- b. Dependence:** TNFD defines dependence as the ecosystem services on which an organization or other actor depends for the functioning of its business processes, such as a constant supply of clean water. Dependences include the ability of ecosystems to regulate water flow and quality, hazards such as fires and floods; provide suitable habitat for pollinators (which in turn provide a service directly to economies) and sequester carbon (terrestrial, marine, and freshwater).
- c. Mitigation Hierarchy:** The Biodiversity Consultancy (2015) defines the Mitigation Hierarchy as a logical framework for managing risks and potential impacts linked to biodiversity and ecosystem services. The mitigation hierarchy can be viewed as a set of prioritized and sequential actions that are applied to reduce the potential negative impacts of project activities on biodiversity and ecosystem services ().
- d. Zero Net Deforestation (ZND):** Balance between forest loss due to deforestation and gain due to reforestation/restoration processes or other criteria determined in the definition of natural forest adopted by Colombia (MADS, Ideam, 2019).
- e. Impacts:** Changes in the state of nature, which may result in changes in nature's ability to provide social and economic functions. Impacts can be positive or negative. They may result from the actions of an organization or another party and may be direct, indirect, or cumulative. (SBTN (2022) Working Definitions [unpublished],

CDSB (2021) Framework Implementation Guide for Biodiversity-Related Disclosures).

- f. Impact drivers:** A measurable quantity of a natural resource that is used as a natural input to production (e.g., the volume of sand and gravel used in construction) or a measurable non-product output of a business activity (e.g., one kilogram of NO_x emissions released into the atmosphere by a manufacturing facility). (Capital Coalition (2016) Natural Capital Protocol).

- g. Opportunity:** TNFD defines nature-related opportunities as activities that create positive outcomes for organizations and nature by avoiding or reducing the impact on nature or contributing to its restoration. Nature-related opportunities can happen: i) when organizations mitigate the risk of loss of natural capital and ecosystem services; and ii) through the strategic transformation of business models, products, services, and investments that actively work to halt or reverse the loss of nature, including through the implementation of nature-based solutions (or their support through financing or insurance).

- h. Dependence pathway:** A dependence pathway shows how a particular business activity depends on the specific characteristics of the natural capital. Identifies how observed or potential changes in natural capital affect the costs and/or benefits of doing business. (Capital Coalition (2016) Natural Capital Protocol).

- i. Impact pathway:** An impact pathway describes how, as a result of a specific business activity, a particular impact factor generates changes in natural capital and how these changes in natural capital affect different stakeholders. (Capital Coalition (2016) Natural Capital Protocol).