Biodiversity in the Nature Positive roadmap

Going beyond carbon

south pole

Who we are

South Pole helps clients reduce climate change impacts, mitigating risk and creating value on their sustainability journeys. Our focus is to develop initiatives associated with **landscape conservation instruments**, especially those related to biodiversity and ecosystem services. These instruments are applied under the concept of **Nature-Based Solutions (NbS)** for initiatives in voluntary and mandatory markets, allowing the timely production of sustainable projects while generating benefits for local communities and stakeholders.

Innovative solutions

An award-winning, 14-year history of providing sustainability solutions

Diverse expertise

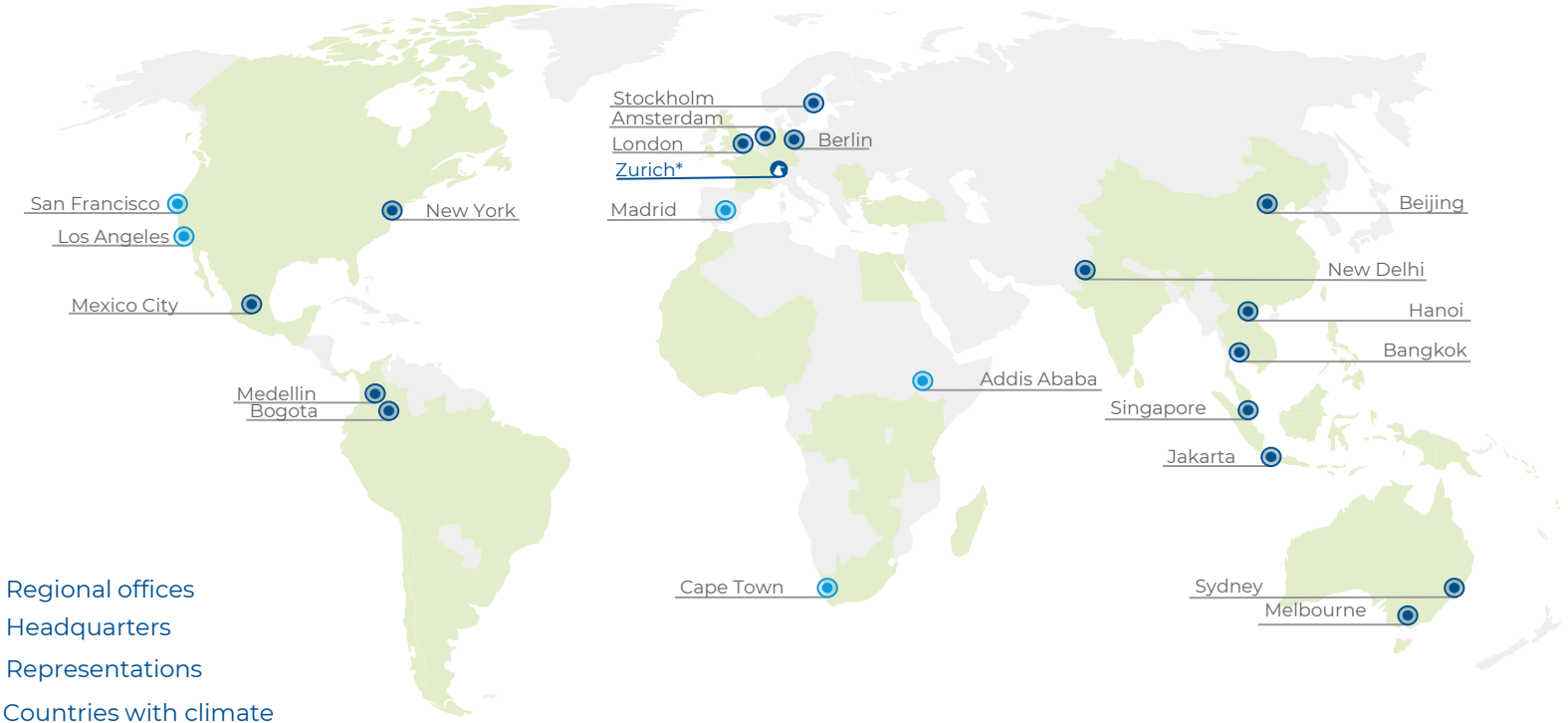
Our team of 350+ sustainability advisors, scientists and engineers are leading experts in their fields

Global presence

19 offices and representations around the world

Our global reach

29 offices and representations



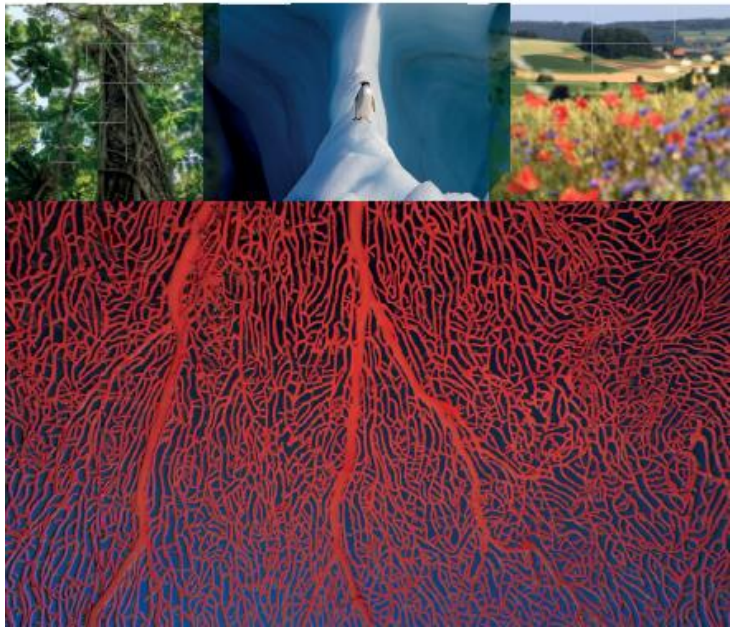
- Regional offices
- Headquarters
- Representations
- Countries with climate action projects

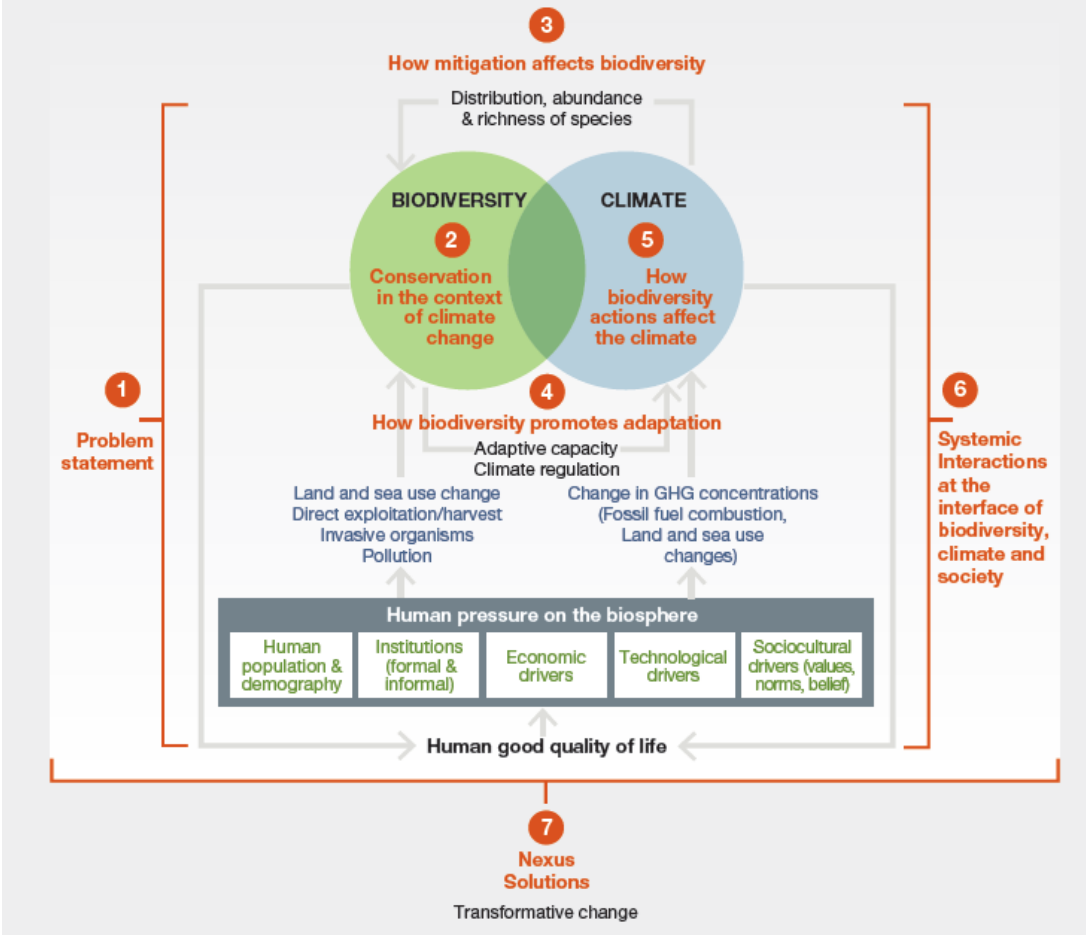
Climate Change and Biodiversity Loss = "Twin Crisis"

IPBES-IPCC CO-SPONSORED WORKSHOP

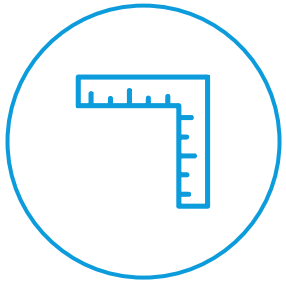
BIODIVERSITY AND CLIMATE CHANGE

Scientific outcome



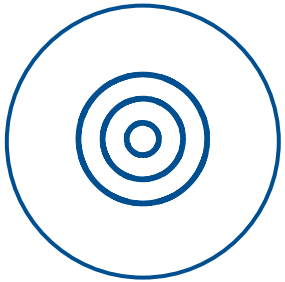


The Climate and Biodiversity Journey: Let's face the twin crisis!



Measure Footprint & risks

Understand your carbon emissions, biodiversity impacts and biodiversity/climate change risks

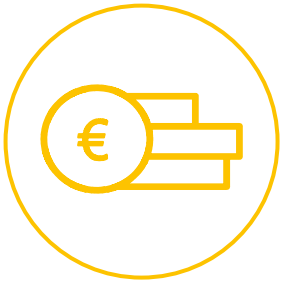


Set roadmap & create targets

Develop sustainability strategies, targets and roadmaps

Reduce footprint

Increase efficiency, procure decarbonise your supply chain Generate biodiversity and ecosystem services enhancements



Finance Climate and biodiversity action

Finance climate and biodiversity action, e.g. through avoidance and removal of unavoidable emissions or investing in NBS in your supply chain landscapes/scapes

Communicate & lead

Engage stakeholders in your sustainability vision and communicate the results

Our approach follows the Nature-Based Solutions concept

NbS are actions that protect, sustainably manage and restore natural or modified ecosystems, address societal challenges effectively and adaptively and provide benefits to human well-being and biodiversity at the same time.

Compliance

NbS for mandatory offsets

Environmental offset strategy

Biodiversity, emissions reduction and removals

Aligned with country specific regulations

Voluntary

Voluntary NbS towards ecosystems' integrity: Biodiversity protection, emissions reduction and removals

NbS pro-biodiversity investment

Support on the ground activities implementation or the Biodiversity Fund towards biodiversity positive net-gain.

NbS for climate mitigation

Additional action towards carbon emissions reduction and removals.

NbS credits for action

Implementation of Forest protection, Sustainable Ecosystems Management, Agriculture, and Restoration activities to generate environmental (carbon and/or biodiversity) credits.

Let’s talk about Biodiversity Credits System

south pole

Biodiversity Credits System

A strategy developed by South Pole

The Biodiversity Credit System is a strategy that seeks to channel investments to conserve prioritized ecosystems through **conservation instruments**, which allows to demonstrate net gains in biodiversity and improvement in ecosystem services.

Credit systems can be implemented within the framework of mandatory and voluntary investments, becoming an integral strategy that **involves all the stages of a conservation project.** The transactional unit is the **Biodiversity Credit.**

A **biodiversity credit** is a measurable result defined by the ecological value of intentional preservation, restoration and sustainable use actions, implemented in ecosystems.

A **biodiversity credit** can be traded in the marketplace between those who implement conservation actions and those who wish to offset their residual impacts on a mandatory or voluntary basis.

Our **conservation strategy** has eight fundamental principles that are critical to ensure the success of any conservation project.

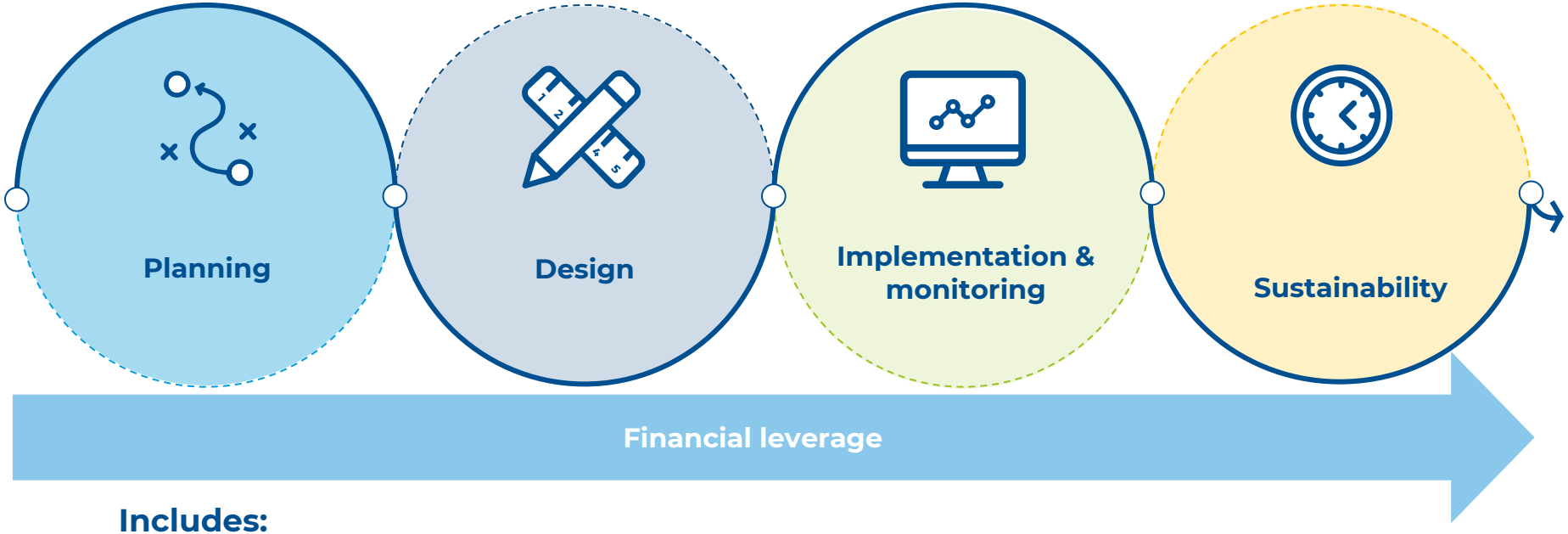
We understand the **dynamics of differents landscapes,** and our approach can be adjusted to their particularities:

- Type of ecosystems present
- Values to be preserved
- Type of community
- Degree of pressure on ecosystem services
- Scale
- Legal framework

Our solutions offer an understanding of the territory as a whole. This is why incentives and conservation instruments are designed to vary according to the local context and landscape characteristics, in order to not only positively impact the environment but also local communities.

We understand the context, design the conservation project and manage it to turn the landscape into a sustainable strategy

Stages and package



Includes:

- Area Search process, isolation, establishment, maintenance.
- Technical reports for environmental authorities.
- Design and management of the conservation instrument
- Base line
- Robust monitoring, which will generate indicators for a period of 5 years.
- Landowner Incentives
- Implementation of conservation actions (restoration, preservation)
- Risk management
- Maintenance
- Administration and communication
- Transport and logistics

Indicator matrix

Biodiversity attribute	Biodiversity Criterion	Definition of the biodiversity criterion	References
Composition	Diversity	Variety of species and ecosystems in impacted and compensated areas	*Magurran (2005)*
	Patrimonial values	Presence of protected or threatened species and habitats in impacted and compensated areas	*Butchart et al. (2005), Delzons et al. (2013)*
	Representativeness	Importance of the presence of species and habitats at the Site Scale (SC) compared to the scale for impacted and compensated sites	*Bodin et al. (2006), Arroyo-Rodríguez et al. (2009)*
Structure	Vegetation structure	Physical organization of vegetation in impacted and compensated areas	*Noss (1990)*
	Connectivity	Up to what level, movement of species between patches is allowed	*Taylor et al. (1993), Fahrig (2003)*
Function	Functionality	Ecological processes that ensure the functioning and maintenance of ecosystems	*Holling (1973), Clavel et al. (2011), Pereira et al. (2013)*
	Pressure	Natural or anthropogenic phenomena that control biodiversity, changes in land use	*Vitousek et al. (1997), Spangenberg (2007), Serranito et al. (2016)*

From commitment to action:
an enduring and real sustainability journey

Restoration

Planting native species will restore degraded areas and bring back the ecosystem's health. By restoration activities, The company will generate **biodiversity net gains** and improvement in ecosystem services.

Protecting and Forest Conservation

Conservation of biological corridors and focal species, control of exotic species and fire control are some of the preservation activities that can be implemented to **reduce stresses on forests** over time and space, **avoiding deforestation or degradation**

Sustainable Ecosystems Management

- **Regenerative agriculture:** transition of conventional farms
- **Agroforestry:** Productive and natives trees are planted
- **Silvopastoral systems**

Biodiversity credits system

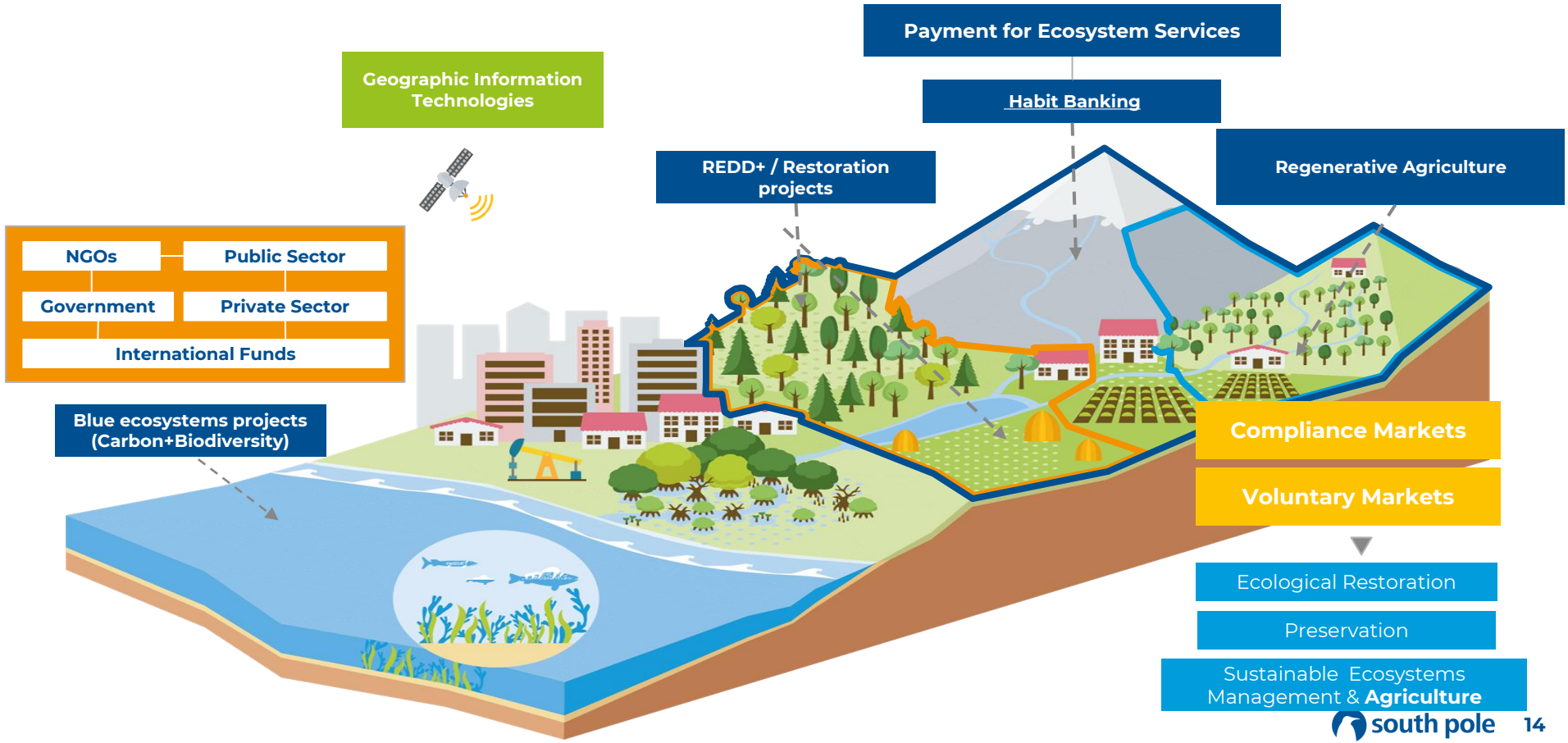
“actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits”. (NbS)

Use resources in conservation actions for protecting prioritized ecosystems

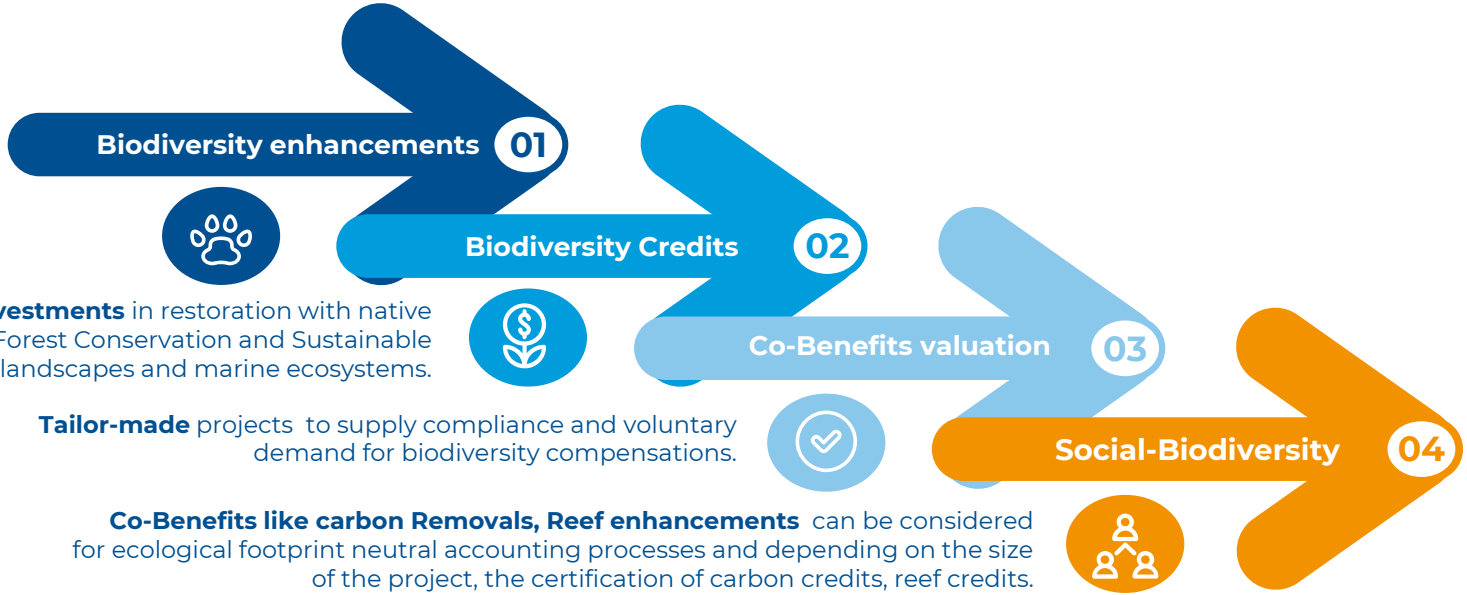
Involves all actors in the territory & focuses on relationship with communities

Integral strategy that involves all stages of a conservation project

Biodiversity Credits System under NbS approach (Landscapes and Scapes)



In summary: what we provide through our biodiversity credits system approach?



Rural and urban investments in restoration with native or mixed species, Forest Conservation and Sustainable management of landscapes and marine ecosystems.

Tailor-made projects to supply compliance and voluntary demand for biodiversity compensations.

Co-Benefits like carbon Removals, Reef enhancements can be considered for ecological footprint neutral accounting processes and depending on the size of the project, the certification of carbon credits, reef credits.

Community based projects with agroforestry, silvopastoral and regenerative agriculture systems. The leverage of such systems can promote the sales of sustainable commodities.

Voluntary Standards for Biodiversity Certification

south pole

We use globally recognized standards to certify ecosystem service benefits

Biodiversity and ecosystem services standards evolution of the demand

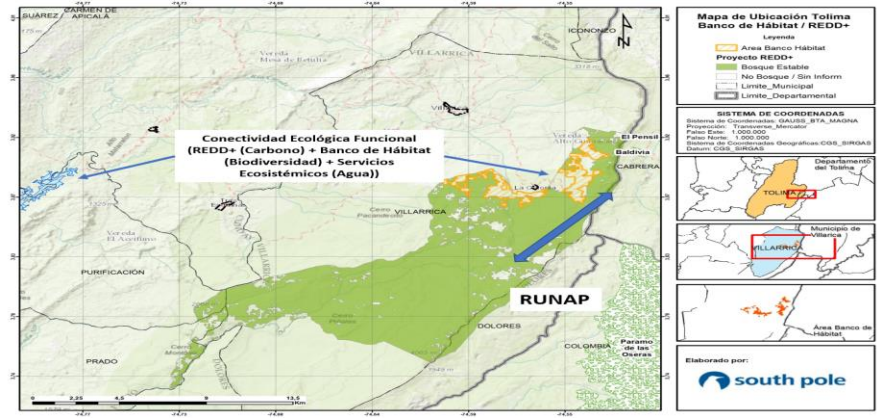
Standards offer the opportunity to certify progress in achieving landscape restoration and conservation objectives, measuring the change of environmental assets in a period of time. South Pole design business case(s) for certification of ecosystem services and credit generation. This means: ACCESS!

Initiatives in Colombia

south pole

Biodiversity+Carbon:

Habit Bank in Tropical Andean Forest of Tolima (Colombia)



Purpose

Strategy:

- Biodiversity protection in remnants of Andean and sub-Andean forest
- Improvement of ecosystem services
- Interaction between Academy - NGO - Public and private sector
- Support communities on conservation instruments / job creation

Extension: More than **300 ha**
Municipalities of influence: Villarica
Hydrographic(s) Subzone(s): Prado river
Environmental determinants:

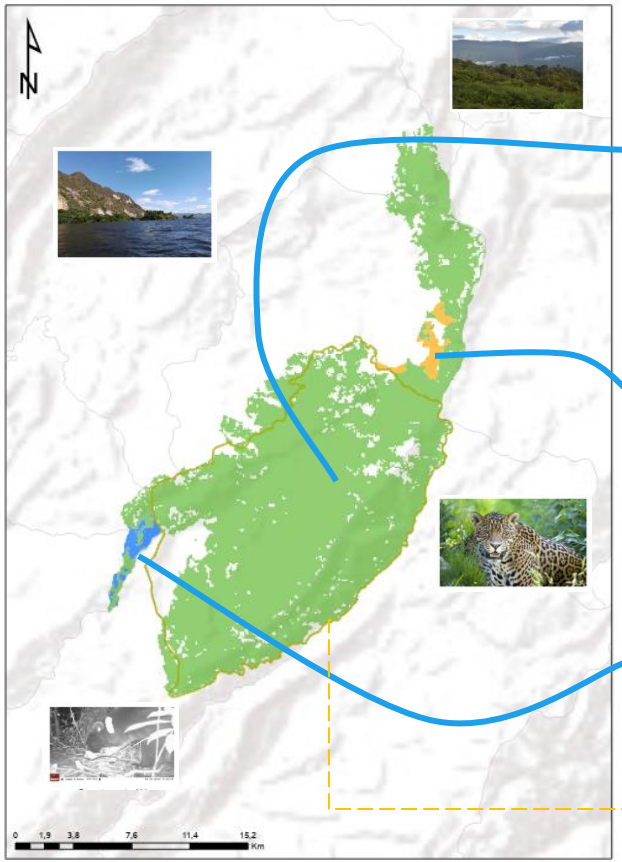
- PNR Galilea forest
- REDD+ credits issued under national scheme
- Watershed plan Prado River

General characteristics

Project model: seek to register Biodiversity Bank under National environmental authority (MADS)

- **Action applied in a buffer zone of a Regional National Park**
- Design of offsetting mechanisms in areas near REDD+ programmes

Biodiversity+Carbon: Habit Bank, REDD+ Colombia



REDD+

Habitat Bank

PES

Ecological connectivity - Landscape scale

Market: Voluntary

Objective: CO_2 capture

Strategy: Conservation / Sustainable use

Market: Voluntary / Mandatory

Objective: Biodiversity net gains

Strategy: Restoration / Sustainable use

Market: Voluntary

Objective: Water provision and regulation

Strategy: Conservation

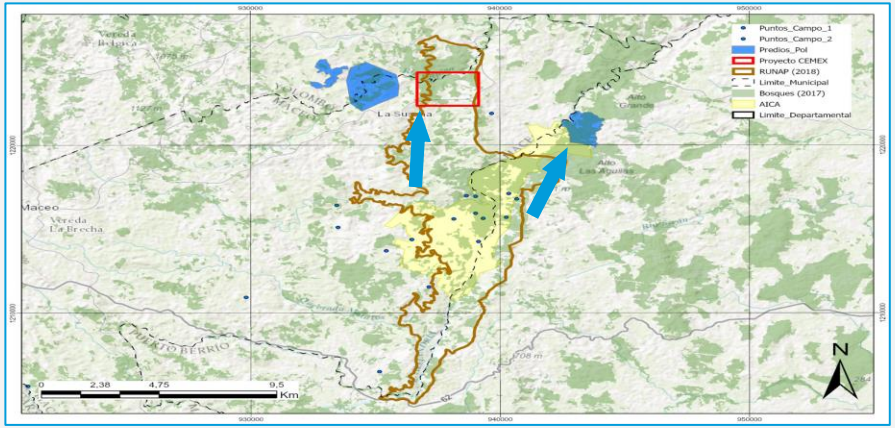
Working with

- **Communities**
- Universities
- Environmental authorities
- Businesses

Environmental determinants / Conservation priorities

Sustainable Landscapes in the Andean region of Colombia

Connecting wildlife in the Alicante River Canyon, Antioquia



Extension: 10,000 **ha**
Municipalities of influence: Maceo, Puerto Berrio
Hydrographic(s) Subzone(s): San Bartolo river
Environmental determinants:

- AICA: Alicante river canyon
- Management district (DRMI) Alicante
- Watershed plan (POMCA) San Bartolomeo river
- Land-use planning (EOT) Maceo

General characteristics

Purpose

Strategy:

- Improvement of ecosystem services at a landscape level using **agroforestry** and **silvopastoral processes** (Cocoa)
- **Community engagement:** signature of more than **40** cooperation for conservation agreements
- **Local jobs** creation

Project model: Voluntary/Compulsory Investment

- **REDD+ / Voluntary and Compliance**
- Biodiversity offsetting mechanisms in areas within and with **buffering function,** nearby the areas of regional ecological importance (DRMI)

Landscape approach: Biodiversity+Carbon+Sustainable cocoa production

Connecting wildlife in the Alicante River Canyon, Antioquia

This project was selected as one of the **pilot initiatives** for the development of the **Verra LandScale standard methodology.** This international certification will allow promoting sustainability at a **landscape level** by verifying environmental, social, and economic-productive impacts, generating incentives for financing conservation activities.

Companies, industry initiatives, NGOs, governments, donors, and financial institutions can use LandScale to measure the sustainability status of any landscape with substantial natural resource-based economies and supply chains:

- **Trusted information:** The assessment framework tracks trends and measures performance against critical landscape sustainability indicators.
- **Better decision making:** Trusted insights enable more sustainable landscape management, investment, and sourcing decisions.
- **Incentives for improvements:** The reporting platform showcases credible results that can lead to incentives or rewards for improvements.

Click here for details on the pilot (Antioquia)

Story maps

Maceo

Connecting wildlife in the Alicante River Canyon

Click on the image to access the storymap.

Cimitarra

Biodiversity Bank

Click on the image to access the storymap.

Cocora

Protecting Colombia's wax palm forests

Click on the image to access the storymap.

Thank you!

Víctor Giraldo

Global Director, Project Implementation (Biodiversity, Carbon & Water)

v.giraldo@southpole.com

Colombia

Offices & global representations:

Addis Ababa, Amsterdam, Bangkok, Beijing, Berlin, Bogotá, Cape Town, Hanoi, Jakarta, London, Los Angeles, Madrid, Medellín, Melbourne, Mexico City, New Delhi, New York, Paris, San Francisco, Singapore, Stockholm, Sydney & Zurich