Developing a Framework for Biodiversity Finance, or incorporating nature positive impact in an existing Sustainable Finance Framework

Prototype, March 2024
09/2021-03/2024: Sustainable Finance for Biodiversity in Brazil and Colombia (SF4B) was a research and capacity building project that focused on training policy makers and financial market actors in the use and application of green taxonomies and other approaches in Brazil and Colombia, taking into account the protection and sustainable use of biodiversity and ecosystems.

Part of the International Climate Initiative (IKI) of the German Government.

Project partners: Frankfurt School - Germany, Fundação Getulio Vargas -Centro de Estudos em Sustentabilidade (FGVces) – Brazil, Fondo Acción - Colombia

The objective of this document

Exchange with financial institutions (incl. development banks) the major components of biodiversity finance that align with green/sustainable finance taxonomies and other frameworks – to test their appetite for biodiversity finance, their insight about the demand for biodiversity finance, etc.

This framework is understood as a prototype that financial institutions can use, although it needs to be amended to reflect national/regional framework conditions, as well as ongoing market developments.
Preconditions
A Framework for Biodiversity Finance is driven among others by physical and transition risk.
Developing and implementing a Framework for Biodiversity Finance relies on robust demand and capacities.

National and international frameworks and regulations for biodiversity
Developing and operating a Framework for Biodiversity Finance happens not in isolation.

Sketching a Framework for Biodiversity Finance
Defining the use of proceeds, the process for project evaluation/selection, the management of proceeds, and the reporting is determined by different national and international frameworks.

Illustrative samples
There is no perfect solution, but cases to learn from.
Preconditions

A Framework for Biodiversity Finance is driven among others by physical and transition risk

Next to climate-related risk, economic sector players/activities also face **nature-related physical and transition risk** that impact economic activities, which in turn impact their financial stability. Besides causing negative impact, some are facing dependencies (double materiality). See also the subsequent 4 pages (illustrative for Colombia and Brazil).

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**Transition risks**
- Technology, policy, regulation, market sentiment

**Physical risks**
- **Climate**: Extreme weather events
- **Nature**: Resource scarcity, biodiversity loss, pollution

**Opportunities**
- **Nature**: Resource-efficiency
- **Climate**: RE, climate resilience

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**Climate-and nature-related risks/opportunities in real economy**

**Transition risks**
- Technology, policy, regulation, market sentiment

**Physical risks**
- **Climate**: Extreme weather events
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**Opportunities**
- **Nature**: Resource-efficiency
- **Climate**: RE, climate resilience

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**Risks & opportunities for the financial sector**

**Strategic planning**
- Risk management

**Financial impact**
- Liability risk
- Credit risk
- Liquidity risk
- Market risk
- Operational risk
- Reputation risk

**Insurance**
- Lending
- All activities

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### Impacts of Main Economic Sectors in Colombia on Natural Capital*

<table>
<thead>
<tr>
<th>Sector</th>
<th>Impact Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial services</td>
<td>- Noise pollution caused by associated seismic activities or drilling; potential</td>
</tr>
<tr>
<td>Freshwater wild-caught fish</td>
<td>- Noise pollution caused by associated seismic activities or drilling; potential</td>
</tr>
<tr>
<td>Saltwater wild-caught fish</td>
<td>- Noise pollution caused by associated seismic activities or drilling; potential</td>
</tr>
<tr>
<td>Agriculture</td>
<td>- Noise pollution caused by associated seismic activities or drilling; potential</td>
</tr>
<tr>
<td>Large-scale farmed arable crops</td>
<td>- Noise pollution caused by associated seismic activities or drilling; potential</td>
</tr>
<tr>
<td>Small-scale farmed arable crops</td>
<td>- Noise pollution caused by associated seismic activities or drilling; potential</td>
</tr>
<tr>
<td>Large-scale livestock (beef and dairy)</td>
<td>- Noise pollution caused by associated seismic activities or drilling; potential</td>
</tr>
<tr>
<td>Gold Mining</td>
<td>- Noise pollution caused by associated seismic activities or drilling; potential</td>
</tr>
<tr>
<td>Coal &amp; Commodity Fuels</td>
<td>- Noise pollution caused by associated seismic activities or drilling; potential</td>
</tr>
<tr>
<td>Integrated oil and gas</td>
<td>- Noise pollution caused by associated seismic activities or drilling; potential</td>
</tr>
<tr>
<td>Natural fibre production</td>
<td>- Noise pollution caused by associated seismic activities or drilling; potential</td>
</tr>
<tr>
<td>Synthetic fibre production</td>
<td>- Noise pollution caused by associated seismic activities or drilling; potential</td>
</tr>
<tr>
<td>Hydropower production</td>
<td>- Noise pollution caused by associated seismic activities or drilling; potential</td>
</tr>
</tbody>
</table>

### Priority sectors in Colombia:

- **Oil & Gas sector** (due to 10 potentially harmful business processes in nature)
- **Mining**, including gold, coal, and iron (due to 9 & 11 potentially harmful business processes in nature)

### Impacts on nature include

- **GHG Emissions**
- **Marine ecosystem use**
- **Soil pollutants**
- **Water pollutants**

### Examples
- **Agriculture**
- **Mining**
- **Oil & Gas**
- **Manufacture & Services**

### Preconditions

A Framework for Biodiversity Finance is driven among others by physical and transition risk.

*The analysis was made using Encore’s database and the publicly available information on the country’s economic sectors. The data provided by ENCORE is sector-based and focuses on different industry types. Nevertheless, not all sectors in the economy are included, and the categories’ name might differ from other economic classification standards.*
Ecosystem services dependencies of the main economic sectors in Colombia*

Priority sectors:

- **Agriculture** - Large and small livestock (beef and dairy) have the highest dependency on ecosystem services (24 dependencies).
- **Manufacture and services** (textiles) have the second highest dependencies (14 & 12).

Some of the dependencies of the Agriculture sector on ecosystem services are:
- **Decomposition and fixing processes**: Livestock farming depends on healthy and fertile soils to provide plant nutrition and health for the production of pastural crops and feedstocks.
- **Disease control**: As such, pastural and feedstock crops are dependent on any disease control naturally afforded.
- **Genetic material**: Selective breeding is central to almost all livestock farming.


*The dependencies were analyzed using Encore’s database and the publicly available information on the country's economic sectors. The data provided by ENCORE is sector-based and focuses on different industry types. Nevertheless, not all sectors in the economy are included, and the categories’ name might differ from other economic classification standards.*
Preconditions

A Framework for Biodiversity Finance is driven among others by physical and transition risk

**Impacts of Main Economic Sectors in Brazil on Natural Capital***

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<th>Impacts on Natural Capital</th>
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<tr>
<td>Agriculture</td>
<td>9</td>
</tr>
<tr>
<td>Mining</td>
<td>9</td>
</tr>
<tr>
<td>Manufacture &amp; Services</td>
<td>9</td>
</tr>
</tbody>
</table>

Some of the impacts of the **Oil & Gas sector** include:
- **Disturbances**: Seismic activity from excavation blasting can result in the migration of species from a localized areas.
- **Terrestrial ecosystem use**: Non-native and invasive species can be introduced to sites by vehicles, and in some instances by reclamation programs that use cheap and/or fast-establishment seed.
- **Soil waste**: Heavy metals released in ore heaps where leaching occurs can negatively impact vegetation and soil conditions when exposed to accidental spillage or leakage in localized areas.

**Priority sectors:**
- **Mining**, including iron, copper, gold and aluminum (due to 9 potentially harmful business processes)
- **Agriculture** activities related to large and small livestock (beef and dairy; due to 5 potentially harmful business processes)
- Energy produced by **hydropower** (due to 6 potentially harmful business processes)

**Impacts on nature include GHG Emissions, Marine ecosystem use, Soil pollutants, Water pollutants...**


*The impact analysis was made using Encore’s database and the publicly available information on the country’s economic sectors. The data provided by ENCORE is sector-based and focuses on different industry types. Nevertheless, not all sectors in the economy are included, and the categories’ name might differ from other economic classification standards.
**Ecosystem Services Dependencies of the main Economic Sectors in Brazil**

**Priority sectors:**
- **Agriculture**, including large and small livestock, arable crops, and fisheries, has the highest priority (due to its dependency on 24 possible Ecosystem Services).

Some of the dependencies of the Agriculture sector on ecosystem services are:
- **Decomposition and fixing processes**: Livestock farming depends on healthy and fertile soils to provide plant nutrition and health for the production of pastural crops and feedstocks.
- **Disease control**: As such, pastural and feedstock crops are dependent on any disease control naturally afforded.
- **Genetic material**: Selective breeding is central to almost all livestock farming.

**Ecosystem Services** include genetic material, plant-based resources, filtration by ecosystems, mass stabilization and erosion control, and microclimate regulation, among others.

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**Preconditions**

*A Framework for Biodiversity Finance is driven among others by physical and transition risk*

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*The analysis was made using Encore's database and the publicly available information on the country's economic sectors. The data provided by ENCORE is sector-based and focuses on different industry types. Nevertheless, not all sectors in the economy are included, and the categories' name might differ from other economic classification standards.*
Preconditions

Developing and implementing a Framework for Biodiversity Finance relies on robust demand and capacities

Identify and generate (a robust) demand for biodiversity finance

- **Identify and develop bankable business** cases across sectors (i.e., also beyond agriculture and forestry sector), conducting demand assessments and feasibility studies (identifying need for finance and technical and economic feasibility of business cases)

- **Link biodiversity conservation and restoration** with other environmental objectives – such as circular and blue economy concepts – which can lead to commercial business cases (beyond agriculture and forestry)

- **Build on good practice** (e.g., recent or ongoing biodiversity programmes, the pilot of applying the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD), etc.)

Build institutional capacities concerning biodiversity finance

- **Incorporate / relate the framework** to the institution's corporate strategy, targets and governance

- **Rising awareness among staff** (e.g., understand nature-related financial risk and opportunities), train loan officers for applying a biodiversity finance framework

- **Adjust processes** (incl. tools, policy documents, templates, MIS etc.) to reflect nature in lending cycle, risk management, reporting and disclosure and marketing
National & international commitments and policies
That affect the development and operation of a Framework for Biodiversity Finance

**The Kunming–Montréal Global Biodiversity Framework (GBF)** aims to halt and reverse biodiversity loss and promote nature-based solutions. Its goals by 2050 include maintaining, enhancing, or restoring all ecosystems’ integrity, connectivity, and resilience, sustainably using and managing biodiversity, fairly sharing genetic resources benefits, and aligning all financial flows to deliver GBF’s objectives.

- **Target 14** requires aligning financial flows and activities of private and public sectors across all industries.
- **Target 15** calls for large businesses and FIs to regularly monitor, assess and fully and transparently disclose risks, dependencies and impacts on biodiversity, along their operations, value chains and portfolios, to reduce negative impacts on biodiversity and increasing positive impacts.
- **Target 19** Requires an increase of the level of financial resources from all sources, including by leveraging private finance; promoting blended finance; implementing strategies for raising new and additional resources; and encouraging the private sector to invest in biodiversity, ...

**The 2030 Agenda for Sustainable Development Goals**

- SGD 14 – Life below water
- SGD 15 – Life on land

**National / Regional Taxonomy for Green/Sustainable Finance**

- Colombia’s Green Taxonomy - Classification system launched in 2022
- Common Framework for Sustainable Finance Taxonomies for Latin America and the Caribbean

**National Biodiversity Strategy, National Biodiversity and Action Plan**

- Colombia’s National Policy for the Integral Management of Biodiversity and its Ecosystem Services (PNGIBSE)
- Colombia’s “Estrategia Integral de Control de Deforestación y Gestión de los Bosques
- Brazil’s Resolution 4.883 / 2020 - Principles, basic concepts, and operations applicable to rural credit.
- Brazil’s Resolution 4,557/ 2017 - Risk management structure, capital management framework and disclosure policy
Sketching a Framework for Biodiversity Finance

Preliminary steps

- Define the principal economic sectors (exposed by portfolio)
- Define priority areas for the conservation and promotion of biodiversity
- Select financial mechanism, e.g.:

Use of Proceeds financing

The destination of the invested funds is exclusively for projects aiming at protecting biodiversity and reducing biodiversity loss, among others.

| Biodiversity Credits | Green Bonds | Biodiversity Bonds |

Critical steps
1. Defining the use of proceeds
2. Defining the process for project evaluation/selection
3. Defining the management of proceeds
4. Defining the reporting

Biodiversity-Linked financing

Invested funds are not exclusive to the aim or focus of the project but are rather linked to the achievement of certain key performance indicators (KPIs). This approach provides better terms, reduced rates, or other benefits to those who receive the funds, as long as they meet specific KPIs related to protecting biodiversity and reducing biodiversity loss.

| Biodiversity-linked Loans | Biodiversity-Linked Bonds |

Additional critical steps
1. Definition of KPIs (Considering ESG Metrics, Sustainable Frameworks, Taxonomies, SDG...)
2. Definition of the terms for repayment or compliance by the debtor/beneficiary.
Sketching a framework for Biodiversity Finance

1. Defining the use of proceeds

Proceeds are defined primarily for refinancing eligible projects or assets, i.e., aligned with Technical Screening Criteria (e.g., taken from a national Green Finance Taxonomy or Sustainable /Green Bond Standards). Designated “biodiversity” Projects should provide clear environmental benefits, which the borrower will assess, measure, and report.

Proceeds will be used to finance/refinance eligible projects that align with the Technical Screening Criteria related to biodiversity, considering the Biodiversity Finance Reference Guide from the IFC. These projects should provide **clear benefits for protecting biodiversity criteria and ecosystem services that sustain biodiversity** and will be assessed, measured, and reported by the borrower.

If proceeds will be used for refinancing, issuers should estimate the proportion for financing versus refinancing, specify which investments may be refinanced, and indicate the expected look-back period for refinanced eligible “Biodiversity” projects. (Adapted from Green Bond Principles 2021)

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Eligible “Biodiversity” projects include:

- **Ecosystem conservation** involving sustainable forestry (certified), agriculture, fisheries, and protecting coastal, marine, and watershed environments.

- **Refer to circular economy** concepts that contribute to biodiversity conservation (e.g., reducing/replacing resource use)

- **Apply classification criteria**: e.g., Standards and eco- or environmental labels on domestic fishing and aquaculture, marine fishing and aquaculture, requirements for nature conservation and biodiversity

- **Align with Technical Screening Criteria** e.g., Green Finance Taxonomy or Sustainable/Green Bond Standards and provide clear environmental benefits to be eligible. Borrowers are responsible for assessing, measuring, and reporting benefits for designated “biodiversity” Projects.

- **Alignment to national environmental regulation** (e.g., in Colombia, Brazil)

Note: further work on specific biodiversity criteria for the taxonomy / framework is expected on national/regional and international levels
Defining the process for project evaluation/selection (i.e., assessing and documenting the eligibility of the projects for green lending): incl. financial due diligence, ESG evaluation, Impact evaluation.

The borrower of a “biodiversity” loan should clearly communicate how it is organized to assess and select projects that will receive loan proceeds. In addition, the borrower explains how it will manage the environmental and social risk of eligible projects.

Considering the negative impact of operations and determine, assess, and manage environmental risks in projects, include, for instance:

- **Equator Principles** (environment and social assessment, applicable E&S Standards, stakeholder engagement, etc.)

- Incorporation of tools like **ENCORE** (Biodiversity module), or **WWF** (Biodiversity Risk Filter), which help to identify and prioritize high-risk areas and issues of different operations/sourcing sites.

- Implementation of an **environmental and social management system**, which will allow assessing and controlling biodiversity risks (e.g., via **IFC Performance Standard 6**).

Considering positive impact/verification eligibility criteria refer to the definition and eligibility criteria for the Rio marker for Biodiversity (2018): via [oecd.org](http://oecd.org) (**1.3 Biodiversity eligibility criteria**). However, developments of harmonizing indicators that are scheduled for 2024 (e.g., through the MDB Common Principles for tracking nature-positive finance) should be also referenced.
Structuring a framework for Biodiversity Finance

3. Defining the management of proceeds

Tracking a bond
According to the Green Bond Principles, it is imperative to ensure proper management of funds raised through green bonds. This can be achieved by establishing a sub-account or sub-portfolio, or by implementing a formal internal process. The management process must be closely linked and aligned with the lending or investment operations for green projects. Additionally, the Green Bond Principles advocate for a high level of transparency, and the issuer must clearly explain how they manage the proceeds to the best of their ability.

Tracking an originated loan
The proceeds of a “biodiversity” loan should be credited to a dedicated account or tracked by the borrower to maintain transparency and promote the integrity of the product.

The net proceeds of a “biodiversity” Bond, or an amount equal to these net proceeds, should be credited to a sub-account, moved to a sub-portfolio or otherwise appropriately tracked by the issuer, and attested to by the issuer in a formal internal process linked to the issuer’s lending and investment operations for eligible biodiversity-linked Projects.

As long as the Biodiversity Bond is outstanding, the balance of the tracked net proceeds should be periodically adjusted to match allocations to eligible Biodiversity Projects made during that period. The issuer should make known to investors the intended types of temporary placement for the balance of unallocated net proceeds.
Structuring a framework for Biodiversity Finance

4. Defining the reporting

**Defining the reporting** Qualitative and, where possible, quantitative indicators of the project’s environmental impact.

Illustrative abstract from the ICMA KPIs:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Sub-sector</th>
<th>Potential KPIs</th>
<th>Global Benchmarks for KPI definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>Construction Materials - Wood</td>
<td>Sustainably sourced wood as % of total wood used (%)</td>
<td>FSC or PEFC or equivalently labelled</td>
</tr>
<tr>
<td>Construction</td>
<td>Construction Materials – Wood</td>
<td>Recycled wood as % of total wood used (%)</td>
<td></td>
</tr>
<tr>
<td>Consumer</td>
<td>Agriculture – Forestry</td>
<td>Forests under management for protection, conservation, restoration and/or sustainable use (hectares)</td>
<td>FSC; PEFC; SFI; Rainforest Alliance; Global Forest Watch; Natural and Modified Habitat Screening; UNEP-WCMC: Land Use-Financing</td>
</tr>
<tr>
<td>Consumer Products</td>
<td>Agriculture</td>
<td>Area under certified land management in km² or in %</td>
<td>SBTN</td>
</tr>
<tr>
<td>Consumer Products</td>
<td>Agriculture</td>
<td>Reduction of chemicals use (e.g., fertiliser, pesticide) as farming input</td>
<td>Organic agriculture, Global G.A.P. certification, Fair Trade; IPBES; Dasgupta review; CBD; ENCORE; CDP Sustainable Food Systems Initiative; WBA</td>
</tr>
<tr>
<td>Consumer Products</td>
<td>Agriculture</td>
<td>Decrease of nitrogen excretion due to fisheries feed choices and/or carbon impact</td>
<td>Organic agriculture, Global G.A.P. certification, Fair Trade; IPBES; Dasgupta review; CBD; ENCORE; CDP Sustainable Food Systems Initiative</td>
</tr>
<tr>
<td>Energy</td>
<td>O&amp;G Exploration &amp; Production O&amp;G Storage &amp; Transportation Integrated O&amp;G</td>
<td>% of upstream or midstream projects in sensitive biodiversity areas</td>
<td>KBA</td>
</tr>
<tr>
<td>Finance</td>
<td>Asset Management</td>
<td>% of investments with sites/operations located in or near to biodiversity-sensitive areas where activities of those investee companies negatively affect those areas</td>
<td>SFDR</td>
</tr>
<tr>
<td>Food &amp; Beverages</td>
<td>Agricultural products</td>
<td>% fish survival rate</td>
<td>ASC; Global GAP; BAP</td>
</tr>
</tbody>
</table>
Illustrative samples
Investment opportunities with focus on biodiversity conservation and protection

1. Investment activities that generate biodiversity/nature co-benefits while supporting business operations
   - Climate smart agriculture
   - Regenerative Agribusiness
   - Sustainable Fishing
   - Waste and Plastic management
   - Reforestation
   - Improve sustainable forest management
   - Tourism/ Ecotourism Services

2. Investment in projects that enhance ecosystem services (Nature-based solutions)
   - Natural infrastructure investment that prevents runoff of agrochemicals into rivers
   - Wetlands for water treatment
   - Rehabilitation of mangroves to reduce flooding
   - Parametric insurance for green infrastructure
   - Investment in natural infrastructure

3. Investments in biodiversity/nature conservation as the primary objective
   - Conservation
   - Payments for ecosystem services
   - Fire management
   - Investment in REDD+
Illustrative samples

Bankable nature-based solutions

**Bankable Nature Solutions (BNS)** are financially viable projects that support the development of more climate-resilient and sustainable landscapes and economies. Their bankability enables projects to accelerate scaling and replication, realizing the large-scale positive impact on nature and communities.

### Sustainable Forestry

**Opportunities**
- Reverse and rehabilitate degraded land.
- Improve ecosystem functions and services such as soil and water conservation.
- Job opportunities and benefits to local economies.

**Expected Outcome**
Revenues from timber sales (for a newly planted facility, this will be a long cash cycle)
Potential additional revenues (e.g., from the sale of verified carbon units (VCUs) or Payment for Ecosystem Services),

<table>
<thead>
<tr>
<th>Financing Need</th>
<th>Example of funding</th>
</tr>
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<tbody>
<tr>
<td>Initial capital investment for creation of new lodge (infrastructure, equipment, land leases etc.)</td>
<td>Indirect debt (loan from local financial institution)</td>
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<tr>
<td>Initial Capital investment and ongoing operations (e.g., land acquisition, equipment planting, and maintenance of trees)</td>
<td>Equity fund (e.g., SLM fund, backed by NCFF funding)</td>
</tr>
</tbody>
</table>

### Sustainable Agriculture

**Opportunities**
- Climate-smart agriculture improves food security (High resilience of crops to extreme weather events)
- Maintain and improve the quality of soil, reduce soil degradation, save water, and protect species that provide ecosystem services.
- Reduce resilience to fossil fuels and pesticides; (Less emission of pollutants and chemicals to the environment) soil quality

**Expected Outcome**
Premium prices for environmentally supportive practices, and/or potential increased yields drive increased revenue
Cost savings from reduced use of artificial inputs (fuel, fertilizers, pesticides)

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### Environmental Protection / Ecotourism

**Opportunities**
- Revenue generated through direct tourism visitation (bed nights, use of equipment etc.)
- Revenue generated through secondary activities (e.g., sale of secondary products and services)
- Providing income and livelihood opportunities to rural communities
- Revenue generation to fund activities that support biodiversity protection and the maintenance of habitats (e.g., management and patrols)

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Source: Adapted from https://www.eib.org/attachments/pj/ncff-invest-nature-report-en.pdf
**Illustrative samples**

*Equity and debt capital markets*

Capital markets provide **equity finance**, for typically large and mature organisations that meet the requirements of capital markets. But also, **debt finance e.g., via bonds** is a possible instruments.

### Equity funds that invest in natural capital projects, e.g.:
- Investment management corporations e.g., BlackRock and Crédit Suisse
- The Moringa Partnership Fund - for larger scale profitable/sustainable agroforestry projects (with integrated smallholder farms/value chain partners) in Latin America & Sub-Saharan Africa

### Dedicated bonds (green, social, sustainability-linked) with focus on natural capital activities, via corporates, e.g.:
- The Starbucks Sustainability Bond for verified coffee purchases, farmer support centres, loans to farmers (Root Capital, Fairtrade Access Fund)
- The Sustainability Bond by the Tropical Landscapes Finance Facility (TLFF). The Sustainability Bond funds the **project PT Royal Lestari Utama (RLU)**, an Indonesian joint venture between France’s Michelin and Indonesia’s Barito Pacific Group, to produce natural rubber on heavily degraded land in Indonesia in a climate-smart, wildlife-friendly, and socially inclusive way.

Photo-source:THAWISAK/stock.adobe.com
The Sustainability Bond – Asia’s 1st Corporate Sustainability Bond

Pioneering Sustainable Natural Rubber – PT Royal Lestari Utama (RLU)

**Stage:** Implementation  
**Geography:** Asia  
**Investment Size:** US 345 million  
**Time Horizon:** 2018 - 2033

The project aims to create socially inclusive rubber plantations, transforming a degraded landscape into a productive area.

- This was done by establishing a 9,700-hectare wildlife conservation area, setting aside 31% of the total area for High Conservation Value, High Carbon Stock, and areas for protection, and providing direct employment to 16,000 people.

- The project also developed sustainable out-grower programs for 3,500 smallholders, with only 41,000 hectares of the total 88,000 hectares being planted with rubber and the rest reserved for conservation, restoration, and community development. WWF was a collaborator in this project.

- The use of proceeds from the bond are to finance the production of sustainable natural rubber, the restoration of forested buffer zones and the implementation of a Community Partnership Programme (CPP)87 in Jambi and East Kalimantan provinces.

**Financial Returns:** Interventions have boosted rubber plantations’ yields, generating financial returns. **Annual rubber yield is expected to reach 1.7 tons per hectare, compared to Indonesia’s 0.8 tons per hectare.** Michelin will purchase 75% of the production, representing **10% of their worldwide natural rubber purchases.**

The project has a total value of **US$ 345 million**.

**US$100 in equity** is provided by PT RLU, an Indonesian joint venture between Groupe Michelin (49%) and PT Barito Pacific (51%).

The Tropical Landscapes Finance Facility (TLFF) provides **US$245 million** through its **loan fund** (US$195 million) and **grant fund** (US$40 million) for smallholder financing.

TLFF provides a **long-dated Sustainability Bond** to fund PT RLU. The bond is organized by BNP Paribas and monitored by ADM Capital. It totals **US$95 million under tranche 1** and issues three classes of notes (Class A, B1, B2).

USAID is providing a **50% first-loss guarantee for the A shares**, which allowed them to gain a AAA rating and attract institutional investors.

The class B2 notes appeal to impact funds such as &Green, which has purchased 7-year and 15-year notes totaling **US$23.75 million**.

Tranche 2 is projected at **US$120 million**.
### Illustrative samples

**The Sustainability Bond – Asia’s 1st Corporate Sustainability Bond**

**Pioneering Sustainable Natural Rubber – PT Royal Lestari Utama (RLU)**

<table>
<thead>
<tr>
<th>Challenges</th>
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<tbody>
<tr>
<td><strong>Deforestation and Social Conflict:</strong> The area had a history of deforestation and conflicts related to land use.</td>
</tr>
<tr>
<td><strong>Complex Geographic Context:</strong> Difficulty in determining attribution due to the complex geography of the project area.</td>
</tr>
<tr>
<td><strong>Sustainability Implementation:</strong> Integrating rigorous environmental and social safeguards within commercial operations.</td>
</tr>
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<thead>
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<th>Risk Management Products and processes</th>
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<tbody>
<tr>
<td><strong>Environmental and Social Due Diligence Assessment (ESDD):</strong> A comprehensive assessment to identify and manage potential risks.</td>
</tr>
<tr>
<td><strong>International Finance Corporation (IFC) Performance Standards:</strong> RLU committed to managing the plantations according to these standards.</td>
</tr>
<tr>
<td><strong>Environmental and Social Action Plan (ESAP):</strong> Developed to guide the implementation of environmental and social safeguards.</td>
</tr>
</tbody>
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<tr>
<th>Solutions proposed to leverage biodiversity finance</th>
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<tbody>
<tr>
<td><strong>Adopted Sustainable Practices:</strong> Implemented sustainable land use and rubber production practices.</td>
</tr>
<tr>
<td><strong>Community Engagement:</strong> Developed community partnership programs to enhance local livelihoods and ensure support.</td>
</tr>
<tr>
<td><strong>Conservation Efforts:</strong> Set aside significant portions of the concession area for conservation and restoration.</td>
</tr>
</tbody>
</table>
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