Pioneering biodiversity metric to guide sustainable investments

To drive smarter, more sustainable investment decisions, EBF partnered with PRé Sustainability to develop & adopt a science-based metric that quantifies biodiversity impacts.

Towards a new metric

In partnership with PRé Sustainability, we developed a science-based metric that measures the fund's impact on biodiversity over time. We can now compare our biodiversity impact across different crops, regions and investment criteria, to make smarter decisions for nature and investors alike.

The approach was originally developed by PRé, CREM, and ASN Bank and is based on the Biodiversity Footprint Financial Institutions (BFFI) method. Using a life cycle assessment (LCA) approach, it looks at the environmental impacts of the financed farming products, from the sourcing of their raw materials to farm gate. It measures the Potentially Disappeared Fraction (PDF) – the fraction of species that could potentially be lost in a specific area due to human activities expressed as PDF·m^2·yr.

For example, 100 PDF·m^2·yr means all species can potentially disappear from 100 square meters for one year.

The new biodiversity measurement method

The method was adapted to identify measurable improvements, adjusts LCA data to account for sustainable practices supported by the fund, and compares them against the environmental footprint of conventional farming—enabling eco.business to estimate biodiversity gains from its investments.

By using the new approach, we can quantify and express these complex ecological impacts as a simple metric.

BFFI focuses on the pressure on biodiversity and hence measures biodiversity loss but does not capture the benefits of sustainable practices supported by the fund. The result is therefore a conservative approach to measuring the impact of our investments.

Example: the dry sugarcane cleaning system, financed by eco.business, cuts water uses by eliminating the need for washing. By adjusting freshwater consumption in the model, BFFI captures this benefit, showing how reduced water use supports both freshwater and terrestrial ecosystems by preserving natural water levels, ultimately benefiting biodiversity.

The BFFI method - a roadmap to analyzing environmental impact

The BFFI method has a clear, five-step roadmap to analyze an investment's environmental impact:

Step 1 - **Follow the funding**: Identify the investments' location and financed activities.

Step 2 - **Track environmental impact**: Use LCA databases to analyze the inputs required and outputs generated by production processes, such as resource use and emissions.

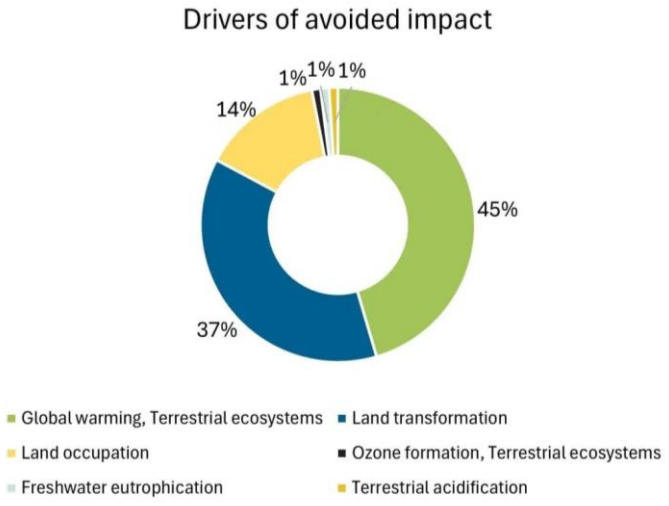
Step 3 - **Measure pressure on nature**: Understand and assess how these activities impact biodiversity in thirteen key categories, like land occupation, marine ecotoxicity, and global warming terrestrial.

Step 4 - **Summarize the results:** Aggregate the impact data to show the extent of potential biodiversity loss on land, in fresh and marine water, using the PDF·m^2·yr.

Step 5 - **Compare to reference scenario:** Evaluate biodiversity footprint against a conventional (business-as-usual) scenario, to determine if interventions reduce pressure on biodiversity and/or enable positive outcomes.

Our biodiversity impact

The fund stands out as an early adopter of the innovative BFFI method, enhanced by an approach that not only measures biodiversity impact but also compares it to a baseline (which is the negative pressure generated by conventional practices), hence demonstrating the positive change driven by the fund's efforts to reduce environmental pressures from agriculture on biodiversity.



Nearly half of the avoided negative impact generated by the fund results from a reduction in global warming effects, followed by impacts related to land transformation (see the graph). Sustainable sugarcane farming contributed the largest share of the avoided environmental impact among the crops in scope.

The results demonstrate that the sustainable interventions that the fund support effectively alleviate pressure on biodiversity. These results are largely driven by interventions aimed at land conservation and reducing land transformation, both of which directly affect land use and climate change. By preventing deforestation, carbon

remains stored in trees and soil, helping to reduce harmful emissions. Avoiding land clearance also prevents carbon emissions resulting from burning biomass during land clearing. Additionally, conserved land supports richer, more diverse ecosystems by avoiding conversion into farmland, further helping to prevent biodiversity loss.

This underscores the fund's growing role in steering farming activities toward more sustainable and biodiversity-friendly outcomes.

Role of the new metric in eco.business Fund's strategy

As a newly adopted indicator, it is currently used as an internal portfolio monitoring tool. This represents an important learning opportunity for the fund, enabling it to explore how best to support investment decisions and build understanding related to biodiversity impacts. Beyond its internal value, the fund's approach can serve as a blueprint for others in the field, demonstrating practical pathways for integrating biodiversity measurement into financial decision-making and fostering broader adoption of biodiversity metrics across financial institutions.

The indicator will continue to be refined as more granular and site-specific data become available, improving its accuracy and expanding the range of sustainability benefits it measures. This will increase the fund's contribution to nature-aligned finance over time.

We will continue to work with other interested parties to promote further innovation in this field.

Click here to explore the methodology in depth.

Click here to learn more about the eco.business Fund.