



**BIODIVERSITY &
SEARCH FOR PERFORMANCE**

The New Frontier of Responsible Investment

Sienna 
INVESTMENT MANAGERS



PAUL DE LEUSSE
Chairman Sienna IM

EDITORIAL

Inventing new forms of investment that are more respectful of nature, placing borrowing companies in a virtuous circle with performance indicators adapted to their activity... These are all challenges to be met if we are to hope to preserve biodiversity or even restore it. The stakes are high: on an international scale, more than half of the world's GDP is directly and indirectly dependent on biodiversity. If the latter were to erode further or even collapse, all of our economies would collapse. Committing to biodiversity is therefore beneficial for economic activity. It is a virtuous circle that benefits both the companies financed and the investors.

Assessing biodiversity is a delicate exercise, particularly because of its protean aspect. Its footprint is local, diverse and the data multiple in terms of biodiversity. The triangulation of different data sources will therefore be essential to have a more global vision.

Soil, air flows, exposure to the sun or shade, the presence or absence of a wetland, a location in the city or in the countryside...

Location changes everything. And this, within a few hundred meters. The degradation of biodiversity in one place cannot be restored or compensated for elsewhere. Also, the challenges of preserving and restoring biodiversity will impact our countries, our local ecosystems, and our entire living environment.

Unlike global warming, which is measured in tonnes of equivalent carbon, biodiversity cannot be measured by any international standard. Taking it into account forces us to think differently, to a paradigm shift. Hence new approaches based on the «strong sustainability» of ecosystems, such as ecological accounting.

At the same time, international regulation is evolving, encouraging financial actors to be increasingly transparent about their impacts, risks and dependencies related to biodiversity as well as to publicly report on their strategies for integrating biodiversity into their policies and action plans.

A long-term commitment to biodiversity

Sienna IM's DNA is to act today to protect the future. The group's role is to finance the real economy with a long-term perspective. To achieve this, it has developed an ambitious CSR strategy, particularly in favour of biodiversity, as well as a unique responsible investment policy. Committed, Sienna IM is a player convinced of the need to systematically integrate biodiversity, whether at the level of its operations or its investments, i.e. as a company but also as a financier. Three themes are now systematically addressed: biodiversity but also climate and diversity. In this way, savings can be directed towards projects that promote a more sustainable economy.

The path is nevertheless strewn with pitfalls. Biodiversity is a subject in the making,

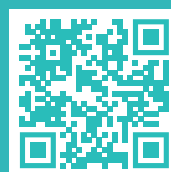
which will gradually gain in maturity. All the actors are still stammering and hesitating. In the face of these challenges, Sienna IM will continue to try to surpass herself. Already, in 2024, the group launched a biodiversity private debt fund. At the beginning of 2025, it updated its biodiversity policy to strengthen the commitments made as an investor in terms of biodiversity. The update of its policy forces its teams to move forward. It is also a way to prove one's responsibility as a committed financial player while maintaining the greatest humility.

Slowly but surely, this progress requires raising awareness among its teams and the involvement of its managers, but beyond the group, it will extend to the entire ecosystem. This is why Sienna IM supports the Chair of Ecological Accounting, hosted by the AgroParisTech Foundation, and also participates in the maturation of the market. For example, in a Series A series in 2021, the group took a stake in Iceberg Data Lab, a company specialising in biodiversity-related data solutions. This strong gesture aims to allow this player to emerge as a European player, French in this case, specialising in biodiversity issues.

All stakeholders are concerned, not just investors or companies that directly preserve or restore biodiversity. The work must be collective in order to be able to act at all levels: private, public, university, etc. Finally, the importance of data must be emphasised: it is impossible to act effectively without knowing where you started, where you want to go and without being able to measure the progress made. Hence the importance of this data and the partnership that Sienna IM has set up with Habitat, based on scientific data. The companies financed by the group are thus launched on a positive biodiversity trajectory and Sienna IM will be able to measure their progress in this virtuous circle.

#Biodiversity

Our Biodiversity commitment,
scan this QR code.



Mainstreaming biodiversity: the imperative for sustainable investing

Introducing biodiversity

Biodiversity is the living essence of our planet. According to the United Nations Convention on Biological diversity, biodiversity refers to all forms of life: genetic diversity (genetic variations within species), species diversity (diversity of plant and animal species) and the diversity of ecosystems and their interaction (variety of natural environments such as tropical forests, coral reefs and deserts on our planet). This biological wealth is not only an ecological concern, it is a fundamental pillar that underpins almost all aspects of human development. Biodiversity loss threatens to affect up to 50% of the world's GDP, according to the

[World Economic Forum](#). These vital resources are being depleted and degraded at an unprecedented rate. Currently, about 1 million species are threatened with extinction, 75% of terrestrial ecosystems have been significantly altered, and 85% of wetlands have disappeared, as reported by the French Ministry of Ecological Transition. For investors, understanding the implications of biodiversity loss is not just a matter of responsibility, it is about recognising the financial risks and opportunities.

The essential dynamics of impact and dependency

Understanding the concepts of biodiversity impact and dependence is essential to understanding how



ALIX FAURE
ESG Director
Sienna IM

biodiversity loss can influence the long-term sustainability and financial performance of companies. Impact refers to how human activities affect biodiversity, while dependence refers to how human well-being depends on the services that biodiversity provides.

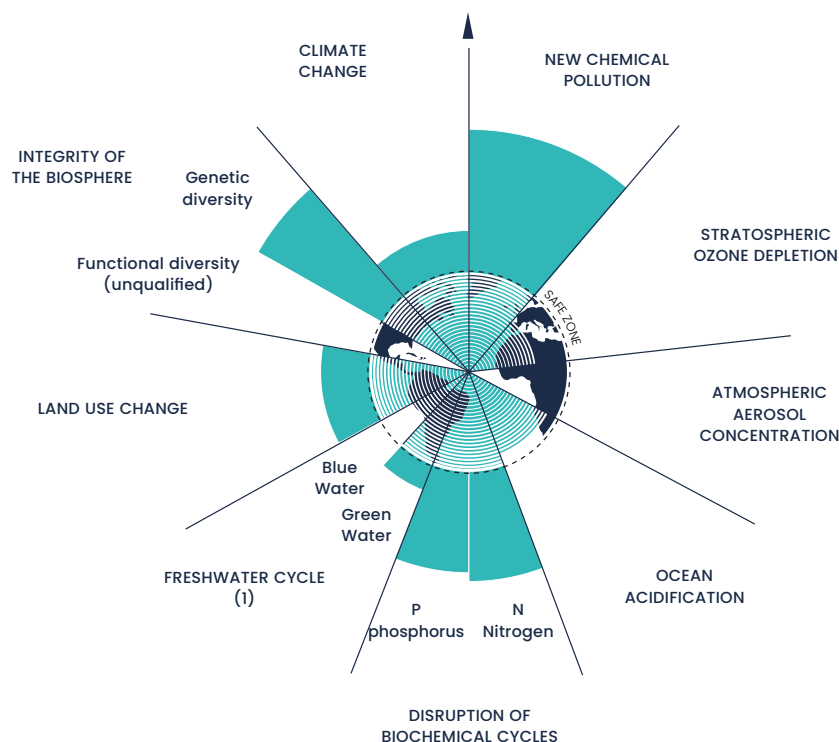
Understanding the impact on biodiversity

Human activities exert various pressures on biodiversity, resulting in significant impacts on ecosystems and species. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services ([IPBES](#)) identifies five direct drivers of biodiversity loss:

- **Land use change:** Land use change is the main human influence on habitats, encompassing activities such as deforestation, mining and intensification of agricultural practices. This changes the configuration of landscapes, leading to fragmentation and habitat loss, which can significantly impact biodiversity.

- **Overexploitation of natural resources:** Unsustainable exploitation of species (overfishing, logging) can deplete resources faster than they can recover, disrupting ecosystems and decreasing biodiversity.

- **Pollution:** Chemical pollutants, plastics, and nutrient runoff from agriculture can degrade ecosystems, harm wildlife, and reduce habitat quality.



Planetary boundaries in 2022

(1) Use of blue water (lakes, rivers and groundwater) // green water (soil moisture) source: Stockholm Resilience Center

— **Climate change:** Rising temperatures and changes in precipitation patterns are affecting species distribution, migration patterns, and the timing of biological events, putting many species at risk.

— **Invading alien species:** Non-native species can outcompete, attack or disease native species, leading to an imbalance and then a decline in local biodiversity. Understanding Dependence on Biodiversity Human activities and businesses depend on biodiversity for their ecosystem ser-

vices, which are essential for survival and well-being. Ecosystem services are generally classified into four main types: — Provisioning services include products obtained from ecosystems, such as food, freshwater, timber, fibre and genetic resources. For example, agriculture is highly dependent on various plant species for food production.

— **Regulating services** regulate environmental conditions, such as climate regulation, water purification and disease control. Healthy eco-

systems can mitigate the impacts of natural disasters, such as floods and droughts.

— **Support services** are the underlying processes that support ecosystems, such as soil formation, nutrient cycling, and primary production. These services are essential for the functioning of all other ecosystem services .

The degradation of nature, including the loss of biodiversity, entails physical transition risks for the European economy and the financial system.

Risks can be acute risks, such as severe natural disasters, or chronic risks.

MORE THAN 1677 EUROPEAN SPECIES ARE THREATENED

1677

MORE THAN HALF OF EUROPE'S ENDEMIC TREES ARE AT RISK

50%

ONE-FIFTH OF AMPHIBIANS AND REPTILES ARE THREATENED

20%

POLLINATORS ARE IN DECLINE



Source : Sienna IM, European Central Bank, 2024

New regulations to halt and reverse biodiversity loss and changing consumer preferences could lead to transition risks.

GLOBAL BIODIVERSITY HAS DECLINED BY 70% SINCE 1970



-70%

MANY PROTECTION POLICIES HAVE BEEN ADOPTED



- European Nature Restoration Act
- Kunming-Montreal Global Biodiversity Framework
- Various European regulations and directives

— **Cultural services** contribute to cultural identity, leisure and aesthetic pleasure. Natural landscapes and wildlife are integral to many cultures and provide opportunities for tourism and recreation.

The link between impact and dependence on biodiversity and financial risk

As the global economy increasingly recognises the importance of sustainability, investors see the critical relationship between biodiversity and financial performance. The concepts of biodiversity impact and dependence are intrinsically linked to financial risks, including through the lens of physical and transition risks. This link is often part of the concept of double materiality, which takes into account both the impact of environmental factors on financial performance and the impact of the company's activities on the environment.

— **Transition risks:** The impact of a company's activities on biodiversity can lead to transition risks, which stem from societal and regulatory developments towards more sustainability. As public awareness of environmental issues increases, companies are facing increasing pressure to adopt sustainable practices. This can lead to regulatory changes, such as stricter environmental laws, leading to fines or lawsuits, or reputational risks and changes in consumer preferences if companies are perceived as environmentally irresponsible.

— **Physical risks:** A company's reliance on biodiversity can lead to physical risks, which stem from the direct impacts of environmental

changes on a company's operations, supply chain, and market. Companies that prioritise biodiversity can Ecosystem services can face disruptions when these resources become scarce or degraded, thus jeopardising their financial stability. According to the World Economic Forum, industries that rely heavily on nature generate 15% of global GDP (\$13 trillion), while those with moderate dependence account for 37% (\$31 trillion). The three largest sectors that are highly dependent on nature – construction, agriculture, and food and beverage – generate nearly \$8 trillion in gross value added (twice the size of the German economy). These sectors depend on the extraction of natural resources and ecosystem services such as soil health, clean water, pollination and climate stability. As nature's ability to provide these services declines, these industries face significant risks. For example, 60% of coffee varieties are threatened with extinction due to climate change, disease and deforestation, which could destabilise the \$83 billion per year global coffee market and impact the livelihoods of smallholder farmers.

Beyond risk: the opportunities of biodiversity

As investors increasingly recognise the importance of biodiversity, it is becoming clear not only to mitigate risks, but also to unlock new sources of income and improve their position in the market. By investing in sustainable sourcing and regenerative practices,

companies can improve the resilience of ecosystems and ensure the long-term sustainability of their supply chains. This commitment not only enhances the brand's reputation, but also allows companies to take advantage of the growing consumer demand for environmentally friendly products. Companies that integrate biodiversity into their business models can gain significant competitive advantages, highlighting the transformative potential of biodiversity as a driver of innovation and growth.

Integrating biodiversity for sustainable investment

In conclusion, the need for investors to engage in biodiversity goes far beyond environmental impact considerations; It is a question of recognising the risks and financial opportunities presented by biodiversity. As the interconnected crises of biodiversity loss and climate change intensify, understanding the concept of double materiality: impact and dependence on biodiversity becomes crucial for long-term financial sustainability.

Integrating Biodiversity into Investment Strategies

Application at Sienna IM

Biodiversity has become a central issue for investors concerned about the sustainability and resilience of their portfolios. As the risks associated with biodiversity loss become increasingly material, it is essential for investors to integrate these considerations into their investment strategies. This article explores the approaches investors can take to integrate biodiversity into their strategies, focusing on the listed asset classes and private debt and illustrating with the approach taken at Sienna IM.

The importance of biodiversity for investors

Integrating biodiversity into investment analysis is becoming a must for investors looking to navigate the complexities of today's financial landscape. As ecosystem degradation accelerates, the implications for financial performance become more obvious. Investors should recognise that companies' impact and reliance on biodiversity represent significant risks, including risks related to regulatory changes, reputational damage, and operational disruptions. By integrating biodiversity considerations into their investment strategies, investors can identify risks and opportunities that are not immediately apparent through traditional financial metrics. This proactive approach not only improves risk management, but also aligns investment practices with global sustainability goals. Engaging in dialogue with companies about their impacts on biodiversity promotes accountability and drives improvements in environmental management, thus contributing to a more resilient and sustainable economy. As the financial community increasingly recognizes the

interconnection between natural capital and economic performance, integrating biodiversity into investment analysis is not only an ethical necessity, but a strategic imperative for long-term success.

General framework for integrating biodiversity

Excluding certain sectors from the portfolio is the first step in reducing biodiversity-related risks, even if there is no systematic exclusion of sectors with a high impact on biodiversity or dependence on it. By excluding certain sectors, such as tobacco, coal and unconventional hydrocarbons, investors can reduce their exposure to risks linked to biodiversity while supporting a more sustainable economy. However, exclusion should not be the only approach. It is also important to integrate biodiversity issues into ESG analysis – an approach developed in this article – before engaging in constructive dialogue with companies operating in sectors with a high impact on

biodiversity. By engaging , we can encourage concrete improvements in the practices of companies, while promoting a better understanding of environmental issues.

Integrating biodiversity

The integration of biodiversity into the analysis of investments in private debt and listed assets is essential to ensure responsible investment decisions and sustainability.

Private debt

A structured approach begins with an in-depth analysis of controversies, making it possible to identify those that are specifically related to biodiversity issues. Understanding these risks through proper assessment leads to better-informed portfolio construction. In addition, it is crucial to consider potential impacts on biodiversity hotspots, whether through an ESG questionnaire during due diligence or through other assessment methods. This consideration makes



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it possible to identify and assess the risks associated with the activities of the companies and projects financed. Incorporating criteria such as proximity to sensitive areas and other factors that can affect ecosystems, such as waste management and discharges to water, into the ESG score is key to fully considering biodiversity in the analysis. This ensures a comprehensive assessment of biodiversity-related risks and opportunities, thereby enhancing the sustainability of investment decisions..

Listed assets

For listed assets, biodiversity issues are directly integrated into the analysis of ESG risks used in the stock selection process. The extra-financial rating

used retains the most relevant ESG issues, those with a significant impact on the financial value of an issuer and, consequently, on the financial risk and return profile of an investment. For each ESG issue identified, the policy, practices and results obtained by the management systems dedicated to ESG risks are analysed and quantified. This results in an ESG risk rating. ESG issues can include, depending on the sector, issues directly related to the degradation of biodiversity, in addition to climate issues.

Impact clauses

As part of its Biodiversity Fund, Sienna IM has integrated impact clauses related to biodiversity. These clauses make it possible to adjust the financial conditions according to the environmental performance of the projects financed. For example, we apply a reduction of 15 basis points for one of our financing if the project obtains a specific sustainability label from a certain date, and another 15 basis points if the farm has been issued an organic certification of less than 12 months, guaranteeing production without chemical inputs. In addition, a 10 basis point reduction is expected if the land cover rate reaches projected levels under a specific land cover trajectory on a given date. These measures incentivise companies to improve their environmental practices, while reinforcing our commitment to preserving biodiversity.

EXAMPLES OF QUESTIONS ASKED BY SIENNA IM IN THE ANNUAL ESG QUESTIONNAIRE:

- If the company is located in or near a key biodiversity area, have appropriate assessments been carried out for these areas, and on the basis of their findings, the necessary reduction measures implemented?
- Has the company carried out an assessment of its impact and dependencies on biodiversity?
- Has the company carried out an assessment of its biodiversity footprint?
- Has the company carried out measurements of its aquatic pollutants?
- Is the amount of waste on construction sites controlled?
- Has a system for monitoring water consumption or detecting leaks been put in place?



Poor management of biodiversity issues is thus reflected, along with other ESG issues, in the ESG risk score, which is then used to exclude the riskiest issuers. Taking into account controversies related to biodiversity is also essential because it materialises the impact of a company on

biodiversity. These events are analysed and must be taken into account in the extra-financial investment process.

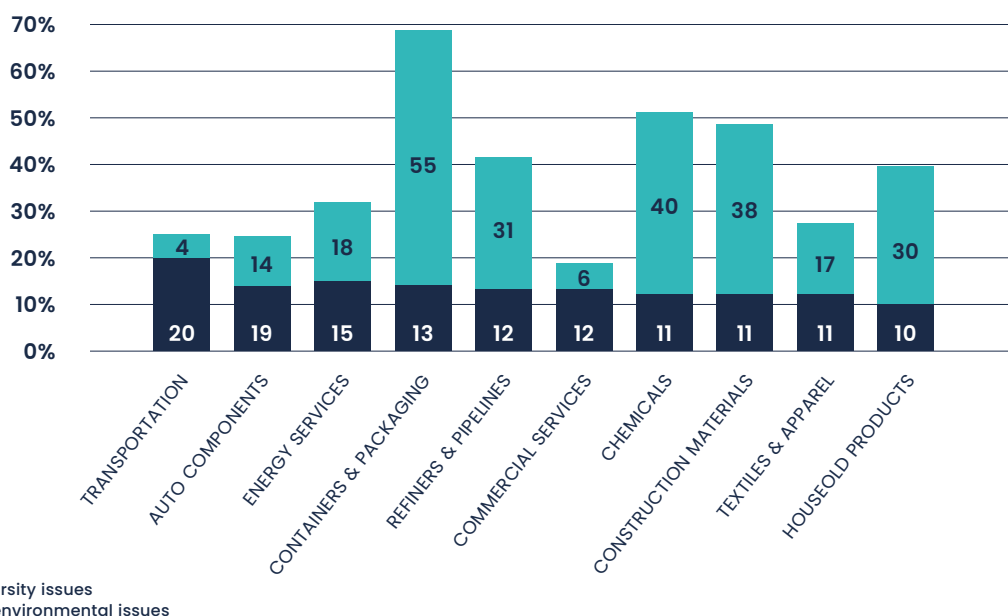
Find out more about [Sienna IM's biodiversity policy](#) its approach, commitments and biodiversity initiatives.

EXAMPLES OF BIODIVERSITY ISSUES TAKEN INTO ACCOUNT IN THE ESG RATING OF ISSUERS INVESTED BY SIENNA IM'S LISTED ASSETS EXPERTISE:

- Emissions, effluents and waste
- Land use and biodiversity
- Resource utilization

Below are the 10 MSCI Europe sectors most exposed to biodiversity issues, put into perspective with the other environmental issues to which the sectors are exposed.

Sectoral weighting of biodiversity-related themes among environmental issues



Source: Sienna Listed Assets, Sustanalytics, 2024



The preservation of biodiversity, essential for the economy and businesses

Many economic sectors depend on biodiversity. However, it is necessary to be able to assess their impact on nature, by equipping ourselves with common data and indicators.



JÉRÔME DUPRAS
CEO of Habitat

en.habitat-nature.com

2022 is a milestone. At the 15th Conference of the Parties on Biodiversity (COP15), the Kunming-Montreal Global Biodiversity Framework was adopted by 196 countries in December of that year

It was an opportunity to establish an ambitious action plan for a world that would live in harmony with nature. The objective: to become a positive humanity for biodiversity again, marked in recent years by the destruction of natural habitats, the rise of invasive species, climate change, the overexploitation of natural resources... "This COP 15 has set itself 23 targets that affect states, economic actors and the financial community, which is encouraged to innovate and invent new forms of capital deployment that are kinder to nature," says Jérôme Dupras, Quebec academic, ecologist and President of Habitat. "This is the case, for example, with payments for environmental sustainable finance services and biocredits. So actors like Sienna are now thinking about alternative models that protect biodiversity. Other targets affect economic sectors that have a spatial impact or a directional relationship with living things." On an international

scale, data show that more than half of the world's GDP is directly dependent on biodiversity.

Key data to assess the impact on biodiversity

In the wake of the climate, more and more standards are emerging with a view to conducting common and transparent discussions, and even producing models assessing dependencies and risks to biodiversity. Hence the importance of data. "As a financial player, assessing biodiversity is complicated. In the absence of a common benchmark, the data will vary depending on the project financed," says Alix Faure, ESG Director at Sienna. "However, we have to report to our investors on the progress of these companies and their behaviour over time." Compared to financial data, which is based on common international accounting systems, in biodiversity, the footprint is local and the data multiple. The triangulation of different data

sources will therefore be essential to have a more global vision. Jérôme Dupras also stresses the importance of having non-binding models that really work. He hopes that some pilot projects, unique and innovative initiatives, can become textbook cases, with the key to establishing international standards.

Regulations are evolving in favor of biodiversity

The international legislative framework, particularly in Europe, encourages companies to question their challenges in terms of biodiversity. These reflections feed into the financing and investment decisions of financial institutions which, at the same time, refine their convictions on the risks and opportunities that result from them.

Many economic actors, and therefore those who finance them, are dependent on biodiversity, even though their activities sometimes have a negative impact on nature. This dependence on ecosystem services introduces a risk to their ability to repay a loan or influences their stock price. The ECB has calculated that about 72% of euro area firms are highly dependent on ecosystem services and that these account for almost 75% of all corporate lending by European banks. The Banque de France, for its part, estimated that 42% of the shares and corporate bonds held by French financial institutions were highly or very strongly dependent on at least one ecosystem service. To ensure the financial stability of economies, financial institutions are therefore beginning to have very specific expectations about the proper management of issues related to biodiversity issues. But if the management of risks related to climate change is complicated to understand, that of risks related to nature is even more so, given the complexity of the subject.

The international community and companies are nevertheless mobilising against the erosion of biodiversity. "The Kunming-Montreal Global Biodiversity Framework adopted in 2022 commits us collectively to a process of protecting and restoring biodiversity," says Antoine Helouin, Partner in EY's Sustainable Finance teams. This

has resulted in several international initiatives more specifically dedicated to companies, such as the TNFD, which is an international voluntary reporting framework, aimed at disclosing nature-related financial opportunities and risks through the integration of biodiversity issues into governance, strategy, risk management and monitoring indicators, and the SBTN framework, which sets scientific objectives to be respected in order to work in favour of nature.

At the European level, the fixed European Green Deal has raised the region's environmental ambitions. In terms of biodiversity, the European strategy aims to strengthen the protection and restoration of nature and aims to "put European biodiversity on the path to recovery by 2030". It is currently being implemented in France, through the National Biodiversity Strategy 2030. "In addition, three other European regulations (European Taxonomy, CSRD and SFDR) are pushing companies and investors to be more transparent about their biodiversity issues. The European Taxonomy defines an official European-wide extra-financial analysis of what is a beneficial activity for the environment in the broad sense and for the protection and restoration of biodiversity and ecosystems in particular. In line with this nomenclature, the CSRD invites companies to disclose informa-

tion on how biodiversity poses risks or creates opportunities for their business models and on the significance of the positive and/or negative impacts of these models on biodiversity. For its part, the SFDR, via Principal Adverse Impacts No. 7 for example, invites investors to report the impact of their assets under management on biodiversity-sensitive areas," he adds. In France, in addition to the application of European legislation, the reporting framework, which includes the bio-diversity component, is set out in particular by Article 29 of the Energy-Climate Law (LEC). For Alix Faure, Director of ESG, Sienna IM, "this regulatory framework contributes to the joint work on biodiversity, by defining the rules of the game, by obliging financial players to adopt a biodiversity strategy and by also measuring the impact."



ANTOINE HELOUIN
Partner – EY



Biodiversity as a source of accountability

Hosted by the AgroParisTech Foundation, the Ecological Accounting Chair – of which Sienna IM is a patron – stands out for its approach based on the «strong sustainability» of ecosystems, as explained by Sienna IM.

“Ecological accounting means being accountable with respect to biodiversity, and this is what we call accountability”. For Alexandre Rambaud and his colleague Clément Féger, both researchers and lecturers at AgroParisTech, the vision of the Ecological Accounting Chair they lead is based on “strong sustainability”, i.e. the idea that nature is a source of responsibilities, making populations and public or private actors who exploit it accountable. Their work focuses on indicators of the “good ecological status” of natural environments, as the basis for their thinking.

Exploiting biodiversity generates an “ecological debt”

This “strong sustainability” is opposed to the idea that nature is an active and that it can be substituted for capital. «For us, nature is a debt that must be

repaid,” says Alexandre Rambaud. In other words, the exploitation of an ecosystem implies that it will have to be restored according to very precise scientific objectives. To ensure that this “ecological debt” is indeed repaid by the organizations that make use of it, the Chair advocates a committed, hands-on approach. “We set ecological objectives, look at the actions to be taken to improve ecosystems and the costs required to implement them,” explains Clément Féger, adding that coordination of local players is essential. This thinking has given rise to the CARE model – for Comprehensive Accounting in Respect of Ecology – enabling a re-reading of the accounts of a company committed to preserving ecosystems. To illustrate this, the researchers give the example of a forestry company seeking investment. Acting in favor of biodiversity, its accounts were in a bad way. By adopting the CARE plan,



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the company was able to present a different reading of its balance sheet, and obtain a rating upgrade from the Banque de France.

The interest for financial players: knowing where the money is going

As part of the field approach to ecological accounting known as the “ecosystem centred”, the Chair recently conducted an experiment in Occitania. Its goal: to improve the management of its aquatic ecosystems and to understand the impact of socio-economic activities on their biodiversity. The objective is to bring together all

the stakeholders in the territory to its preservation and to serve as a model for other regions. But what does green accounting bring to financial players like Sienna IM? For Clément Féger and Alexandre Rambaud, it is a way of knowing “where the money is really going and whether it is being used correctly”, a kind of support for investments that did not exist until now in terms of biodiversity.

Biodiversity: a constructive dialogue with corporate borrowers

Investing in private debt on the theme of biodiversity places borrowers in a virtuous circle with performance indicators adapted to their activity. The management team will lead discussions with these companies on both profitability criteria and non-financial indicators.

"Financing in private debt format allows us to establish a dialogue with the borrowing company to identify its needs, its business model and verify its eligibility for the fund's financial and extra-financial criteria," says Claire Sanson, manager of the Biodiversity fund at Sienna IM. This discussion process can last several weeks or even months. The extra-financial analysis is always conducted by the ESG team in conjunction with the management team. The aim will then be to analyse the environmental, social and governance aspects of the company by submitting a questionnaire to the borrowing company on its spatial footprint, intentionality, impact, additionality and measurability in terms of biodiversity. It is on the basis of these responses that the dialogue continues. Sienna IM's multi-sectoral biodiversity fund addresses very broad issues related to biodiversity. To date, four investments have already been made and the

discussions on biodiversity performance indicators (KPIs) have been very constructive each time. The fund invests in companies that provide solutions in favour of biodiversity (regenerative agriculture, for example) or wishing to follow a transition trajectory (by increasing their share of sourced agriculture for example) or also extra-financial analysis companies with the best biodiversity practices in their sector.

From the almond farm to the anaerobic digestion plants

"We have therefore decided to finance a farm in regenerative agriculture, having previously defined in conjunction with the borrower two biodiversity KPIs, one relating to plant cover to encourage the farm to nourish the land surrounding its almond and olive trees, the other to obtain the organic label and another label that aims to restore the balance

of agricultural ecosystems and promote soil regeneration, water and biodiversity," describes Claire Sanson. Another project funded is anaerobic digestion plants in France, whose methane-generating inputs are overwhelmingly organic waste rather than dedicated or perennial crops. "Audits of the various sites are also carried out annually, to verify, for example, that these anaerobic digestion plants do not negatively affect local biodiversity," she explains. To finance companies that do not provide «solutions», the Biodiversity Fund has put in place impact clauses to verify that the company is well placed on a good trajectory. So many win-win discussions which allow these virtuous companies to borrow at a lower cost and investors to limit their risks.



CLAIRE SANSON
Fund Manager
Sienna Biodiversity
Private Credit

Biodiversity and the economy: why their destinies are linked

At a time when biodiversity continues to decline, it is necessary to reflect on the pressures exerted by our economic model, and on the need for a more positive approach to these issues.

Can we exploit infinitely a world with limited resources? This is the existential question that scientists are trying to answer in the face of the accelerated scarcity of biodiversity. Because since the industrial revolution, it is estimated that our planet has lost between 35 and 40% of its biodiversity. Antoine Cadi, president of Tetras Innovating for Nature and Restore, is sounding the alarm. For him, "everything is moving very fast, and the main cause of this disaster is Man and his economic model of growth".

Ecosystem services threatened by our growth patterns

But how did we get here? Antoine Cadi cites the alteration of "ecosystem services", which before their gradual disappearance, allowed ecosystems to maintain themselves naturally. The example often given is that of pollination, a service rendered to nature by insects, but which is less and less so as they disappear. Considered for too long as «free» by our societies, these services have been widely exploited without ever being restored, which in turn penalises a whole series of economic sectors.

"Today," says Astrid Lieder of Sienna IM, "it is estimated that nearly 50% of the world's GDP is based on these services." Among the other figures given by the Responsible Finance Analyst, to illustrate this interdependence, the fact that 72% of European companies will face economic problems due to the degradation of ecosystems.

A dozen problem sectors identified

In this context, Sienna IM has identified a dozen sectors accounting for 70% of the impacts on biodiversity. The asset manager carries out an extra-financial scoring that takes into account issues related to biodiversity, based on a mapping of the sectors most exposed to these issues. Which ones carry the greatest risks for biodiversity? Since soil artificialization is the most significant pressure on biodiversity, all sectors are involved, particularly through the increase in urbanization. Astrid Lieder points in particular to agriculture in a broad sense, which consumes large quantities of fresh water and pesticides. The overexploitation of the soil will harm its fertility, and it is a real vicious circle that is set in motion for the agricultural sector.



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It is in this context that Antoine Cadi intervened with the Sienna IM teams, offering them insight into economic sectors and their impact and dependence on biodiversity, to enable them to better source their investments. In finance, "Sienna IM tackled this challenge before anyone else, but today, it is accelerating," says Astrid Lieder.



Investors, the driving force behind biodiversity protection

Investing in private debt allows direct financing and earmarking of the money invested. Two investors committed to biodiversity issues tell us about their approach and the importance of the quality of the selected projects.

Preserving the living fabric of our planet also means safeguarding an entire sector of the global economy. “As an institutional investor, we finance very long-term, passive and we are helping to ensure the sustainability of many biodiversity-dependent sectors,” says Pierre Laly, Director of Investments at La France Mutualiste. The challenge is to preserve not only natural resources, but also economic sustainability and long-term growth. “to ensure that the companies in which we invest are capable of sustaining over the long term and delivering the expected returns,” adds Aurélie Baudhuin, Director of Investments at Malakoff Humanis, for her part.

France Mutualiste and Malakoff Humanis were two early investors in the Sienna Biodiversity Fund. Although these two Limited Partners (LPs) are not involved in

the management of the fund, their role is far from passive. “We took part in several workshops and in the selection of potential projects and biodiversity themes,” recall Pierre Laly and Aurélie Baudhuin. “While Sienna IM manages and selects the projects in which to invest, we inform our investors every time,” adds Alix Faure, Chief Sustainability Officer at Sienna IM.

Quality of selection and investment monitoring

In addition to being the first biodiversity fund in private debt with impact, what appeals to investors is that this vehicle allows to finance projects directly, and therefore be able to precisely target the money invested. The projects are very focused and very concrete. “The partnership between Sienna and the Quebec

company Habitat* represents for us a guarantee of quality in the selection and monitoring of investments,” says Pierre Laly. By cross-referencing geolocation data with geological, hydrological and biodiversity-related characteristics, Habitat’s Natureinvest TM tool referring to the report is particularly innovative. Aurélie Baudhuin appreciates, for her part, “the academic rigour put in place, which is based on the report of the Intergovernmental Scientific and Political Platform on Biodiversity and Ecosystem Services (IPBES), on the operational approach through this partnership with Habitat. He recommends: “to go even further in the construction of data on biodiversity. The sharing, carried out through this fund, should also make it possible to contribute to academic reflection with a view to setting up a method for calculating the Biodiversity footprint that will become more and more homogeneous over time.”



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OUR EXPERTS



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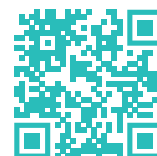


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