NATURAL CAPITAL PUBLICATION





CONTENTS

Introduction	3
THE WHAT	5
1 - Natural Capital & Biodiversity	5
2 - Current State of Biodiversity	5
3 – Ecosystems and Drivers Climate Change and Biodiversity – Mutually Reinforcing	
4 - The La Française Natural Capital Triangle	7
THE WHY	9
1 - Planetary Emergency	9
2 - Regulatory Environment	10
3 - Financial Risks & Opportunities Transitioners vs Enablers:	
THE HOW	14
1 - Quantitative Assessment	
2 - Qualitative Assessment	17
3 - Stewardship Finance for Biodiversity Foundation	
Conclusion	21
Appendix:	22
Planetary Boundaries Framework	22
TNFD: The Task Force for Nature-Related Financial Disclosure	23
SBTN: The Science-Based Targets Network	23

Authors:

Deepshikha Singh, Deputy Head of La Française Sustainable Investment Research & Head of Stewardship

Guy Wilkinson, ESG Analyst, La Française Sustainable Investment Research

INTRODUCTION

The International Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) was established a decade ago in recognition that "the Biodiversity crisis is probably a greater threat than global climate change to the stability and prosperous future of humankind on Earth". The latest reports by the organization indicate how nature loss has accelerated exponentially during the last 5 decades and how human activity through our use of ecosystem services and climate change are major drivers of it.

More than half of the world's economic output – US\$44tn of economic value generation (World Economic Forum) – is moderately or highly dependent on nature. Abundant Biodiversity is necessary for many components of life, including the provision of food, energy, water and health. On the other hand, we are facing a global Biodiversity funding gap of more than \$800mn per annum, and the financial industry can play a key role through capital allocation and stewardship.

2022 is a landmark year for blended nature-climate action. The 2022 UN Climate Change Conference - COP27 - closed in November with world leaders calling for a 'Paris moment' for nature. What is needed now, according to leaders and experts, is a concerted effort by governments and corporations to tackle both climate change and Biodiversity loss simultaneously. The second edition of UN Biodiversity Conference (COP15) is scheduled to take place from December 7th to 19th in Montreal, Canada - after being postponed for more than 2 years now - hopefully, giving greater clarity on a global framework for managing Biodiversity loss. The European and French regulations surrounding SFDR and Taxonomy require us to monitor and report on our nature-related risks and impacts. In addition, asset managers around the world are increasingly being asked about nature-related risks and opportunities by their clients. With global Biodiversity in decline, we, as investors, need to reconsider traditional economics and factor in the burgeoning concept of Natural Capital, in our investment processes and strategies.

This paper intends to demonstrate our understanding of Natural Capital and Biodiversity risks (and opportunities), the reasons why we believe tackling nature risks are both a financial and legal imperative, and our approach towards doing so. It is work in progress and we hope to provide more tangible and detailed progress reports on this topic in due course.

Developing a Natural Capital strategy has been a priority at La Française Asset Management (AM) over the course of 2022. We recognise the planetary emergency we are living in, and aside from reporting requirements, we realise the financial risks and opportunities that changing policy developments (like EU Biodiversity Strategy 2030) and higher scrutiny surrounding nature and the finance sector (like the Dasgupta Review) bring forth. We see two main kinds of investment opportunities across our issuer universe – 'Transitioners' with high dependencies and/or high negative impacts on nature but financial ability and strategic willingness to mitigate these, and 'Enablers' with solutions that can have a positive impact on nature on their own or by helping other firms to manage/reduce their risks.

We introduce our proprietary 'Natural Capital Triangle' which captures the multi-faceted dimension of our strategy on Natural Capital – connecting Dependencies to Ecosystems, Negative Impacts to Drivers and Positive Impacts to UN SDGs. We align these concepts with our overarching sustainable investment research approach which includes quantitative assessment, qualitative assessment and stewardship. One of the biggest challenges in creating this strategy has been the unavailability of global standards surrounding both assessment frameworks and data/metrics to be used. We have addressed this challenge by applying a multi-layered approach, using multiple

datasets like ENCORE and CDP, as well as incorporating draft TNFD recommendations to our qualitative assessment methodology.

Finally, stewardship is an important pillar of our sustainability approach. We are active members of the TNFD Forum, Finance for Biodiversity Foundation and the FAIRR initiative. We are also members of the Nature Action 100 – a collaborative engagement group for nature –, which will be launched during December 2022. These associations give us a platform to influence both companies and policy makers in addressing the nature crisis through knowledge exchange and collaborative actions.

Natural Capital's time in the spotlight during COP15 represents the perfect opportunity for the investment community to drive change for our clients, our investee companies, and the planet. For nature, as for climate, we need to put our best foot forward and leave no stone unturned. As Churchill famously said after WWII, during the formation of the United Nations:

"Never let a good crisis go to waste!"



THE WHAT

1 - Natural Capital & Biodiversity

Although Natural Capital and Biodiversity are used interchangeably, they are not the same. We derive much more from nature and its reserves than through species Biodiversity. Nevertheless, Biodiversity is the one we depend on the most, and it is the one that is in exponential decline. Hence, we see the greater emphasis on Biodiversity.

Natural Capital refers to the stock of renewable and non-renewable natural assets, including everything from soil, forests, air, water, geology, and all living organisms.

Biodiversity, short for biological diversity, constitutes the living component of Natural Capital and put simply, refers to the variety of living things in each area. This variability is essential for the healthy functioning of ecosystems, which in turn provides a multitude of goods and services that underpin our economies.

STOCKS
Natural capital

FLOWS
Ecosystem and abiotic services

VALUE
Benefits to business and to society

Figure 1: The entwined concepts of Natural Capital, Biodiversity and ecosystem services

Source: Natural Capitals Coalition, 2016

Ecosystem services are the goods and services provided by nature. They include the provisioning services that supply the goods we harvest and extract (food, water, fibres, timber, medicines), and cultural services, such as for entertainment, religious and social activities. But nature's processes also preserve and regenerate soil, control floods, filter pollutants, assimilate waste, pollinate crops, maintain the hydrological cycle, regulate the climate, and fulfil many other functions. Without these regulating and maintenance services, our economy and society as we know it would not be possible.

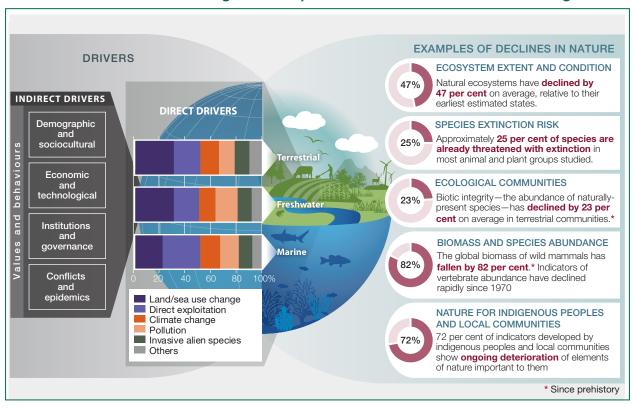
2 - Current state of Biodiversity

The 'Global Report on Biodiversity and Ecosystem Services' by IPBES, published in 2019, high-lighted the importance of nature and its contribution to human existence. Some major takeaways were:

◆ Nature's contribution is essential to human life. We extract food, energy, medicines, and a variety of minerals from nature, regulate our climate, quality of air, water and land, and need nature to sustain the non-material aspects of life as well – like culture, religion and quality of life.

- ♦ Benefits and burdens of Biodiversity and Natural Capital are distributed differently among societies, countries, and regions. Sometimes, this may benefit some people/societies at the expense of others, especially the most vulnerable.
- Nature degradation has accelerated over the last 50 years due to extensive urbanisation and exponential growth in the human population.
- There are trade-offs in the production and use of nature's contributions giving priority to one use of nature (forests as carbon sinks) can undermine another (land for agriculture) very relevant in the current food security vs sustainability debate.

Figure 2: Examples of global declines in nature, emphasising declines in Biodiversity, which have been and are being caused by direct and indirect drivers of change



Source: (IPBES, 2019)

3 - Ecosystems and drivers

The IPBES report presents the global declines in nature across ecosystems and drivers. The report simplifies ecosystems into three main types: terrestrial, freshwater and marine. Terrestrial ecosystem refers to all environs that are land-based such as forests, savannahs, deserts and grasslands. Freshwater ecosystems are based exclusively in non-salt-water environs such as rivers, lakes and streams. Marine ecosystems are all those that are based in seas, oceans or deltas.

The assessment's authors have also ranked the five direct drivers of change in nature with the largest relative global impacts so far. These are: (1) changes in land and sea use, (2) direct exploitation, (3) climate change, (4) pollution and (5) invasive alien species. Invasive Alien Species refers to harmful plants, animals, pathogens and other microbes not originally found within native ecosystems and are directly or indirectly introduced and spread into those ecosystems by human activities.

The direct drivers (such as land/sea use change) result from an array of underlying societal causes. These causes can be demographic, sociocultural, economic, technological, or relating to institutions, governance, conflicts, and epidemics. They are called indirect drivers and are underpinned by societal values and behaviour. Human activities are overall the most important direct and indirect drivers of Biodiversity loss. According to the International Union for the Conservation of Nature (IUCN), human activities have caused the extinction of 882 species over the last five centuries.

Climate change and Biodiversity - mutually reinforcing

Climate change and Biodiversity are inherently connected and mutually reinforce each other. Traditionally, both these crises have been tackled separately. But as the latest IPBES and IPCC reports show, climate change is a leading driver of Biodiversity loss, and the loss of wetlands and forests due to wildfires, droughts and other extreme weather events makes the Paris Climate Accord targets even more unattainable. We cannot solve one crisis independently of another.

As the world warms, rising temperatures threaten to ravage a natural world already reeling from habitat loss and over-exploitation. For example, rising temperatures and structural changes in precipitation patterns eradicate or weaken sensitive plant species (i.e., those with very specific soil and climatic requirements). This can make them more vulnerable to competition, which can prove fatal for many of them, as well as the multitude of species that rely on them. According to the 2020 WWF Living Planet Report, the Living Planet Index is in rapid decline and shows an average 68% decline in population sizes of mammals, birds, amphibians, reptiles and fish between 1970 and 2016 — more than ever before in human history.

Conversely, the loss of nature and these species can hamper climate action and exacerbate climate change. Through its ecosystem services, Biodiversity and the natural world is essential for both climate change mitigation and adaptation. According to CDP, about a quarter of all climate action is dependent on freshwater availability. Conserving and sustainably managing Biodiversity and nature is critical to addressing climate change and vice-versa.

4 - The La Française Natural Capital Triangle

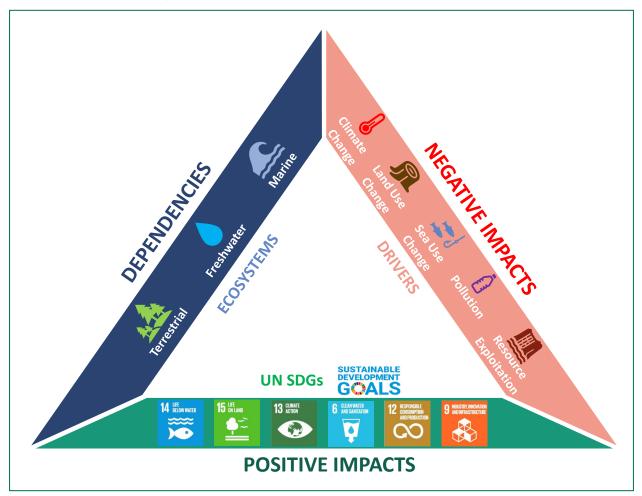
Acting on species Biodiversity loss in a standalone way is not efficient and can miss interdependent elements of nature, which are important for a holistic sustainable investment approach. At La Francaise AM, we use a **Natural Capital** approach, which includes water, land use (deforestation), pollution and Biodiversity loss, among other areas of risks and opportunities that nature provides.

Nature-related risks and opportunities cannot be addressed through a single lens. We need to account for 'double materiality', which in the case of Natural Capital involves monitoring the dependencies of businesses on nature and its three ecosystems (terrestrial, freshwater and marine), as well as impacts (both positive and negative) that these businesses have on Natural Capital and Biodiversity loss. Businesses can have a negative impact on nature through affecting any of the five drivers discussed before – climate change, land/sea use change, pollution and resource exploitation. We do not include invasive alien species as it is difficult to obtain data for this category.

For a nature-positive future, we need businesses that can have a positive impact on nature. This can be done in relation to Sustainable Development Goals (SDGs) related to nature and Biodiversity. Although almost all 17 SDGs are related to nature in one way or another, there are some that have a stronger significance. SDG 14 and 15 are directly related to life on Land and below Water, but others like 13 (Climate Action), 6 (Clean Water and Sanitation) and 12 (respon-

sible consumption and production) directly relate to the underlying drivers. SDG 9 (Industry, Innovation and Infrastructure) addresses the technological transformation and infrastructure development we will need to confront the crisis effectively. We summarise these three pillars of our approach in a Natural Capital Triangle, as illustrated below.

Figure 3: The La Française Natural Capital Triangle



In the context of Natural Capital assessment, it is also important to include the value chain analysis and location specificity. Companies need to estimate their impacts and dependencies on nature that are most material to them, as well as identify where these risks occur along their value chain. This is because most key issue areas for nature, like Biodiversity, water availability, land conversion, and deforestation, are inherently location dependent.

For details on how we use this approach in our assessments, refer to Chapter 3 - THE HOW.

THE WHY

Expectations that investors will address the interrelated problems of Natural Capital deterioration, ecosystem service decline and Biodiversity loss (together the 'nature crisis') are growing. The inherent environmental significance and urgency of the issue, the response of global governments and regulators and the growth of citizen, consumer & investor concern about the issue have all made the matter ever more concerning and urgent. As mentioned in the <u>Dasgupta Review</u> (Dasgupta, 2021), all actors of the global financial system have a critical role to play to transform the current financial system, with a view to align financial flows for a nature positive world. Financial institutions can catalyse action to avoid, manage and mitigate nature loss.

1 - Planetary emergency

Out of the 9 key planetary boundaries outlined by the <u>Stockholm Resilience Centre</u>, we have breached the boundaries of 'safe operating space' on biosphere integrity – going beyond the zone of uncertainty (see Appendix). The WEF Global Risks Report 2022 listed Biodiversity Loss as the third most severe risk facing the world over the next decade.

According to IPBES, around three-quarters of the land-based environment and two thirds of the marine environment have been significantly altered by human actions. We have already lost 85% of the world's' wetlands and one third of its forests. The authors of the 2019 IPBES report also concluded that, except in policy scenarios that include transformative change, the negative trends in nature, ecosystem functions and in many of nature's contributions to people will continue to 2050 and beyond. We are facing the sixth mass extinction, with a million species at risk, many within decades.

As the 2020 paper in <u>Nature</u> concluded, bending the curve on Biodiversity loss will need an integrated strategy from all actors of the economy. Economic systems and lifestyles that take the world's generous stocks of natural resources for granted will need to be abandoned. We need to multiply our efforts on conservation and transform food systems to produce more with less resources. And we will need both public and private finance to achieve these objectives.

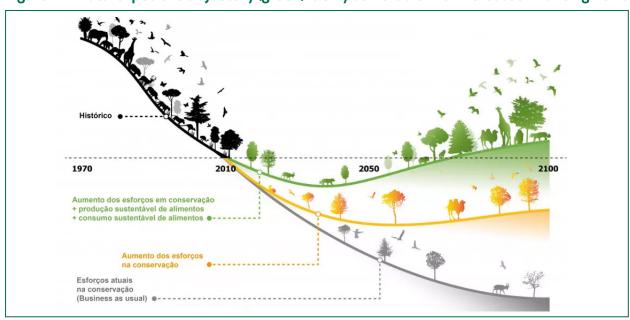


Figure 4: A nature-positive trajectory (green) is only achievable with increased financing flows

This artwork illustrates the main findings of the article but do not intend to accurately represent its results (https://doi.org/10.1038/s41586-020-2705-y)

2 - Regulatory environment

There are increasing amounts of regulation around Biodiversity, from national legislation to international agreements. At the COP26 climate summit last year, more than 100 world leaders representing over 85% of global forests committed to ending and reversing deforestation and land degradation by 2030, potentially resulting in the materialisation of this policy forecast.

The <u>Convention on Biological Diversity</u> is the first global agreement to cover all aspects of Biodiversity, launched in 1993. Their Post-2020 Global Biodiversity Framework (GBF) is currently under negotiation and should be finalised at the COP15 conference. In its draft version, the GBF has 21 targets and 10 milestones proposed for 2030. Overarching targets include halting and reversing Biodiversity loss and achieving a nature-positive world by 2030, and that Biodiversity is valued, conserved, and restored by 2050. Target 14 aims to align all public and private activities and financial flows with the framework and Target 15 specifically asks for businesses and financial institutions to report on negative Biodiversity impacts and improve positive impacts.

Figure 5: Significant global and regional regulatory milestones on Biodiversity



Despite the delay in finalising the GBF, we are already seeing a shift in policy to require explicit information for nature inclusion and restoration in financing and investing activities. The European regulatory framework, for its part, encourages investors to integrate the impact and dependencies of their investments on environmental dimensions, which is now naturally extended to the preservation of Biodiversity. SFDR requires asset managers to incorporate a company's impact on Biodiversity sensitive areas under the principal adverse impacts framework. EU Taxonomy calls on companies (and in turn FIs investing/financing them) to account for climate action when it leads to no significant harm (DNSH) to other sustainable objectives, including nature.

In France, Article 29 of the Energy-Climate Law, which came into force this year, extends the "climate" framework of Article-173 of the Energy Transition for Green Growth Law to Biodiversity conservation.

Apart from reporting requirements, new regulations can also create financial risks and opportunities for us as investors. The EU Biodiversity Strategy for 2030 was launched in May 2020 under the European Green Deal. There are 16 targets and 102 actions under the strategy aiming to put Biodiversity on a path to recovery by 2030. A number of targets are supported by related strategies such as the EU Farm to Fork strategy and the new CAP (Common Agricultural Policy) 2023 – 2027.

A few examples:

- Decreasing land and sea available for use by food and agriculture sectors:
 - Target 1: Legally protect at least 30% of the EU's land area and sea area.
 - Target 2: A third of these protected areas (10%) will be 'strictly' protected.
- Improving market for Agri Tech, bio-fertilisers; reducing for chemical pesticides/fertilisers:
 - Target 6: Reduce use and risk of chemical pesticides, and use of more hazardous pesticides each by 50% by 2030.
 - Target 13: Reduce nutrient losses by 50% without soil fertility deterioration and fertiliser use by 20%, by 2030.

3 - Financials risks and opportunities

As with climate-related financial analysis, Biodiversity-related risks to corporates and financial institutions' portfolios can be distinguished between physical and transition risks.

Physical sources of risk include, for example, the decline of ecosystem services on which economic actors depend. These risks can be chronic (i.e., gradual decline in numbers and species diversity of pollinators resulting in reduced crop yields, or increasing costs of manual pollination) or acute (i.e., pests wiping out significant parts of a harvest because of the disappearance of natural predators, or disease spreading as a consequence of reduced natural resistance, potentially leading to pandemics), or both (i.e., disruption to micro-climates and the hydrological cycle caused by deforestation).

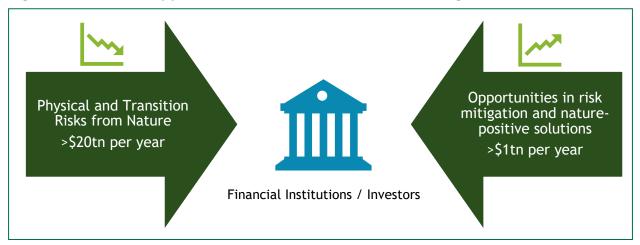
As per the IPBES report, losing critical ecosystems such as the Amazon could lead to tipping points that would cascade the planet into existential risk. Services provided by ecosystems are worth roughly \$125-\$140 trillion per year (more than 1.5x global GDP). Between 1997 and 2011, the world lost an estimated \$4-\$20 trillion per year in ecosystem services owing to land-use change and a further \$6-\$11 trillion per year from land degradation.

Transition risks result from a misalignment between financial institutions' portfolio allocations and strategies and developments aimed at reducing or reversing the damage to Biodiversity and ecosystems, such as government measures, technological breakthroughs, litigation and changing consumer preferences. These measures and developments are likely to target the five direct drivers of Biodiversity loss listed above, which could affect a great variety of economic agents and sectors. For example, expansion of protected areas via the Global Biodiversity Framework or Natural Capital solutions will limit businesses' ability to expand into or exploit natural resources.

Currently, many economic activities have a negative impact on Biodiversity. Harmful government subsidies alone amount to around US\$500 billion annually (OECD, 2020), and will likely have profound impacts on sectors and companies when redirected and eliminated. A study found that the Dutch financial sector had €15 billion in exposure to companies that are active in already protected areas, rising to €28 billion in a scenario where protected areas are increased to 30% of land and inland waters by 2030. Scenario analysis and stress testing will be instrumental to the assessment of transition risk.

Physical and transition risks can interact and affect economic agents through various channels, before materialising into traditional sources of financial risks (i.e., credit or market risks).

Figure 6: Risks and Opportunities from a Net Nature Positive goal



The Taskforce for Nature-related Financial Disclosure (TNFD) describes a third form of nature-related risk – 'systemic risk' – a rare, but overlapping and compounding, impact of physical and transition risks that can result in the breakdown of the entire system, rather than the failure of individual parts.

However, there are also significant opportunities that are arising for us as investors from addressing Biodiversity loss. Changes in global regulations and social behaviour towards protection, preservation and restoration of nature will create numerous opportunities in many sectors. Technological innovations will be needed as companies and governments grapple with monitoring and reducing their risks related to nature. In <u>Brazil</u>, for example, a state-of-the-art satellite-based deforestation monitoring system in the Amazon biome, run by the National Institute for Space Research, has enabled the government to monitor and enforce actions against deforestation. In Mexico, a national automated mapping system allows the evaluation of national subsidies/incentives through spatial analysis tools.

There will also be an added opportunity with companies that have better Biodiversity risk management, and that can help achieve the GBF goal for a nature-positive future. According to the WEF, sustainable supply chain investment has the potential to decrease operational costs by up to 16%, and can increase revenue by up to 20%. We see some of the largest chemical, agricultural and technological companies in the world, actively working on solutions to answer positive Biodiversity targets. The World Economic Forum recently concluded that 'nature-positive' solutions can create almost 400 million jobs and over \$10 trillion in business opportunities by 2030.

Transitioners VS Enablers:

When looking at the distribution of dependencies, negative impacts and opportunities across sectors and companies, we at La Française AM divide our universe into two main types of actors: The 'transitioners', where decreasing the risks is paramount and where there is a lot of capital to be deployed towards mitigation; and 'enablers', who are bringing the solutions to reach Nature positive goals.

Transitioners - Companies that are supporting the transition towards a nature positive economy by reducing their negative impact, and, in doing so, better managing their environmental risks and making use of environmental opportunities. The best transitioners to invest in will be those that may currently have the highest dependencies and/or negative impacts on nature, but are actively strategizing towards reducing them.

The consumer staples industry has a high dependence on ecosystem services such as pollination, soil quality and water flow to maintain a reliable supply of agricultural products and

other nature-based inputs as well as a high negative impact on Biodiversity through significant land footprint, greenhouse gas emissions and the overall business model (including sourcing activities and agricultural practices).

- Investing in global food and agriculture companies which have large capital, globally vast supply chains, and are implementing positive Biodiversity strategies such as regenerative agriculture, zero deforestation policies, etc. can help us advance towards a nature-positive future, faster.
- Paper & packaging firms that depend on forests but use sustainable forestry management and deforestation-free certifications to mitigate negative impacts can be potential additions to transitioning Natural Capital portfolios.

Enablers - Companies whose goods and services provide solutions to protect or restore Natural Capital, or to reduce human impact on nature. Targeting single or multi-thematic investment strategies aligned to SDGs can provide opportunities to invest in businesses that can help others mitigate their dependencies and negative impacts on nature.

- Investing in agri-tech companies can help address one of the leading causes of Biodiversity loss – agricultural land use, whilst also providing opportunities to benefit from innovations such as precision farming and bio-fertilisers.
- Other investable themes linked to positive impact drivers include renewable energy, food waste management, clean air and carbon reduction, biotechnology, sustainable food alternatives (fishing, plant- and lab-based foods), and water and waste management, etc.
- Technology solutions like environmental management systems, satellite monitoring, etc. will be needed by public and private sector to monitor their nature-related risks.

THE HOW

Expectations from investors that we will act on the 'nature crisis' are growing but so far, progress has been patchy. A 2020 report by ShareAction found that none of the world's largest 20 asset managers analysed had published a dedicated policy on specific Biodiversity risks and impacts. The main roadblock to achieving full Natural Capital integration across the market is the absence of global standards – both in terms of analytical frameworks and data/metrics for measurement.

However, there are areas of progress. The Science-Based Target Network's work on target setting for companies will enable investors to have effective science-based analytical tools to determine how the individual corporate efforts align with global goals and science on nature loss. The TNFD framework will provide the much-needed standardization of a qualitative assessment approach. The third beta version of the framework for corporates and for financial institutions has already been released, and the final version is set to be released in early 2023.

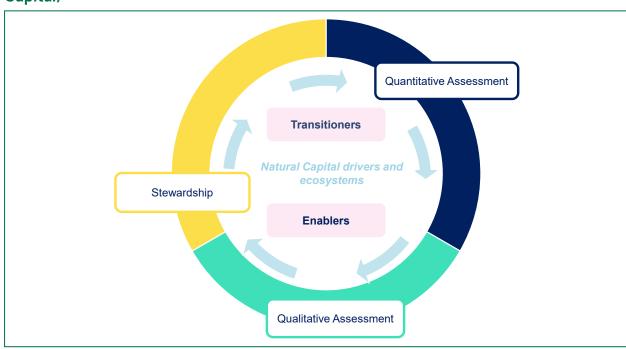
See Appendix for some more details on the two TNFD frameworks.

As a sustainability-focused investor, Natural Capital, along with climate change is one of the four pillars of our group's sustainable investment philosophy. Our approach towards managing and integrating nature-related risks and opportunities will depend on the guidelines from the TNFD, the SBTN, and our work with the Finance for Biodiversity Foundation, as well as other global standards. We aim for our approach:

- 1 to be research-based,
- 2 to include material dependencies and impacts both negative and positive,
- 3 to actively target reducing risks, and enabling positive action, and
- **4** to consist of integrative and adaptive models and assessment approaches, which can be implemented along with climate, on all our portfolios.

This approach will follow the overarching structure used across all our sustainable investment research methodologies, including climate change, i.e., quantitative assessment, qualitative assessment, and stewardship.

Figure 7: Our Sustainable Investment Research methodology (customised for Natural Capital)



1 - Quantitative assessment

As discussed in the previous chapter, our Natural Capital Assessment approach recognises the need for a multi-faceted analysis. We are using multiple data providers – ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure), CDP and Iceberg Data Lab to map and quantify our Natural Capital risks and opportunities.

As a first step, we use a proprietary methodology based on ENCORE data to build the Dependency / Impact Matrix which determines the level of dependency (negative impact) related to each ecosystem (driver) for each revenue segment. This can then be aggregated at company level, and portfolio level.

ENCORE aims to help visualise the links of economic activities to dependencies and negative impacts on nature. It is well suited for risk management purposes via the provision of qualitative materiality ratings for dependencies and impacts. It was developed by the Natural Capital Finance Alliance (Global Canopy, UNEP FI, UNEP-WCMC). It has been used by Central Banks for assessments of Biodiversity-related financial risks in portfolios in the Netherlands, France and Brazil. For dependency, it links 21 ecosystem services, derived from eight types of Natural Capital assets to 86 types of economic production processes. Dependency is a function of the degree of disruption to productive processes if the ecosystem service were to disappear, and the expected resulting financial losses.

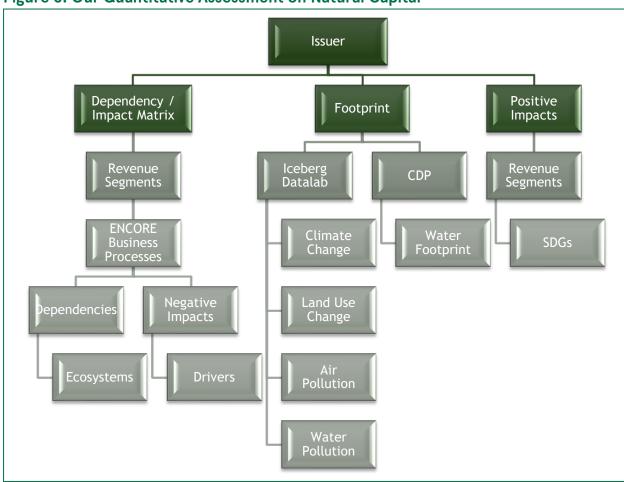


Figure 8: Our Quantitative Assessment on Natural Capital

Using ENCORE, a study in 2020 found that 36% of financial institution portfolios of listed shares in the Netherlands are highly or very highly dependent upon at least one ecosystem service.

On negative impacts, ENCORE provides a mapping of 11 impact drivers to the same 86 business processes covering c.170 industry sub-sectors. This mapping enables us to have the different levels of negative impacts on separate drivers of Biodiversity loss.

Dependency/Impact Matrix only provides us with a qualitative view of the risks assessment, which we then enhance on a more granular basis with footprint data. For the Biodiversity footprint, we use Iceberg Data lab's Corporate Biodiversity Footprint (CBF) solution to get the overall footprint, aggregated from 4 individual drivers (Climate Change, Land Use Change, Air Pollution and Water Pollution) for each issuer. The CBF models the annual Biodiversity impact of issuers based on the products or services purchased or sold. This footprint is then expressed in mean species abundancy per area terms (MSA.km2), which is calculated using GLOBIO. We are also able to analyse the footprints for direct operations, upstream and downstream for the issuers through data provided by Iceberg Data lab. However, Iceberg's CBF does not cover water resource use - hence, we are using CDP and Bloomberg Water data to calculate the water footprint for our portfolios.

We plan to use a revenue segment mapping to individual SDGs to account for positive impact - this is a work in progress.

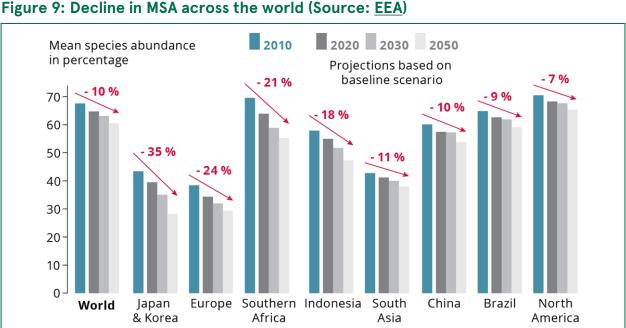
There are a few elements that are still missing from our current quantitative assessment approach:

- We do not have Invasive Alien Species data, due to lack of coverage.
- ◆ Our footprint from IDL does not have data on footprint from Sea Use Change, and Resource Exploitation. We use Water data from CDP to cover part of resource exploitation.
- ◆ It currently has a single year of data for each issuer, and hence, we cannot analyse trends.

We aim to fill these gaps with qualitative assessments and expect that our coverage will improve as more data and research become available over time.

Mean species abundance – Biodiversity footprint

Mean Species Abundance (MSA.km2) is one of the metrics widely used to measure Biodiversity loss. It is defined as "the average abundance of originally occurring species relative to their abundance in an ecosystem in a pristine state, undisturbed by human activities and pressures". A loss of x MSA.km² is equivalent to the conversion of x km² of undisturbed ecosystem (with an MSA of 100%) into a totally artificialized area (MSA of 0%). This loss can be expressed in static terms, which captures persistent effects that remain over time, or dynamic terms, to include the changes in Biodiversity over the assessment period. EEA (European Environmental Agency) estimated that the MSA is expected to decline by 24% in Europe between 2010 and 2050, vs 10% in the world.



2 - Qualitative Assessment

At La Française AM, we have a well-established process of enhancing our quantitative assessments with detailed qualitative analysis. The qualitative analytical framework helps fill several gaps.

- It helps us capture the impact of targets and ambitions of companies on their nature-related risks and opportunities.
- Positive or negative momentum can be analysed as evidenced by time series data and peer analysis.
- It also helps incorporate additional aspects of a company's potential performance like governance, risk management practices and initiatives with a longer period of impact.
- In the case of Natural Capital, the qualitative assessment will also enable us to determine the alignment of a company's climate and nature related targets and any trade-offs.
- ♦ It will help us capture the missing elements of our quantitative framework like sea-use change, invasive alien species, etc.

In line with our carbon impact assessment approach, we follow the Taskforce for Climate-related Financial Disclosure (TCFD) framework for disclosure recommendations in order to analyse a company's Natural Capital risk and opportunities. We give special attention to above listed areas of improvement. The TNFD in its beta versions recommends the use of the four pillars of disclosure from TCFD, albeit with some small changes – governance, strategy, risk & impact management and metrics & targets.

TNFD Nature-related Disclosure Recommentations (v0.3) Governance Risk & Impact Metrics & Targets Strategy <u>Assessment</u> Disclose the actual Disclose the metrics Disclose the organisation's and targets used to and potential impacts Disclose how the governance around of nature-related organisation assess and manage identifies, assesses and manages naturenature-related risks and opportnities relevant naturedependencies, related dependencies, on the organisation's impacts, risks & realted businesses, strategy impacts, risks and dependencies, impacts, risks and opportunities. and financial opportunities where planning where such such information is information is material. opportunities. material.

Figure 10: TNFD disclosure recommendations (beta version)

Board and Executive management level of responsibility and monitoring of Biodiversity risks are important for a company to take nature-related risks and opportunities seriously and embed them in business strategy across the firm. On the strategy pillar, we look for initiatives that will have a significant impact on a firm's nature dependencies and impacts (positive and negative) – details on efforts towards developing capabilities to monitor and then capture/mitigate opportunities and risks.

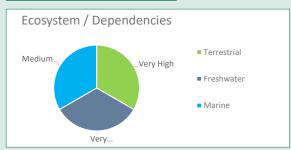
The Risk and Impact Management pillar on the Biodiversity assessment seems to be the one requiring maximum disclosure requirements. As per the Locate, Evaluate, Assess, Prepare (LEAP) approach proposed by TNFD, we expect our companies to provide disclosures around nature-related risks and opportunities across their entire value chain – specifying what they are, where they are located and how they are evaluated and assessed. We aim to measure progress and ambitions under the Metrics & Targets pillar, as compared to SBTN guidelines.

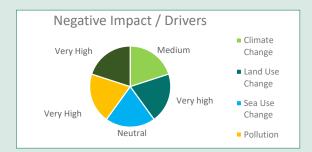
All assessments are adapted for the sector, based on materiality of topics related to nature.

There are many major developments still in flux including the final TNFD framework (September 2023) and the SBTN guidelines (2025). We will adapt our methodologies as more clarity emerges.

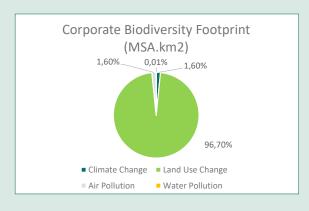
CASE STUDY: GLOBAL FOOD MANUFACTURER

Quantitative Assessment:





The graphs above show ecosystem dependencies and the negative impact drivers for a global food manufacturer, based on ENCORE data. As shown in the first pie chart, the firm has 'Very High' dependencies on terrestrial and freshwater ecosystems, whereas its dependency on the marine ecosystem is 'Medium'. The firm also has a 'Very High' negative impact on pollution, resource exploitation and land use change. Whereas the impact on sea use change is 'Neutral' or negligible, and on climate change it is 'Medium'.



The pie chart opposite shows the Biodiversity footprint for the firm. We get this data from Iceberg Data Lab in MSA.km2. As the chart shows above, the vast majority of the company's Biodiversity footprint comes from Land Use Change (as expected from the food sector), with a small amount contributed by climate change and air pollution. Our footprint does not yet capture other forms of pollution and resource exploitation, as mentioned before.

Qualitative Assessment:

Governance:

- ESG-related KPI's for Executive Board remuneration, some can be linked to Natural Capital.
- There is a separate, dedicated Sustainability Committee to review the sustainability agenda.

Strategy:

• Four core strategies with respect to Natural Capital: Regenerative agriculture, becoming forest positive, protecting, and enhancing Biodiversity, and water stewardship.

Risk & Impact Assessment:

- The company uses both desktop-based and on-the-ground assessments to help monitor risks along its entire supply chain, which can consist of small-hold farmers.
- They also undertake supplier engagement, smallholder farmer initiatives, industry collaboration and landscape projects to minimise their negative impact and increase positive impact on nature and communities.
- Company also has a fast-growing plant-based meat and dairy alternatives division.

Metrics & Targets:

- 100% deforestation-free by 2022 for palm oil, sugar, soya, meat, pulp and paper primary supply chains and by 2025 for coffee and cocoa (currently at 97.2%).
- igoplus They have reduced water use in factories by 2.3 million m³.
- Net Zero emissions by 2050 with efforts focusing on regenerative agriculture, recycled packaging, improving efficiency in operations (energy and water), waste management, etc.

3 - Stewardship

Investors have a significant role to play in achieving meaningful change in our economies, environment, and societies. Effective, collective, goal-oriented stewardship is a powerful tool wielded to serve these interests, and our interests as responsible investors. In this respect, our team has extended our stewardship efforts – mostly on engagements – on Natural Capital through our existing collaborative memberships and joining several new initiatives.

We are members of the TNFD Forum, which is a global multi-disciplinary consultative group of institutions, which works with the Taskforce by providing technical inputs, beta-testing and knowledge sharing. As part of the French consultation group of TNFD, we are collaborating with other investors to provide feedback and help develop the final TNFD disclosure recommendations.

For collaborative company engagements, we have signed up for Nature Action 100, which is supported by the Finance for Biodiversity Foundation (of which we are members) and aims to engage with the world's largest companies on Biodiversity and Natural Capital issues. It is expected to be launched in late December and is supported by the IIGCC (The Institutional Investors Group on Climate Change), Ceres (as members of the Secretariat), the Finance for Biodiversity foundation and Planet Tracker as the leader of the Technical Advisory Group. For the first time in 2022, we participated in the CDP Non-disclosure Campaign on Forests and Water Security disclosures, along with that on Climate Change. We co-signed the letters to 10 companies demanding them to report to CDP on these pillars.

We joined the FAIRR Initiative (Farm Animal Investment Risk and Return Initiative) in 2021. The FAIRR Initiative was originally set up to focus on animal antibiotic and nutrient use. Its remit has now expanded to help the investor network put the whole food sector on the ESG agenda. As a signatory, in October we signed up to lead and/or collaborate on engagement with several companies in the chicken and pork producing market through the Initiative. The specific engagement will focus on encouraging pork and chicken producers to decrease the negative impact on Biodiversity from pollution and effluent flow. Company dialogues will take place during Nov-Jan 2023 and an analysis report will be released by FAIRR in Feb-Mar 2023.

Additionally, we aim to include Natural Capital related enquiries in our direct engagement with companies. We are currently also exploring how to incorporate Biodiversity and Natural Capital in our voting policy and process. We will provide an update on these when available.

Finance for Biodiversity Foundation

La Française signed the Finance for Biodiversity pledge in March 2022. As a signatory, we commit to protecting and restoring Biodiversity through our finance activities and investments by:

- Collaborating and sharing knowledge
- Engaging with companies
- Assessing impact
- Setting targets
- Reporting publicly on the above before 2025

The Finance for Biodiversity Foundation's mission is to call on financial institutions to make commitments on ambitious action on Biodiversity. There are currently 89 signatories, comprising of 16.3 trillion EUR of AUM across 19 countries. We are active members of the Working Groups on Impact Assessment and Target Setting and contribute through exchanging knowledge and best practices on a regular basis with other signatory members. Our team also contributes in preparing guides and reference materials for the wider financial community through these working groups.

As part of our work with the Finance for Biodiversity Foundation, in November 2022, we signed a letter to the French Finance Minister, demanding clear actions to increase the amount of green finance going towards Biodiversity during COP15 negotiations. The foundation also acts as a knowledge hub and forum, allowing multiple investors to share learnings, roadmaps and advice on how best to engage with companies and policy makers on the issue of Biodiversity.

CONCLUSION

This paper has shown the importance of Natural Capital in our lives, for the economy and in the fight against climate change. The COVID-19 pandemic was a poignant reminder of our interconnectedness with the natural world, and that its imbalance can create existential crises for human civilisation. Economic activity and human life depend on ecosystems, which are collapsing in ways that can affect supply chains, food security, health, livelihood and even weather systems. We are currently consuming around 1.7x the annual resources of the planet every year, and we are polluting much of what is left. This is why it is so critical that investors address nature-related risks in their activities.

As investors, we have a crucial role to play in helping manage Natural Capital risk, preventing Biodiversity loss, as well as creating a nature-positive economy. So far, Biodiversity-related financial risks have not yet been fully appreciated by most investors, and there are even fewer with policies or targets in place to address the issue. However, clients and regulators are increasingly demanding asset managers to have Natural Capital strategies and policies in place, and it is important for asset managers to respond in-kind with transparency and rigor. By fulfilling our stewardship responsibilities with respect to nature-related risk, asset managers can help prevent Biodiversity loss, protect the planet and improve investment performance for our clients. As such, Natural Capital sits central to our sustainable investment philosophy at La Française AM. Through this white paper, we seek to provide thought-leadership for our clients and other asset managers alike. Together, we can make an even greater change.

The La Française Natural Capital Approach incorporates the most well-respected data providers in the Biodiversity finance space such as ENCORE & CDP, as well as drawing on the frameworks from leading industry collaborative platforms and organisations such as the Finance for Biodiversity Foundation and TNFD. By combining core quantitative metrics such as Mean Species Abundance with our own in-house qualitative research expertise, La Française AM is able to build a clear picture of each individual company's Biodiversity footprint and dependencies/impacts on planetary ecosystems. This analysis is then underpinned by our steward-ship activities, which seek to move the needle of action on Natural Capital for corporates. By engaging directly with companies, and through collaborative engagements with the PRI, Nature Action 100 & FAIRR, La Française AM aims to drive the Natural Capital agenda and move towards a nature-positive economy. As active owners, our combination of data insight, qualitative assessment and stewardship of asset activities will help us identify the leaders and the laggards with respect to the risks and opportunities related to Natural Capital. Through this identification, there is significant opportunity for nature-positivity and financial returns.

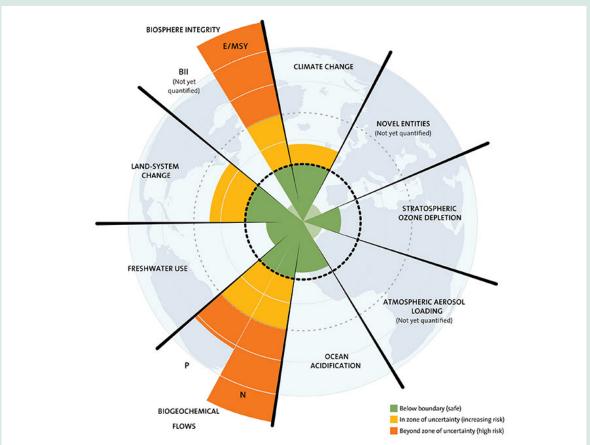
It's time that we invest in preserving and protecting Natural Capital – after all, our survival depends on it!

APPENDIX

Planetary boundaries framework

The seriousness of Biodiversity loss compared with other environmental issues can be assessed using the planetary boundaries framework, developed by the Stockholm Resilience Centre. This analytical framework defines a "safe operating space", essentially a set of boundaries beyond which the functioning of the "Earth system" is endangered. The framework identifies nine planetary boundaries, corresponding to the key processes of the "Earth system". These nine boundaries cannot be crossed without endangering humanity.





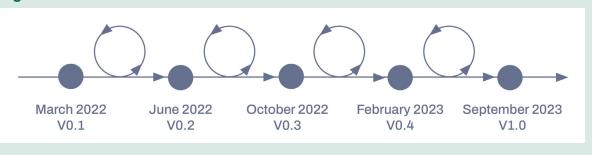
The figure above shows the estimated current compliance with these boundaries. It illustrates that this safe operating space has already largely been exceeded in terms of loss of biosphere integrity (particularly in terms of loss of genetic diversity, linked to the rate of species extinction). In comparison, while the situation is worrying because it is already close to its safety threshold, the "climate change" variable has not yet exceeded the Earth system's resilience threshold according to this study.

TNFD: the Task force for Nature-related Financial Disclosure

TNFD's mission: To develop and deliver a risk management and disclosure framework for organisations to report and act on evolving nature-related risks, with the ultimate aim of supporting a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes.

The Taskforce consists of 34 individual Taskforce Members representing financial institutions, corporates and market service providers with US\$19.4trn in assets. The TNFD Co-Chairs, David Craig and Elizabeth Mrema, lead the Taskforce.

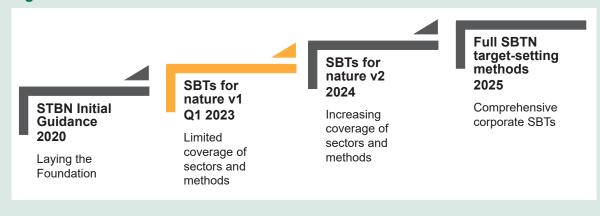
Figure: Timeline for TNFD



SBTN: the Science-Base Targets Network

SBTN: The Science-based Targets Network works to enable companies and cities to set targets for both climate and nature. The SBTN is part of the Global Commons Alliance and builds on the momentum of the hugely successful work of the Science Based Targets Initiative (SBTi). The network is currently developing the target-setting methodologies for corporates, which will then be extended to Financial Institutions. SBTN launched their initial business guidance in September 2020. They are aiming to release the first SBTN framework (v1) in early 2023.

Figure: Timeline for SBTN



This document is provided for informational and educational purposes only and is not intended to serve as a forecast, research product or investment advice and should not be construed as such. It may not constitute investment advice or an offer, invitation or recommendation to invest in particular investments or to adopt any investment strategy. The opinions expressed by La Française Group are based on current market conditions and are subject to change without notice. These opinions may differ from those of other investment professionals.

Published by La Française AM Finance Services, head office located at 128 boulevard Raspail, 75006 Paris, France, a company regulated by the Autorité de Contrôle Prudentiel as an investment services provider, no. 18673 X, a subsidiary of La Française. La Française Asset Management was approved by the AMF under no. GP97076 on 1 July 1997.



i 654 - December 2022 - Copyright: Pixabay on Pe