Biodiversity as an Investment Opportunity

Blog

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Help to protect the Earth's resources with the **Solactive Vigeo Eiris Biodiversity Index** and invest in companies that integrate the protection of biodiversity into their corporate social responsibility strategy! The index provides an opportunity for investors to benefit from a global trend towards a greener future. The constituents of the index are early adopters and role-models in dealing constructively with the problem of biodiversity loss. Thus, they are well-positioned for regulatory changes and profit from increased ESG fund flows.

The loss of biological diversity has long become a global problem

The proper functioning of the ecosystem is important to humans' well-being as well as to the economy. Its significance is addressed in an OECD report, which starts with the dramatic statement: "Biodiversity loss is among the top global risks to society. The planet is now facing its sixth mass extinction, with consequences that will affect all life on Earth, both now and for millions of years to come." [1]

According to the OECD, natural forests' area declined by 6.5 million hectares annually between 2010 and 2015, over 30% of corals are disposed to the risk of bleaching, 60% of global vertebrate populations have vanished since 1970, and more than 40% of insect species are quickly disappearing. [1] The challenge of curbing global warming becomes harder in this context, as the loss of plants and sea life lowers the capacity to absorb carbon – which creates a detrimental cycle.

Efforts in preserving wildlife and biodiversity are closely linked to anti-deforestation since rainforests – the main sufferers of extensive logging – are areas of very high biodiversity. According to estimates, tropical rainforests contain about half of all plants and animals on land, while representing only about 6% of the world's land area. [2] Whereas consumers of developed markets would probably not consider themselves responsible for deforestation in Brazil or Indonesia, their consumption behavior could be more destructive to the planet than generally expected. The term *imported deforestation* refers to the consumption of goods that were produced in fields cleared through forest fires to gain space for their agricultural usage. Examples of *imported deforestation* are, among others, space clearing for soy or palm oil production, as well as for cattle farming. According to ESG research agency Vigeo Eiris, between 1982 and 2016, the Brazilian Amazon has lost 8% of its area. Global forests absorb 2.4 billion tons of CO_2, and the Amazon region is estimated to absorb around a quarter of it. [3]

The interdependencies of consumption, deforestation (to clear space for cattle and crops), greenhouse emissions, and reduction of CO_2 absorption capacity makes the biodiversity loss a global problem. It is estimated that between 29 and 39 percent of CO_2 emissions generated by forest fires is driven by international trade. [3]

Moreover, the lack of biodiversity could be one of the major reasons for infectious disease outbreaks: up to three-quarters of newly emerged infectious diseases were transmitted from other animals through wildlife exploitation activity like hunting, capture, and trade. This in turn endangers productivity, supply chains, business activity in the global economy, and even lives of millions of people, as the society may have experienced with the example of COVID-19. [4]

Biodiversity and the economy – a one-sided relationship?

The economic benefits and the business case to scale up action on biodiversity are strong. Biodiversity delivers valuable services like the pollination of crops, water purification, flood protection, and carbon sequestration – with an estimated value of between USD 125 and 140 trillion per year, which is more than 150% of the global GDP. For instance, the estimated value of crops reliant on pollination by animals adds up to between USD 235 and 577 billion. [1]

The diversity of plants and animals is clearly linked to our planet's future. With at least 40% of the world's economy derived from biological resources, companies will have to take care of mother nature as natural interdependencies are under attack by human intervention. [5] Recent studies even find that USD 44 trillion of value added – which is more than 50% of the global GDP – depends on nature's services. [4]

Companies with strong sustainable product lines that preserve biodiversity are expected to be the winners of a structural shift. Investors are taking climate issues, as well as the carbon footprint of their portfolio more and more into consideration. Environmentally friendly investing is not only important from a moral or regulatory perspective but should also be factored-in as an element of proper risk management. Companies, as well as investors, are increasingly aware of the externalities and the involved risks their actions generate. Transparency concerning the way in which businesses are conducted opens new opportunities.

It is expected that in the future, governments and institutions enforce stricter regulations concerning species and biodiversity conservation, making it very costly for companies to react to the requirements instead of pro-actively planning and acting in advance. Early adopters of this trend are likely to face higher costs in the short run but will certainly benefit in the long term.

Companies that demonstrate responsible ways of dealing with environmental aspects such as deforestation can benefit from their well-regarded endeavors by gaining the goodwill of investors.

Inaction can be very costly

According to the OECD, 25% of all plant and animal species are under threat of extinction – mainly due to human's activity, through changes in land and sea-use, overexploitation, increasing pollution, climate change, and invasive alien species. [4] If humankind continues as habituated, the outlook will become increasingly gloomy, as inaction on the loss of biodiversity becomes ever-more costly. Crop outputs could decrease, and losses from disasters such as floods are likely to increase. For example, corals are expected to decline by 99% if global warming leads to temperatures of two degrees Celsius above levels observed in pre-industrial times. [1]

Striking negative examples exist to a large extent. A prominent one is the rupture of the Samarco iron ore dam in 2015. It flooded large areas with toxic waste, and experts expect that nature's recovery could take up to 100 years. So far, a huge loss of biodiversity, as well as the first payment of USD 5.3 bn by BHP and Vale, have been the disaster's result. Further USD 41 billion are still at stake in additional civil claims. [6]

In order to conserve biodiversity and to sustainably benefit from what nature delivers at no cost, far-reaching changes are necessary. Although rough estimates attach a price tag to biodiversity, the services of the ecosystem are broadly undervalued. Going forward, stopping the loss of biodiversity is urgently necessary.

How Solactive tackles it

Based on data of Vigeo Eiris, Solactive tackles the global problem of biodiversity loss. For the **Solactive Vigeo Eiris Biodiversity Index**, Vigeo Eiris calculates a **Protection of Biodiversity Score** of listed companies based on their proprietary classification of companies' sustainability objectives. The index focuses on companies that protect the diversity of biological systems and offer sustainable goods and services with a connection to biodiversity. The 77 constituents that are included in the index operate in the business fields Forest Products & Paper, Building Material, and Mining & Metals, amongst others. As of Nov-17th, 2020, the economic sector with the highest weight in the index is Finance (with 16 companies and 23.07% of the index' weight), followed by Industrials (with 16 companies and 19.71% of the index' weight), Basic Materials (with 14 companies and 18.16% of the index' weight), Energy (with 13 companies and 17.19% of the index' weight), Utilities (with 14 companies and 16.48% of the index' weight), and Consumer Services (with 4 companies and 5.39% of the index' weight). Thus, only six sectors are represented in the index as of the latest. Examples of companies receiving a high score from Vigeo Eiris are:

- Metsa Board, a Finnish producer of paperboard solutions and packaging,
- Empresas CMPC, a Chilean pulp and paper company, and
- Eramet, a French global mining and metallurgy company.

The **Solactive Vigeo Eiris Biodiversity Index**

The index universe contains listed companies from both developed and emerging markets. The index encompasses companies from, but is not limited to, the following sectors:

Waste & Water Utilities

Electric & Gas Utilities

Mining & Metals

Building Materials

Forest Products & Paper

Heavy Construction

To qualify as an index member, companies need to have an "advanced" or "robust" Protection of Biodiversity Score (following Vigeo Eiris classification), plus a contribution to sustainable goods and services connected to biodiversity (such as bio-based chemicals, recycling services, rainwater harvesting, water quality preservation). Further, companies are required to have a commitment towards biodiversity protection, no controversies regarding biodiversity, no involvement in the production of genetically modified organisms, and no involvement in the mistreatment of animals.

The index components are reviewed and equally weighted on a quarterly basis.

Final Remarks

Ecosystem services and biodiversity are often taken for granted. But the conservation of a natural diversity is too important and valuable for human well-being and the global economy to ignore. In the near future, awareness will most likely increase, and the **Solactive Vigeo Eiris Biodiversity Index** provides an opportunity for investors to benefit from this challenge. This awakening is not only crucial for risk management purposes, but environmentally friendly ways of conducting business may also be reflected in companies' performance. Shareholders will pay more and more attention to how a company's revenues are obtained, and capital market participants will differentiate between investment targets accordingly.

High inflows in ESG-related investments underscore the significance of the topic within the asset management industry, allocating capital towards consciously operating companies. Such investments provide rising opportunities for investors to participate in long-term trends and major economic shifts in accordance with sustainability goals towards a greener future. Such investments are thus an essential element of asset allocation decisions.

References

[1] OECD (2019); Biodiversity: Finance and the Economic and Business Case for Action; report prepared for the G7 Environment Ministers' Meeting, 5-6 May 2019.

[2] National Geographic Partners (2019); Rainforests, explained; online: https://www.nationalgeographic.com/environment/habitats/rain-forests/.

[3] Vigeo Eiris (2019); Amazon Fires in a Global Context of Deforestation: need for increased Investor awareness.

[4] OECD (2020); Policy Responses to Coronavirus (COVID-19); Biodiversity and the economic response to COVID-19: Ensuring a green and resilient recovery, online: http://www.oecd.org/coronavirus/policy-responses/biodiversity-and-the-economic-response-to-covid-19-ensuring-a-green-and-resilient-recovery-d98b5a09/

[5] Convention on Biological Diversity; Sustainable Use of Biodiversity; online: https://www.cbd.int/sustainable/.

[6] Vigeo Eiris (2019); Protection of biodiversity: Companies need to take action as scores remain quite limited.

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