

# INTEGRATING FSC CERTIFICATION INTO IMPACT INVESTING

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An Illustrative Publication for Investment Analysts





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# Contents

|  |           |
|--|-----------|
| DISCLAIMER .....   | II        |
| <b>1. Executive Summary .....</b>  | <b>1</b>  |
| Purpose of the Publication .....   | 1         |
| Key Findings .....   | 1         |
| Implications for Investment Analysts .....   | 1         |
| <b>2. Introduction .....</b>   | <b>2</b>  |
| The Growing Demand for Sustainable Forest Management in Impact Investing .....                 | 2         |
| Objectives of this publication .....   | 5         |
| <b>3. The Case for FSC Certification in Impact Investing: Key Findings from Research .....</b> | <b>6</b>  |
| Financial and Market Benefits .....  | 6         |
| Impact on Employee and Social Well-being .....   | 7         |
| Effects on Conservation and Environmental Protection .....                                     | 8         |
| <b>4. Case Studies: Lessons from Leading Investors .....</b>                                   | <b>10</b> |
| BNP Paribas Future Forest Fund .....   | 10        |
| Domini Impact Investments .....  | 10        |
| Mirova .....   | 12        |
| Mobilising Finance for Forests .....   | 13        |
| <b>5. FSC Certification and Its Role in Global Sustainability Frameworks ..</b>                | <b>14</b> |
| Introduction .....   | 14        |
| CDP Worldwide (CDP) & Accountability Framework Initiative (AFI) .....                          | 14        |
| Forestry Impact Performance Benchmark ..   | 15        |
| Positive Impact Indicator PRO 07 – Forest under Sustainable Forest Management .....            | 17        |
| Kunming-Montreal Global Biodiversity Framework (GBF) Targets .....                             | 17        |
| Taskforce on Nature-related Financial Disclosures (TNFD) .....                                 | 22        |
| <b>6. Practical Tools for Investment Analysts .....</b>  | <b>24</b> |
| FSC Document Centre .....  | 24        |
| FSC Impact Dashboard .....   | 24        |
| FSC Performance and Outcomes Dashboard .....   | 25        |
| FSC Risk Hub .....   | 25        |
| FSC Search .....   | 25        |
| FSC Verified Impact .....  | 25        |
| <b>REFERENCES .....</b>  | <b>26</b> |



# 1. Executive Summary

## PURPOSE OF THE PUBLICATION

This publication examines the role of Forest Stewardship Council (FSC) certification in impact investing, providing investment analysts with data-driven insights into its financial, environmental, and social implications. It explores how FSC certification may contribute to sustainability assessments in investment portfolios, drawing on research findings, case studies, and its relevance within sustainability-related frameworks. While the publication makes references to impact investing, it is intended for all investment analysts, not only those with an impact mandate.

## KEY FINDINGS

### Financial and Market Considerations

- Investors use FSC certification as a reference for assessing forestry investments that seek both financial returns and sustainability benefits.
- Data suggests that FSC-certified forestry funds have delivered competitive internal rates of return (IRR) over time, supporting their inclusion in long-term investment strategies.
- Companies with FSC certification have reported stronger customer retention and supplier preference, enhancing their market positioning.

### Sustainability and Risk Considerations

- FSC certification may help investors manage certain sustainability-related risks, including those linked to deforestation, biodiversity loss, pest and disease outbreaks, natural disturbances such as forest fires and storm damage, and irresponsible land management, thereby improving portfolio resilience.
- Research indicates that FSC-certified forestry operations tend to have stronger biodiversity outcomes, including higher wildlife populations and improved ecosystem integrity.
- FSC certification is referenced in various sustainability-related frameworks and benchmarks that investors may use in their assessments, though application varies by context.

### Investor Case Studies and Practical Considerations

- Several asset managers, including BNP Paribas Asset Management and Mirova, have integrated FSC-certified assets into their investment strategies, employing different approaches to balance certification costs and financial feasibility.
- Some investors conduct pre-feasibility assessments to evaluate the potential for FSC certification before committing capital, supporting structured risk management.

### Relevance to Sustainability-Related Frameworks

- FSC certification is referenced in selected sustainability disclosure and reporting initiatives, including those related to forestry impact benchmarks and nature-related financial disclosures.
- Some institutional investors and reporting initiatives consider FSC certification when assessing sustainability factors, though methodologies vary across frameworks.

## IMPLICATIONS FOR INVESTMENT ANALYSTS

- FSC certification may serve as a reference point in due diligence for forestry-related assets, depending on investment objectives and risk parameters.
- Analysts evaluating sustainability-linked investments may consider FSC certification's role within broader impact assessment methodologies.
- Given variations in reporting standards and certification adoption, investors may benefit from assessing FSC certification in the context of specific investment criteria and risk considerations.

## 2. Introduction

### THE GROWING DEMAND FOR SUSTAINABLE FOREST MANAGEMENT IN IMPACT INVESTING

The demand for sustainable forest management within impact investing is experiencing significant growth, driven by the recognition of forests' critical roles in climate change mitigation, biodiversity preservation, and socio-economic development.

Forests act as substantial carbon sinks, storing about 861 gigatonnes of carbon and absorbing about 7.5 billion metric tonnes net of carbon dioxide annually. Additionally, forests support the livelihoods of over 1.6 billion people worldwide.<sup>12</sup>

According to the Global Impact Investing Network's survey of 293 impact investing organizations, investors

increased their allocations towards forestry from 2023 to 2024, reflecting a 53% increase in asset under management. Over the next five years, 44% and 49% of respondents respectively plan to maintain or increase their allocations, respectively, while 7% plan to decrease them.<sup>3</sup>

Laurent Capolaghi's analysis of closed forestry and timber funds over a ten-year period (2013–2022) further shows a median internal rate of return of 15%, with a minimum of 10% in 2015 and a peak of 16% in 2021.<sup>4</sup>



**Figure 1** Planned future forestry & timber sector allocations over the next five years. Adapted from Hand et al. (2024). Visual styling modified; used under fair use.

### OVERVIEW OF FSC CERTIFICATION AND ITS RELEVANCE TO IMPACT METRICS

The Forest Stewardship Council (FSC) was established in 1994 with the mission to promote environmentally appropriate, socially beneficial, and economically viable management of the world's forests. Among the key players in the founding of FSC were the World Wildlife Fund, IKEA, Tetra Pak and Forest Peoples Programme.

FSC's Principles and Criteria is a globally recognized forest certification standard that promotes responsible

management of plantations and natural forests. FSC certification is granted by accredited certification bodies, whose performance is assessed by the Assurance Services International (ASI).

Globally, over 160 million hectares of forest are FSC-certified, with about 1,600 forest management certificate holders and more than 64,000 chain of custody certificate holders.

- 1 Goddard Digital Team. (2021). *NASA satellites help quantify forests' impacts on global carbon budget*. NASA. Retrieved from <https://www.nasa.gov/science-research/earth-science/nasa-satellites-help-quantify-forests-impacts-on-global-carbon-budget/>
- 2 World Resources Institute. (2024). *Global forest review*. World Resources Institute. Retrieved from <https://research.wri.org/gfr/biodiversity-ecological-services-indicators/forest-carbon-stocks#how-much-carbon-is-stored-in-the-world-s-forests>
- 3 Excludes two organizations that did not provide an answer to this question. Respondents could select multiple options. Hand, D., Sunderji, S., Ulanow, M., Remsberg, R., & Xiao, K. (2024). *State of the market 2024: Trends, performance and allocations*. Global Impact Investing Network (GIIN). New York. <https://thegiin.org/>
- 4 Capolaghi, L. (2023). *Forestry funds: The emerging star of alternative investments*. EY Luxembourg. [https://www.ey.com/en\\_lu/insights/private-equity/forestry-funds--the-emerging-star-of-alternative-investments](https://www.ey.com/en_lu/insights/private-equity/forestry-funds--the-emerging-star-of-alternative-investments)

**1,601**

NUMBER OF  
FOREST MANAGEMENT  
CERTIFICATES

**65,372**

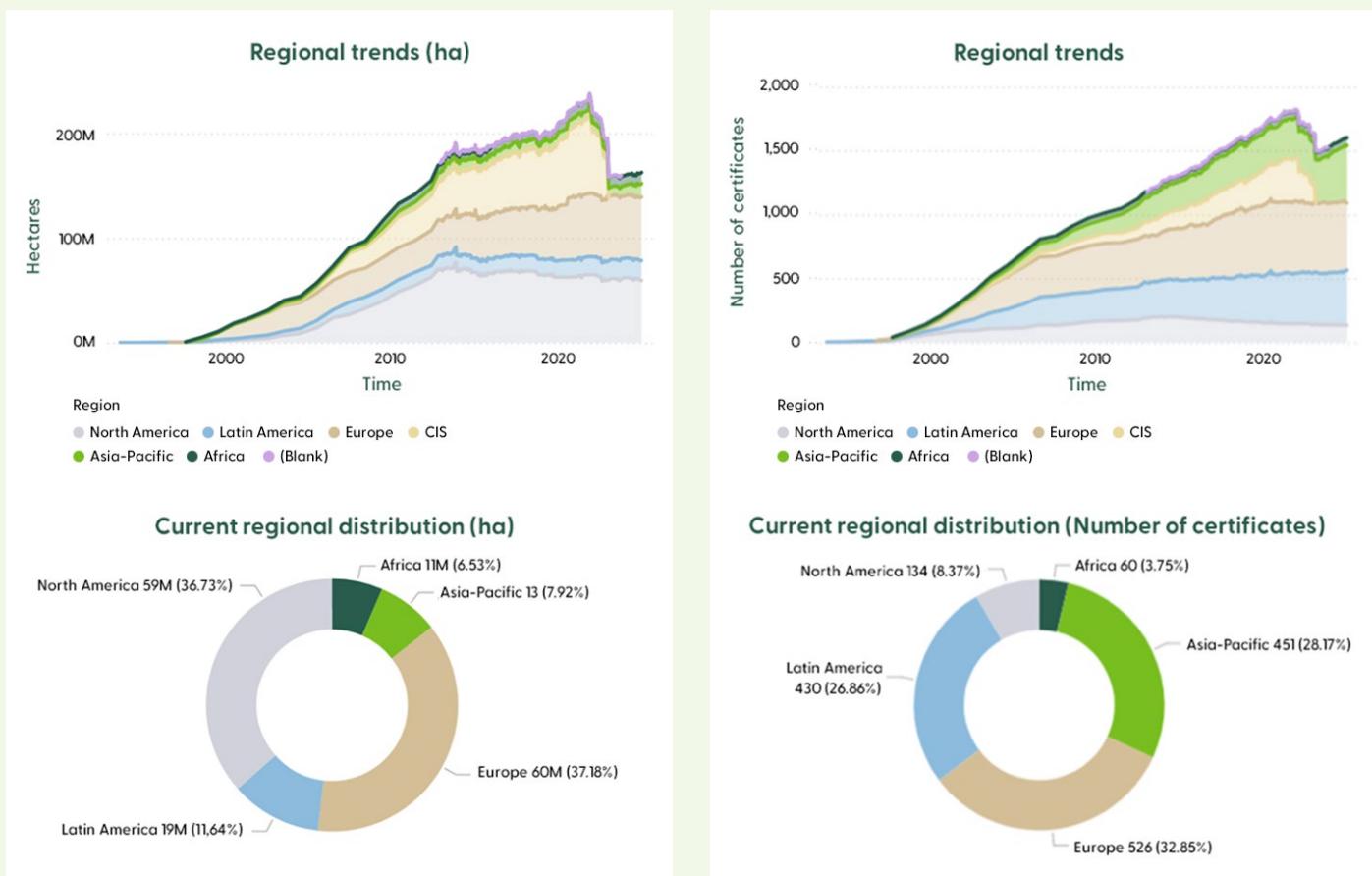
NUMBER OF  
CHAIN OF CUSTODY  
CERTIFICATES

**161,723,872**

CERTIFIED FOREST  
AREA (HA)

Figure 2 FSC certification statistics as of 30 April 2025, retrieved from <https://connect.fsc.org/impact/facts-figures>.





**Figure 3** FSC global certification statistics (2025). The figure presents forest management certification statistics from FSC as of 30 April 2025, retrieved from <https://connect.fsc.org/impact/facts-figures>.

## Types of FSC Certification

The following is an overview of FSC certification offering.

### Forest Management (FM) Certification<sup>5 6 7 8 9</sup>

FM certifications include:

- **Individual:** For single forest management units.
- **Group:** For multiple forest operations under a single certificate.
- **Special options for Small and Low Intensity Managed Forests (SLIMFs):** Tailored procedures to assist small operations.

- **Controlled FM:** For forests supplying materials that meet FSC's risk-based requirements

### FSC Verified Impact Claims<sup>10 11</sup>

FM certificate holders have the added option of being certified under FSC Verified Impact (formerly known as Ecosystem Services Procedure). FSC Verified Impact certification quantifies the positive impact that forest management has on various ecosystem services, such as biodiversity restoration, carbon sequestration, water retention, cultural benefits of local communities or recreation.

- 5 Forest Stewardship Council. (2023). FSC Principles and Criteria for Forest Stewardship (FSC-STD-01-001). <https://connect.fsc.org/document-centre/documents/resource/392>
- 6 Forest Stewardship Council. (2023). International Generic Indicators (FSC-STD-60-004). <https://connect.fsc.org/document-centre/documents/resource/262>
- 7 Forest Stewardship Council. (2023). Forest Management Groups (FSC-STD-30-005). <https://connect.fsc.org/document-centre/documents/resource/367>
- 8 Forest Stewardship Council. (2023). SLIMF and Community Forest Eligibility Criteria (FSC-STD-01-003). <https://connect.fsc.org/document-centre/documents/resource/205>
- 9 Forest Stewardship Council. (2024). Controlled Forest Management (FSC-STD-30-010). <https://connect.fsc.org/document-centre/documents/resource/374>
- 10 Forest Stewardship Council. (2025). Ecosystem Services Procedure: Impact Demonstration and Market Tools (FSC-PRO-30-006). <https://connect.fsc.org/document-centre/documents/resource/316>
- 11 Forest Stewardship Council. (2021). Requirements for use of the FSC trademarks by certificate holders (FSC-STD-50-001). <https://connect.fsc.org/document-centre/documents/resource/225>

FSC Verified Impact claims can be made in several contexts:

- **Forest operations:** Claims can be provided through the supply chain as evidence of quantified positive impact of forest operation. Such claims can be used in non-financial reporting, sustainability report or towards corporate sustainability targets.
- **Financial sponsorship:** Companies can claim to have financially sponsored verified positive impacts in specific forests, contributing to the United Nations Sustainable Development Goals or the Kunming-Montreal Global Biodiversity Framework.
- **Purchasers of external environmental assets:** Claims can be made regarding the purchase of assets with FSC-verified positive impacts on ecosystem services and therefore contribution to the enhancement of maintenance of an ecosystem service.

#### Chain of Custody (CoC) Certification<sup>1213</sup>

CoC certification, which tracks the journey of forest products from the source to the final product, can be single, multi-site or group:

- **Single:** For organizations with a single site.
- **Multi-site:** For large enterprises with multiple sites linked by common ownership.
- **Group:** For multiple independent entities grouped together for certification.

CoC certified companies can make FSC 100%, FSC Mix or FSC Recycled claims:

- **FSC 100%:** Indicates a product is made solely from wood sourced from FSC-certified forests.
- **FSC Mix:** Indicates a product is made from a combination of materials, including FSC-certified wood, recycled materials, and other controlled sources. It does not guarantee that all materials come from FSC-certified forests.
- **FSC Recycled:** Indicates a product is made entirely from recycled materials and does not imply that the materials come from well managed forests.

#### Forest Types and Their Role in Impact Metrics

In terms of forest types, natural forests are particularly important as they help maintain ecological integrity and supports biodiversity. Natural forests provide critical habitats and contribute to the overall health of the environment, which is essential for addressing global challenges such as climate change or biodiversity loss.

Plantations are areas established by planting or sowing. When well-managed, they can develop natural ecosystems attributes and may eventually be classified as natural forests if they enhance biodiversity and ecosystem functionality. This transition is significant for impact metrics, as it reflects a commitment to restoring ecological integrity and supporting local communities that rely on forest resources for their livelihoods.

#### OBJECTIVES OF THIS PUBLICATION

The objective of this publication is to provide investment analysts with a clear and actionable understanding of how FSC certification can serve as a credible impact metric within the growing field of impact investing.

Through real-world examples and data-driven insights, this publication aims to facilitate the incorporation of FSC certification into investment decision-making frameworks, to drive positive, verifiable impact alongside financial returns. While the publication makes references to impact investing, it is intended for all investment analysts, not only those with an impact mandate.

12 Forest Stewardship Council. (2021). *Chain of Custody Certification* (FSC-STD-40-004). <https://connect.fsc.org/document-centre/documents/resource/302>

13 Forest Stewardship Council. (2020). *Chain of Custody Certification of Multiple Sites* (FSC-STD-40-003). <https://connect.fsc.org/document-centre/documents/resource/294>

# 3. The Case for FSC Certification in Impact Investing: Key Findings from Research

FSC certification supports companies in fulfilling their commitments to local and global sustainability agendas. These include the Paris Agreement, the United Nations Sustainable Development Goals and the Kunming-Montreal Global Biodiversity Framework. By promoting responsible forest management and climate change solutions, FSC certification can help mitigate investment portfolio risks associated with environmental degradation and climate change.<sup>14</sup>

Research findings illustrate FSC certification's multifaceted value in impact investing. FSC-certified forestry delivers measurable economic, environmental, and social benefits, making it a strategic asset for investors seeking both financial returns and sustainability impact.

## FINANCIAL AND MARKET BENEFITS

In general, forest certification has been shown to support the economic performance of forest investments in Europe by reducing risks and strengthening



investor confidence. Additionally, it facilitates access to competitive international markets, enhancing the position of forest industries in global trade (Corticeiro et al., 2024, pp. 14-15).<sup>15</sup>

Earlier research conducted by the WWF found that, on average, companies with FSC certification generated an additional \$1.80 per cubic meter of certified roundwood beyond their certification costs. This financial gain was attributed to higher price premiums, improved operational efficiency, and various financial incentives. (Breukink, Levin, & Mo, 2015, p. 3).<sup>16</sup> In the U.S., an analysis of publicly traded firms found that FSC certification improved financial performance, particularly for downstream companies like manufacturers and retailers. (Narasimhan, Schoenherr, Jacobs, & Kim, 2015, p. 528).<sup>17</sup>

Multi-year data further illustrate how FSC certification improves business retention and attracts new customers. A study of FSC CoC certificate holders in Croatia found that between 2015 and 2023, the proportion of companies citing customer retention as the primary benefit of certification increased from 80% to 84%, while 66% of businesses reported gaining new customers due to FSC certification (up from 59% in 2015). Despite a decline in reported profitability due to certification costs (from 20% in 2015 to 9% in 2023), FSC certification remains valuable for supplier preference and premium market positioning (Klarić et al., 2024, pp. 7, 8, 12).<sup>18</sup>

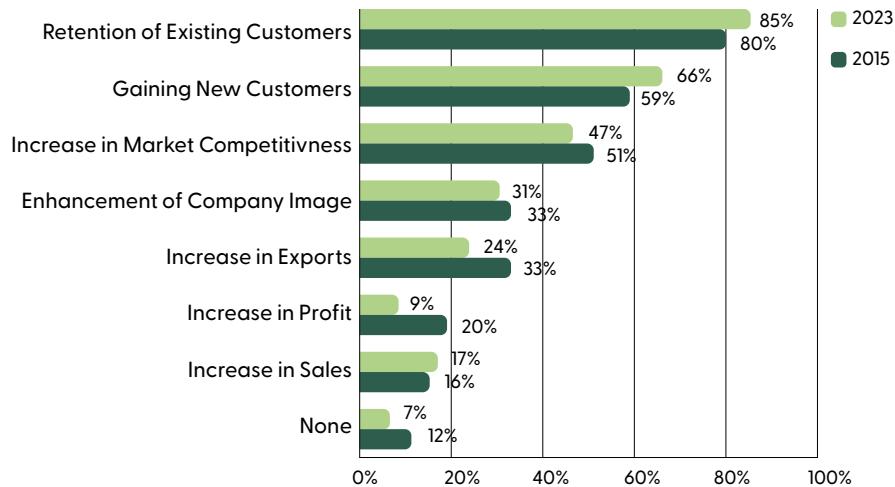
14 Forest Stewardship Council. (2021). *FSC global strategy 2021-2026*. <https://fsc.org/en/global-strategy>

15 Corticeiro, S., Brás, G., Tomé, M., Lillebø, A., & Vieira, H. (2024). Forest certification and economic insights: A European perspective. *Frontiers in Forests and Global Change*, 7, Article 1464837. Retrieved from <https://doi.org/10.3389/ffgc.2024.1464837>

16 Breukink, G., Levin, J., & Mo, K. (2015). *Profitability and sustainability in responsible forestry: Economic impacts of FSC certification on forest operators*. World Wide Fund for Nature. Retrieved from <https://www.worldwildlife.org/publications/profitability-and-sustainability-in-responsible-forestry>

17 Narasimhan, R., Schoenherr, T., Jacobs, B. W., & Kim, M. K. (2015). *The financial impact of FSC certification in the United States: A contingency perspective*. *Decision Sciences*, 46(3), 527-535. Retrieved from [https://www.researchgate.net/publication/277336902\\_The\\_Financial\\_Impact\\_of\\_FSC\\_Certification\\_in\\_the\\_United\\_States\\_A\\_Contingency\\_Perspective](https://www.researchgate.net/publication/277336902_The_Financial_Impact_of_FSC_Certification_in_the_United_States_A_Contingency_Perspective)

18 Klarić, K., Klarić, M., Josipović, S., & Tafro, A. (2024). *The evolving role of FSC certification in Croatia: From market pressures to sustainable practices*. *Forests*, 15, 1717. <https://doi.org/10.3390/f15101717>



**Figure 4** Benefits of FSC certification (percent of respondents). The figure illustrates the perceived benefits of FSC certification as reported by respondents in 2015 (n = 51) and 2023 (n = 116), with multiple responses possible. Reprinted with permission from Klarić et al.(2024)

FAO analysis further shows that FSC certification can improve financing conditions, support growth, and strengthen market access in different contexts (Boscolo et al., 2025, pp. 59, 62, 65, 66)<sup>19</sup>:

**Access to finance** (Guatemala) – Certification was a condition for community concessions and enabled access to bank loans, with certified annual operating plans accepted as collateral. Between 2012 and 2016, concessions generated about USD 25 million in timber revenues and reinvested part of this in forest protection.

**Tax savings** (Gabon) – The 2020 Amending Finance Law reduced area taxes for FSC-certified concessions, improving cash flow for operators.

**Cost reduction and competitiveness** (Kenya) – Partnerships to supply FSC-certified pine lowered input costs for engineered timber and supported expansion into the emerging market for low-carbon construction.

**Market access and aggregation** (Viet Nam) – A cooperative of smallholders used FSC certification to invest in a certified sawmill, aggregate production, and secure contracts with large buyers, improving market positioning.

## IMPACT ON EMPLOYEE AND SOCIAL WELL-BEING

Beyond financial and market benefits, FSC certification positively impacts employee conditions and corporate reputation in Brazil. A survey of 149 employees from 71 FSC-certified companies found that workers perceived higher job quality, improved training opportunities, and better labour conditions than their counterparts in non-certified firms.

Notably, employees ranked as key benefits FSC certification's role in promoting environmentally responsible products (mean score: 4.779 out of 5.000) and enhancing corporate reputation (mean score: 4.577) (Nunes et al., 2024, pp. 14–15).<sup>20</sup>

19 Boscolo, M., Lehtonen, P., Di Girolami, E., & Duong, G. (2025). *Enhancing the sustainability and financing of forest-based value chains*. FAO. <https://doi.org/10.4060/cd5197en>

20 Nunes, M. P., Weber, B. R. K., Fagundes, C., & Schreiber, D. (2024). *The impact of FSC certification perceived by employees of Brazilian companies*. Revista de Administração da UFSM, 17(2), e9. <https://doi.org/10.5902/1983465973756>

| Number of the Principles | Affirmatives   | Mean  | Stand. Deviation |
|--------------------------|--|-------|------------------|
| 5                        | ...privilege products that benefit the environment and society.                        | 4,779 | 0,6023           |
| 6                        | ... has a protective relationship with the forest.                                     | 4,671 | 0,6921           |
| 4                        | ...has a protective relationship with the communities.                                 | 4,638 | 0,6700           |
| 1                        | ... respect by the company for economic, social and environmental principles.          | 4,584 | 0,6985           |
| 1, 4 and 6               | ...improvement of external company image.  | 4,577 | 0,7900           |
| 9                        | ...allows consumers to purchase products free of social and environmental liabilities. | 4,537 | 0,7400           |
| 2, 3 and 4               | ...has a protective relationship with other people.                                    | 4,409 | 0,7971           |
| 7 and 8                  | ...link between productivity and lessening negative environmental impact               | 4,309 | 1,0061           |
| 2 and 4                  | ...offers better working conditions.   | 4,174 | 1,0950           |
| 2 and 7                  | ...offers training.  | 4,040 | 1,0898           |
| 5 and 6                  | ... certified products have different values.  | 3,987 | 1,2839           |
| 10                       | ...FSC marketing that the company carries.   | 3,718 | 1,2197           |
| 2, 3 and 4               | ...better standard of living for me and my family.                                     | 3,591 | 1,1969           |

**Figure 5** Positive impacts of FSC certification. The figure presents the positive impacts of FSC certification as identified in data collection. Developed by the authors based on data collection. Reprinted with permission from Nunes et al. (2024)

## EFFECTS ON CONSERVATION AND ENVIRONMENTAL PROTECTION

A 2024 global review published in *Science of the Total Environment* examined the impact of FSC certification on biodiversity through a systematic review and hierarchical meta-analysis of 57 studies conducted between 2004 and 2022. The meta-analysis included 15 studies with 231 effect sizes for mammal, bird, and vascular plant abundance and 10 effect sizes for vascular plant richness.

FSC certification was found to have a neutral overall effect on species abundance, but a significant positive impact on mammal populations, particularly threatened species, smaller-bodied mammals, and omnivorous species. Additionally, vascular plant richness was higher in FSC-certified areas, and shrubs and adult trees were more abundant (Matias et al., 2024).<sup>21</sup>

A study by Zwerts et al. (2024, pp. 564–568) examined the impact of FSC certification on large mammal populations in Western Equatorial Africa using an extensive camera-trap dataset. The study deployed 1.3 million camera-trap images across 14 logging concessions in Gabon and the Republic of Congo, pairing seven FSC-certified and seven non-FSC concessions to control for landscape variation.

The analysis compared mammal encounter rates across different body mass classes, taxonomic groups, and conservation statuses under the International Union for Conservation of Nature (IUCN) Red List.

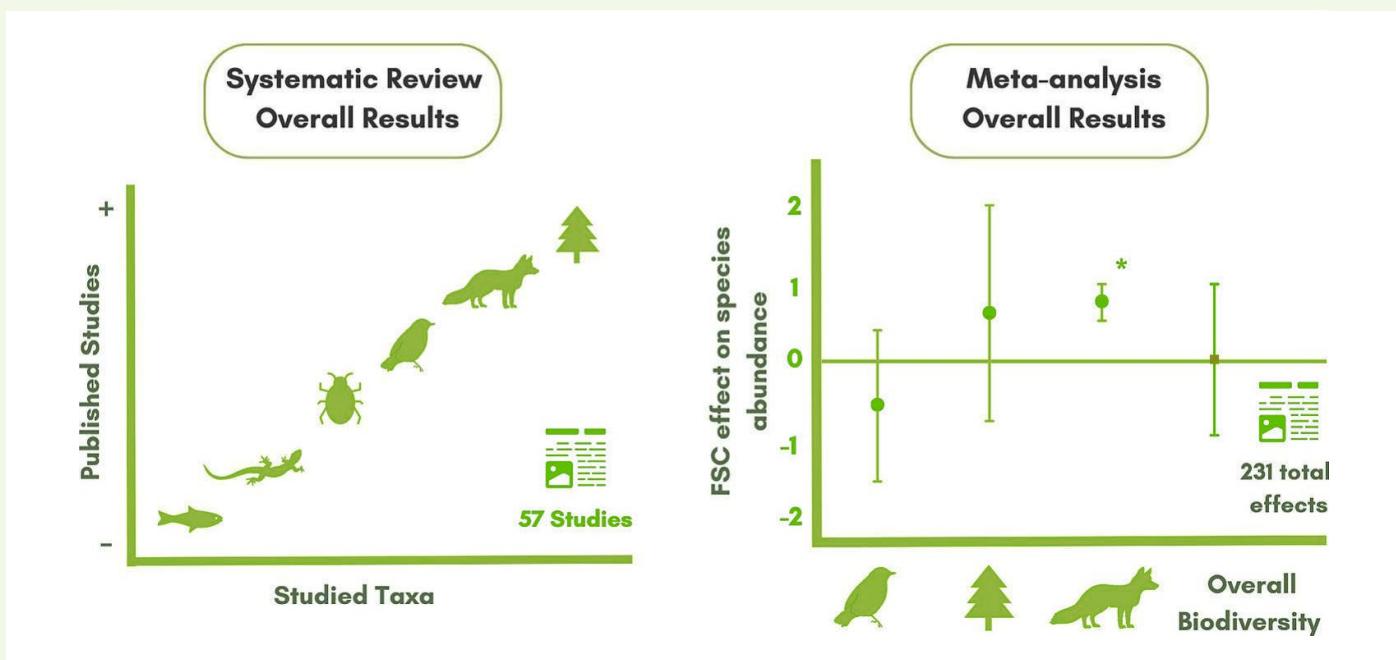
The researchers found that FSC-certified forests had significantly higher encounter rates of large-bodied mammals, including critically endangered species such as forest elephants and western lowland gorillas, compared to non-FSC logging concessions. In contrast, non-FSC forests contained proportionally more small species, suggesting a shift in community composition due to increased hunting pressure.

The study attributes these biodiversity benefits to key FSC forest management practices, including the closure of old logging roads, prohibition of wild meat transport, and enhanced surveillance against illegal hunting. These measures appear to mitigate the negative effects of logging on mammal populations, leading to 4.5 times higher estimated total faunal biomass. Although the authors emphasized unlogged forests with effective law enforcement remain the most effective strategy for species protection, the findings provide strong evidence that FSC certification can serve as an effective tool for maintaining mammal diversity and mitigating biodiversity loss in logged forests.<sup>22</sup>

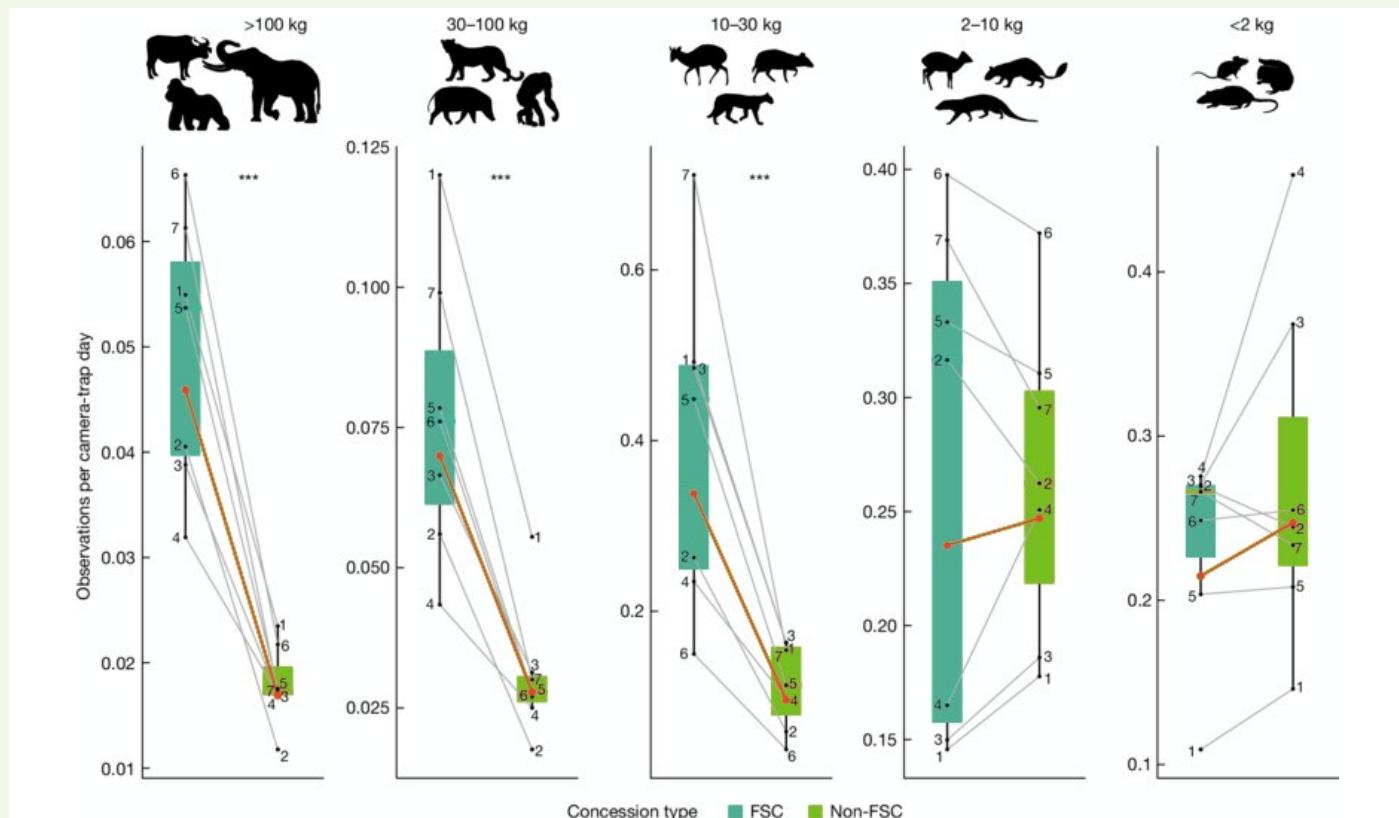
Beyond species-level conservation outcomes, forest cover provides another indicator of FSC's contribution to environmental performance. Econometric analysis of 70 countries over 2000–2021 found that FSC certification is significantly associated with increases in forest cover, with the strongest effects observed in low- and middle-

21 Matias, G., Cagnacci, F., & Rosalino, L. M. (2024). FSC forest certification effects on biodiversity: A global review and meta-analysis. *Science of the Total Environment*, 908, 168296. <https://doi.org/10.1016/j.scitotenv.2023.168296>

22 Zwerts, J. A., Sterck, E. H. M., Verweij, P. A., Maisels, F., van der Waarde, J., Geelen, E. A. M., Tchoumba, G. B., Zebaze, H. F. D., & van Kuijk, M. (2024). FSC-certified forest management benefits large mammals compared to non-FSC. *Nature*, 628, 563–568. <https://doi.org/10.1038/s41586-024-07257-8>



**Figure 6** Effects of FSC forest certification on biodiversity. The figure presents results from a systematic review (left panel) and a meta-analysis (right panel) assessing the impact of FSC forest certification on biodiversity. The systematic review synthesizes findings from 57 studies, while the meta-analysis aggregates 231 total effects on species abundance across various taxa. Positive effects are indicated above the horizontal zero line. For each study, the effect size Hedge's  $d$  (Koricheva et al., 2013) is measured, which is an estimate of the standardized mean difference (i.e., the effect size) between control (uncertified) and treatment (FSC areas). The horizontal line shows Hedge's  $d = 0$ . (\*) Indicates significant Hedge's  $d$  values (i.e., values that did not overlap zero). Reprinted with permission from Matias et al.(2024)



**Figure 7** Mammal encounter rates across five body mass classes in FSC-certified and non-FSC concessions. The figure presents observed encounter rates per camera-trap day for mammals categorized into five body mass classes in paired FSC-certified ( $n = 7$ ) and non-FSC ( $n = 7$ ) forest concessions. Data are shown as boxplots, where central lines represent medians, and lower and upper lines correspond to the first and third quartiles. Whiskers indicate 1.5 times the interquartile range. Red lines indicate linear mixed model-predicted fixed effects (certification status), while grey lines represent random effects (concession pairs). Pairwise comparisons were multivariate-adjusted ( $p < 0.001$ ). Silhouettes of Gorilla, Syncerus caffer, Poamochoreus porcus, Cephalophus sp., Hyemoschus aquaticus, Philantomba monticola, Atherurus africanus, and mice were created by T. Markus. Reprinted with permission from Zwerts et al. (2024)

income countries where governance challenges are most acute.

The study highlights FSC's role as a market-based conservation tool that links economic incentives with

sustainability outcomes, with particularly pronounced impacts in tropical regions (Boubacar & Sissoko, 2025, pp. 29)<sup>23</sup>.

## 4. Case Studies: Lessons from Leading Investors

This section presents case studies of investors who have successfully integrated FSC certification into their impact investment due diligence process. It offers a practical perspective on the motivations, challenges, and outcomes associated with sustainable forestry investment and in investment decisions.

### BNP PARIBAS FUTURE FOREST FUND<sup>24</sup>

BNP Paribas Asset Management (BNPP AM) launched the BNP Paribas Future Forest Fund (FFF) in response to a growing global demand for sustainably managed timberland investments. The demand for sustainable timberland investments is driven by several macroeconomic trends. The United Nations Food and Agriculture Organization (FAO) projects that global demand for wood products will increase between 37% and 60% by 2050, fuelled by population growth, urbanization, and rising per capita income.

Additionally, investors are increasingly considering forestry as an attractive asset class due to its potential for stable returns, low correlation with other asset classes, and its natural inflation-hedging properties. A key component of the investment strategy is ensuring all assets within the fund are FSC certified or certifiable.

#### Navigating Complexity: Certification, Compliance, and Performance

Ensuring compliance across diverse geographic regions requires rigorous due diligence, as different

jurisdictions have varying environmental regulations and enforcement levels.

BNPP AM has partnered with the International Woodland Company (IWC), a Copenhagen-based natural capital specialist, to leverage IWC's three decades of expertise in managing sustainable forest investments.

While the fund prioritizes sustainable forestry, it must also ensure profitability to attract investors. This necessitates selecting timber assets that provide both environmental benefits and strong financial performance. Addressing these concerns, the fund uses a controlled risk approach, focused on core timberland investments in developed markets such as the United States, Oceania, and Europe.

Additionally, measuring and reporting environmental impact remains complex. Investors require robust, standardized data to assess the sustainability performance of their assets. In this respect, the FFF provides plug-in data for greenhouse gas accounting targets and regulatory reporting needs.

### DOMINI IMPACT INVESTMENTS<sup>25 26</sup>

Domini Impact Investments (DII) focuses on impact investing, emphasizing universal human dignity and

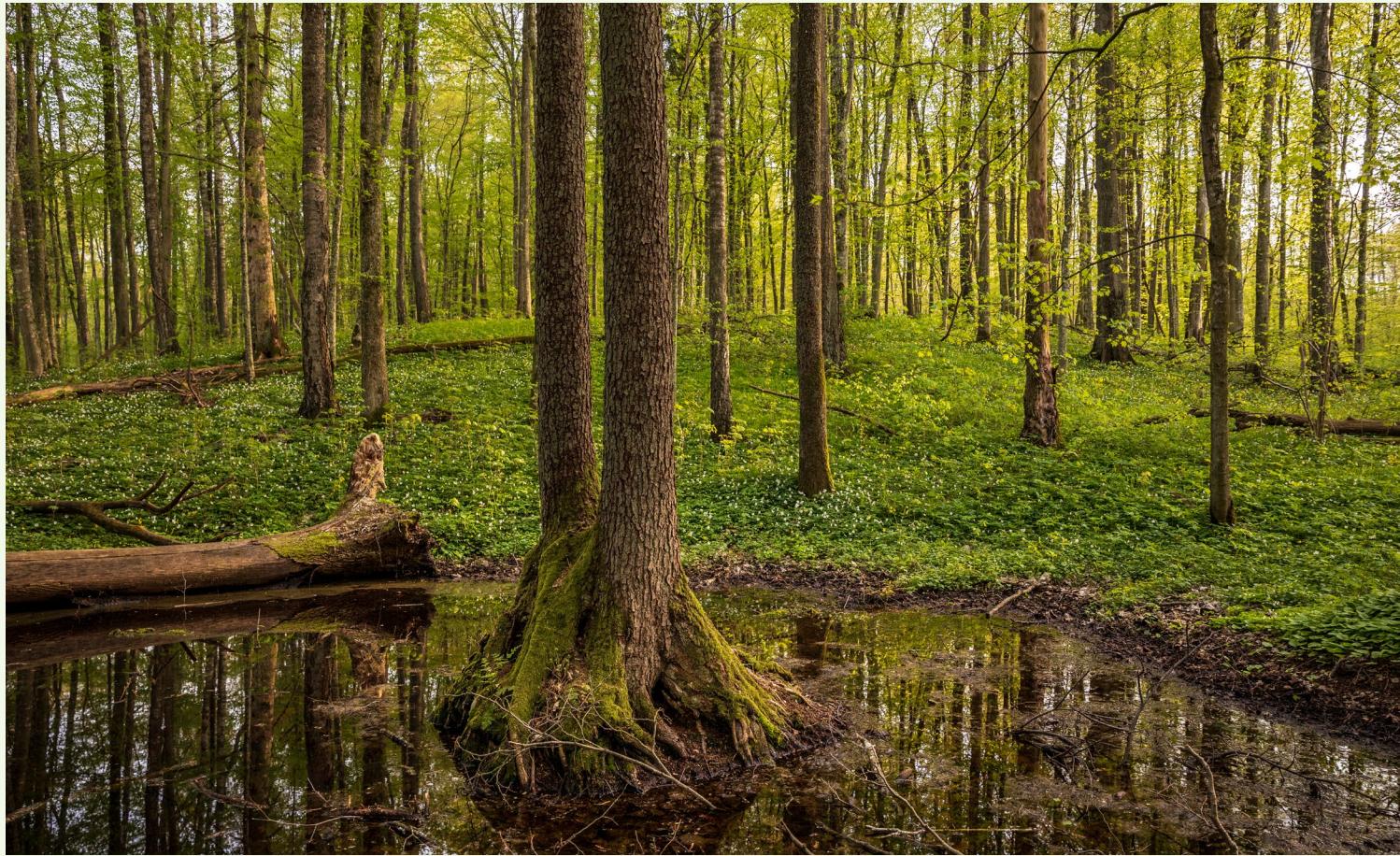
ecological sustainability. In 2018, the firm refined its investment strategy to prioritize forests and land

23 Boubacar, I., & Sissoko, F. (2025). Sustainable forest management through certification and wood products trade. *Journal of Cleaner Production*, 470, 145786. <https://doi.org/10.1016/j.jclepro.2025.145786>

24 BNP Paribas Asset Management. (2024, November 20). BNP Paribas Asset Management launches the BNP Paribas Future Forest Fund to answer global demand for sustainably managed timberland investments. <https://www.bnpparibas-am.com/en/press/mediaroom-en-bnp-paribas-asset-management-launches-the-bnp-paribas-future-forest-fund-to-answer-global-demand-for-sustainably-managed-timberland-investments/>

25 The Investment Integration Project. (2024). *System-level investing: Case studies of investors leading the way* (pp. 10, 12, 21, 22). <https://tiiproject.com/wp-content/uploads/2024/04/TIIP-CaseStudiesReport-March2024-4-1-24-SUBMITTED-FINAL.pdf>

26 Domini Impact Investments. (2023, January 24). *A look into our toolbox: Forest Stewardship Council certification*. <https://domini.com/insights/a-look-into-our-toolboxforest-stewardship-council-certification/>



use, recognising their critical role in climate stability, biodiversity, and human livelihoods. This shift was influenced by growing concerns over deforestation and the environmental degradation linked to commodity sourcing (The Investment Integration Project, 2024, pp. 10, 12).

### Bridging Financial and Environmental Metrics: The Challenge of System-Level Investing

One of the primary challenges in system-level investing is quantifying the long-term impact of investments on forest ecosystems. Unlike traditional financial metrics, which provide clear and standardized methods for evaluating returns, measuring biodiversity preservation, carbon sequestration, and community well-being lacks universally accepted frameworks (The Investment Integration Project, 2024, p. 21).

This challenge is deeply connected to the concepts of value extraction and value creation, which are embedded in DII's investment philosophy. Unlike conventional investors, who prioritize financial return, system-level investors integrate both value creation and financial performance into their investment strategies.

Evaluating investments solely from a financial standpoint is relatively straightforward but capturing and communicating social and environmental value is far more complex, given the absence of standardized metrics or established methodologies. As a result,

system-level investors often measure their progress against the commitments and standards they have set rather than relying on conventional financial analyses (The Investment Integration Project, 2024, p. 22).

### Leveraging FSC Certification: A Standard for Responsible Investment

DII has made significant efforts to design and implement rigorous investment criteria. These comprise of in-house criteria and credible third-party standards such as FSC standards, which are uniquely capable of recognising companies in industries heavily reliant on forest products that are making efforts to source materials more responsibly (Domini Impact Investments, 2023).

A key strength of FSC certification lies in FSC's multi-stakeholder governance model. This balances environmental, social, and economic considerations, and engages diverse voices, including industry leaders, environmental groups, and Indigenous communities. Additionally, FSC upholds the principle of Free, Prior, and Informed Consent (FPIC), which requires forest managers to respect Indigenous land rights and consult local communities before undertaking forestry operations.

While FSC certification remains an essential tool in DII's investment research, the firm maintains a critical perspective, recognising both FSC's strengths and areas for improvement. Through continued dialogue and

engagement, DII seeks to support FSC in strengthening its impact on forest conservation, biodiversity protection,

and sustainable resource management (Domini Impact Investments, 2023).

## MIROVA

### Unlocking Finance for Forest Protection<sup>27</sup>

Dedicated to sustainable investing, Mirova has been developing innovative investment solutions across all asset classes, aiming to combine long-term value creation with positive environmental and social impact. In April 2025, the FSC and Mirova signed a Memorandum of Understanding (MoU) to unlock responsible finance for planted forests, sustainable management of natural forests, and other land-use projects.

FSC and Mirova will work together to identify high-impact investment opportunities and implement forestry projects through the Mirova Sustainable Land Fund 2<sup>28</sup> (MSLF2), which focuses on sustainable land management and ecosystem restoration. With an initial focus on Central and South America, Sub-Saharan Africa, and Southeast Asia, the partnership will prioritize building a robust pipeline of forestry initiatives that deliver measurable environmental and social benefits and aims to implement the best sustainable forestry and reforestation practices within timber and other forest resource value chains.

### Incorporating FSC Certification into Environmental and Social Criteria<sup>29</sup>

All of MSLF2's investments, including plantation forest projects, must achieve material compliance with the International Finance Corporation's Performance Standards (PS) on Environmental & Social (E&S) Sustainability within a reasonable period of time post investment<sup>30</sup>. In addition to requiring implementation of a formalised Environmental and Social Management System (ESMS), the PS and associated sector-specific Environmental, Health & Safety (EHS) Guidelines require the adoption of best practice across a range of topics such as stakeholder engagement, labour practices, health & safety, hazardous chemical management, natural resource use, and biodiversity.

Importantly, the scope of FSC can extend to outgrowers, which feature prominently in the impact thesis of MSLF2. There is therefore considerable overlap between



MSLF2's Environmental, Social, and Governance (ESG) requirements and the scope of international sustainability certification standards, including FSC. Consequently, each investee is required to either hold certification at the time of investment or have a plan to achieve certification within an acceptable timeframe.

MSLF2 considers this beneficial from multiple perspectives. In addition to the direct business-related benefits (i.e., meeting requirements of customers who have committed to increasing sustainability ambitions), certifications provide an additional level of independent oversight of a plantation's ESG performance. Thus, while such certification does not diminish the Fund's own scrutiny during E&S due diligence and post-investment monitoring, certifications are considered highly complementary.

### Barriers and Lessons in Implementing FSC Certification

Challenges associated with FSC certification can be considered from multiple perspectives. The first is that developers may not have internal capacity or skills across all elements covered by the scope of the FSC Standard, and this may result in delays in implementation.

For example, the requirements regarding biodiversity can present challenges and would frequently require involvement of external specialists (e.g. related to the identification of High Conservation Value areas).

27 Adapted from Forest Stewardship Council. (2025, April). *Unlocking finance for forest protection: FSC and Mirova partner to drive global climate action*. <https://www.fsc.org/en/newscentre/general-news/unlocking-finance-for-forest-protection-fsc-and-mirova-partner-to-drive>

28 MIROVA SUSTAINABLE LAND FUND 2 SLP RAIF is a special limited partnership (société en commandite spéciale) qualifying as a reserved alternative investment fund (fonds d'investissement alternatif réservé), opened to subscription exclusively for eligible investors as defined in the fund rules. Mirova is the management company. The supervisory authority approval is not required for this fund.

29 Mirova ESG Team. (2025, April). *Unpublished internal analysis*.

30 Limits non-binding at the date of this document and not mentioned in the sub-fund regulatory documentation, subject to change by Mirova without prior notice.

Achieving certifications for large-scale outgrower schemes can also present similar and potentially significant challenges.

Historically, Mirova has also experienced challenges with private projects in East Africa to obtain FSC certification, as the national FSC standards had not yet been developed.

## MOBILISING FINANCE FOR FORESTS<sup>31</sup>

Mobilising Finance for Forests (MFF) was established in 2021 by the United Kingdom government and FMO as a blended finance investment programme designed to combat deforestation and promote sustainable land use. The programme aims to accelerate private investments in forestry and sustainable land use sectors by using a blended finance approach in tropical forest regions that are contributing to global climate change.

### Balancing Certification and Financing: Overcoming Investment Barriers

One of the key challenges in integrating sustainable forestry practices into impact investment strategies is the tension between financial viability and certification requirements. In a case study from the MFF programme, a group certification scheme required projects to obtain FSC certification before accessing financing. However, the project lacked the upfront capital needed to achieve certification at scale.

Recognising this barrier, investors worked closely with project developers to establish interim management systems and pilot operations, enabling them to demonstrate early compliance with FSC standards before full-scale implementation. FSC auditors verified compliance at the pilot stage, allowing the project to secure financing, after which additional group members were incorporated.

This case illustrates that investors can proactively engage with forestry projects at an early stage to bridge the gap between certification requirements and financial feasibility. By allowing phased implementation, impact investors can support sustainable forest management while ensuring that certification remains an achievable goal rather than a barrier to entry.

### Investor Requirements and Pre-Feasibility Assessments

Another key insight from MFF's experience is the role of pre-feasibility assessments in de-risking forestry investments. Many impact investors require projects to obtain FSC certification within a defined timeframe post-investment. However, without an initial feasibility assessment, projects may struggle to meet

these requirements. To mitigate this risk, investors commonly conduct detailed pre-feasibility studies to assess:

- The likelihood of FSC certification success, based on the project's current practices and governance structures.
- The financial and operational resources needed to achieve certification.
- Potential risks of non-compliance, such as community conflicts or supply chain traceability issues.

By incorporating pre-feasibility assessments into the investment processes, investors can ensure that projects have a clear and achievable pathway to FSC certification, reducing long-term investment risks.



<sup>31</sup> Mobilising Finance for Forests (MFF). (2024). *ESG guide for forestry investments* (pp. 11, 75, 77). FMO – Dutch Entrepreneurial Development Bank. <https://www.fmo.nl/l/en/library/download/urn:uuid:a29d02a9-ba3e-4776-883a-125574b338d4/esg+guide+for+forestry+investments.pdf>

# 5. FSC Certification and Its Role in Global Sustainability Frameworks

## INTRODUCTION

FSC certification is a key mechanism for ensuring sustainable forest management and deforestation-free supply chains. It aligns with global sustainability frameworks by providing credible assurance, enhancing transparency, and supporting corporate and investor commitments to responsible forestry. This chapter explores its role in advancing these efforts.



## CDP WORLDWIDE (CDP) & ACCOUNTABILITY FRAMEWORK INITIATIVE (AFI)<sup>32</sup>

The *Time for Transparency* report (CDP & AFI, 2024) illustrates how FSC certification can serve as a methodology that can support clear deforestation- and conversion-free (DCF) sourcing disclosures.

One company's CDP disclosure included FSC Chain of Custody certification of its products as a milestone in its journey towards 99% DCF timber products. The company also requires as a matter of policy, that its

<sup>32</sup> CDP Worldwide & Accountability Framework Initiative. (2024). *Time for transparency: Deforestation- and conversion-free supply chains* (pp. 22, 23, 31, 36, 37). CDP. [https://accountability-framework.org/fileadmin/uploads/afi/Documents/Resources/Time\\_for\\_Transparency\\_2024.pdf](https://accountability-framework.org/fileadmin/uploads/afi/Documents/Resources/Time_for_Transparency_2024.pdf)

paper suppliers comply with FSC Controlled Wood or FSC Forest Management standards, which are independently audited and verified by third parties.

In addition, FSC's Risk Assessment was cited in the report as an example of international indexes that are used by companies making CDP disclosures.

The report also sets out certain criteria for DCF responses to be considered as high-quality. The criteria cover:

- description,
- coverage,
- determination – risk, certification, monitoring, and
- data quality.

Under determination – monitoring, a high-quality DCF disclosure:

- states verification method or tool used,
- describes process and/or results,
- verified method or outcomes,
- monitored direct suppliers and employed landscape and jurisdictional approaches, and
- used and verified third-party monitoring method that assures deforestation or conversion free status.

On the last point, FSC Controlled Wood is cited as an example of a third-party monitoring method. Based on desk-top research and consultation, the authors of the report assessed all models of FSC Chain of Custody certification as providing credible DCF assurance for timber and rubber companies.

## FORESTRY IMPACT PERFORMANCE BENCHMARK <sup>33</sup>

The *Forestry Impact Performance Benchmark*, developed by the Global Impact Investing Network (GIIN), is an impact assessment framework designed to evaluate the sustainability of forestry investments. The benchmark provides a comparative assessment of forestry investments, measuring their impact on sustainable land management, reforestation, conservation, and economic development. It allows investors to benchmark their portfolios against peers

and industry standards, and to the pace of change required to support sustainable forestry globally.

The benchmark adopts FSC definitions for forest types, including natural forests and plantations.

As of 30 April 2025, the benchmark shows that 87% of reported investments have at least one certification. Of these, 75% (82) hold FSC certification, which is more than any other reported certification.





## INSTITUTIONAL SHAREHOLDER SERVICES (ISS) ESG NATURAL CAPITAL RESEARCH INSTITUTE DEFORESTATION REPORT <sup>34</sup>

The *ISS ESG Natural Capital Research Institute Deforestation Report (2025)* explores the causes, risks, and mitigation strategies related to deforestation, with a focus on the role of institutional investors in addressing nature-related financial risks. The report seeks to answer the question:

**“How are global institutional investors exposed to deforestation risks in their investment portfolios, and how can they assess and mitigate those risks—and related impacts and dependencies—while capitalizing on nature-based opportunities?”**

The report outlines a structured approach to evaluating corporate deforestation risk, emphasizing Management, Disclosure, and Performance Key Performance Indicators (KPIs) as essential tools for institutional investors assessing sustainability efforts.

FSC certification system and standards would directly address three types of KPIs, namely, commitment management, disclosure and performance.

### Commitment Management (e.g., policies, targets)

Commitment management involves assessing corporate policies and strategic targets. The relevant deforestation risk mitigation measures include evaluating companies based on the percentage of wood products certified to sustainable forest management standards, such as FSC certification. This helps measure corporate adherence to responsible forestry practices and their efforts to eliminate deforestation from supply chains.

Companies must also disclose sector-specific policies that address deforestation risks associated with their operations, particularly in industries reliant on forest-derived commodities.

This indicator also assesses whether companies impose clear supplier standards on deforestation, human rights, and environmental sustainability in their sourcing practices.

<sup>34</sup> ISS Natural Capital Research Institute. (2025). *The root cause of nature loss: Forests, why they matter, and how to assess deforestation risk in investment portfolios through nature-related data* (pp. 4, 33, 53–54). ISS ESG. <https://www.issgovernance.com/file/publications/iss-esg-2025-ncri-deforestation-report.pdf>

### Disclosure (e.g., corporate disclosures)

Companies are assessed on their public disclosure of key raw materials, including their origin and procurement policies for wood and fiber. Transparent supply chain reporting, particularly regarding FSC-certified products, could serve as a core expectation.

### Performance (e.g., quantitative data points)

Additional performance indicators include the percentage of fibre in paper sourced from recycled fibre and certified sustainable forestry. FSC Mix and FSC Recycled certifications would be relevant to these indicators.

## POSITIVE IMPACT INDICATOR PRO 07 – FOREST UNDER SUSTAINABLE FOREST MANAGEMENT<sup>35</sup>

The *Positive Impact Indicators Directory*, developed by UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), provides a structured approach for investors to measure sustainable land-use impacts.

Indicator PRO 07 – Forest under Sustainable Forest Management tracks the area of forest land under sustainable management, as defined in the Helsinki Declaration:

 ***The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems.***

The methodology consists of the following steps:

#### Step 1:

Consider the definitions of 'forest' and 'sustainable forest management' in the UNEP-WCMC's Definition Module.

#### Step 2:

Define "sustainable management" on a case-by-case basis by detailing requirements above and beyond Business as Usual for the activity in the region.

#### Step 3:

Identify invested project areas that meet the requirement and collect spatial data on them. (To also consider remote sensing monitoring, on-site visits and ongoing spot checks).

Under Step 2, FSC is cited as an example of a well-established sustainable forestry certification scheme, the alignment with which should be considered based on its suitability to the investment project and accessibility to land managers.

## KUNMING-MONTREAL GLOBAL BIODIVERSITY FRAMEWORK (GBF) TARGETS

The GBF sets ambitious global targets to halt biodiversity loss by 2030 and restore ecosystems by 2050. Key targets include protecting at least 30% of the planet's land and oceans, reducing pollution from plastics and excess nutrients, promoting sustainable agriculture, mobilizing \$200 billion annually for biodiversity efforts, and recognizing the vital role of indigenous peoples and local communities in conservation efforts.

The following heatmaps illustrate the extent that FSC Verified Impact are aligned with the 23 action-oriented GBF targets.

| ES Impact   | ES Pro Impacts | Impact Claim ID | Category | GBF Targets |   |   |    |    |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
|---|----------------|-----------------|----------|-------------|---|---|----|----|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|
|   |                |                 |          | 1           | 2 | 3 | 4  | 5  | 6 | 7 | 8 | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |  |
| ES1: Enhancement of natural forest cover  | 1              | Biodiversity    | X        | X           |   |   |    | X3 |   |   |   | X  | X  |    |    | X6 | X7 |    |    |    |    | X4 | X5 | X5 |    |    |  |
| ES1.2: Maintenance of intact forest landscapes  | 2              | Biodiversity    | X        |             | X |   |    |    |   |   |   | X  | X  |    |    | X6 | X7 |    |    |    |    | X4 | X5 | X5 |    |    |  |
| ES1.3: Maintenance of an ecologically sufficient conservation area network            | 3              | Biodiversity    | X        |             |   | X |    |    |   |   |   | X  | X  |    |    | X6 | X7 |    |    |    |    | X4 | X5 | X5 |    |    |  |
| ES1.4: Enhancement of an ecologically sufficient conservation area network            | 4              | Biodiversity    | X        | X           |   |   |    |    |   |   |   | X  | X  |    |    | X6 | X7 |    |    |    |    | X4 | X5 | X5 |    |    |  |
| ES1.5: Maintenance of natural forest characteristics                                  | 5              | Biodiversity    | X        |             | X |   |    |    |   |   |   | X3 |    | X  | X  |    |    | X6 | X7 |    |    | X4 | X5 | X5 |    |    |  |
| ES1.6: Enhancement of natural forest characteristics                                  | 6              | Biodiversity    | X        | X           |   |   |    |    |   |   |   | X3 |    | X  | X  |    |    | X6 | X7 |    |    | X4 | X5 | X5 |    |    |  |
| ES1.7: Maintenance of species diversity   | 7              | Biodiversity    | X        |             |   | X | X2 |    |   |   |   |    | X  | X  |    |    | X6 | X7 |    |    |    |    | X4 | X5 | X5 |    |  |
| ES1.8: Enhancement of species diversity   | 8              | Biodiversity    | X        | X           |   |   | X  | X2 |   |   |   |    |    | X  | X  |    |    | X6 | X7 |    |    |    |    | X4 | X5 | X5 |  |
| ES1.9: Maintenance of functional biodiversity   | 9              | Biodiversity    | X        |             |   | X |    | X  |   |   |   |    | X  | X  |    |    | X6 | X7 |    |    |    |    | X4 | X5 | X5 |    |  |
| ES1.10: Enhancement of functional biodiversity  | 10             | Biodiversity    | X        | X           |   |   |    |    |   |   |   |    |    | X  | X  |    |    | X6 | X7 |    |    |    |    | X4 | X5 | X5 |  |
| ES1.11: Maintenance of rare, endemic, threatened or endangered habitats or ecosystems | 11             | Biodiversity    | X        |             |   | X |    |    |   |   |   | X3 |    | X  | X  |    |    | X6 | X7 |    |    |    |    | X4 | X5 | X5 |  |
| ES1.12: Enhancement of rare, endemic, threatened or endangered habitats or ecosystems | 12             | Biodiversity    | X        | X           |   |   |    |    |   |   |   | X3 |    | X  | X  |    |    | X6 | X7 |    |    |    |    | X4 | X5 | X5 |  |
| ES2.1: Maintenance of forest carbon stocks  | 13             | Carbon          |          |             |   |   |    |    |   |   |   |    |    |    |    |    |    |    |    | X6 | X7 |    |    | X4 | X5 | X5 |  |
| ES2.2: Enhancement of forest carbon stocks  | 14             | Carbon          |          |             |   |   |    |    |   |   |   |    |    |    |    |    |    |    |    | X6 | X7 |    |    | X4 | X5 | X5 |  |
| ES3.1: Maintenance of water quality   | 15             | Soil            |          |             |   |   |    |    |   |   |   |    |    |    |    |    |    |    | X  | X6 | X7 |    |    | X4 | X5 | X5 |  |
| ES3.2: Enhancement of water quality   | 16             | Soil            |          |             |   |   |    |    |   |   |   |    |    |    |    |    |    | X  | X6 | X7 |    |    | X4 | X5 | X5 |    |  |

Figure 8 Alignment between Verified Impact and GDF Targets. Source: FSC.

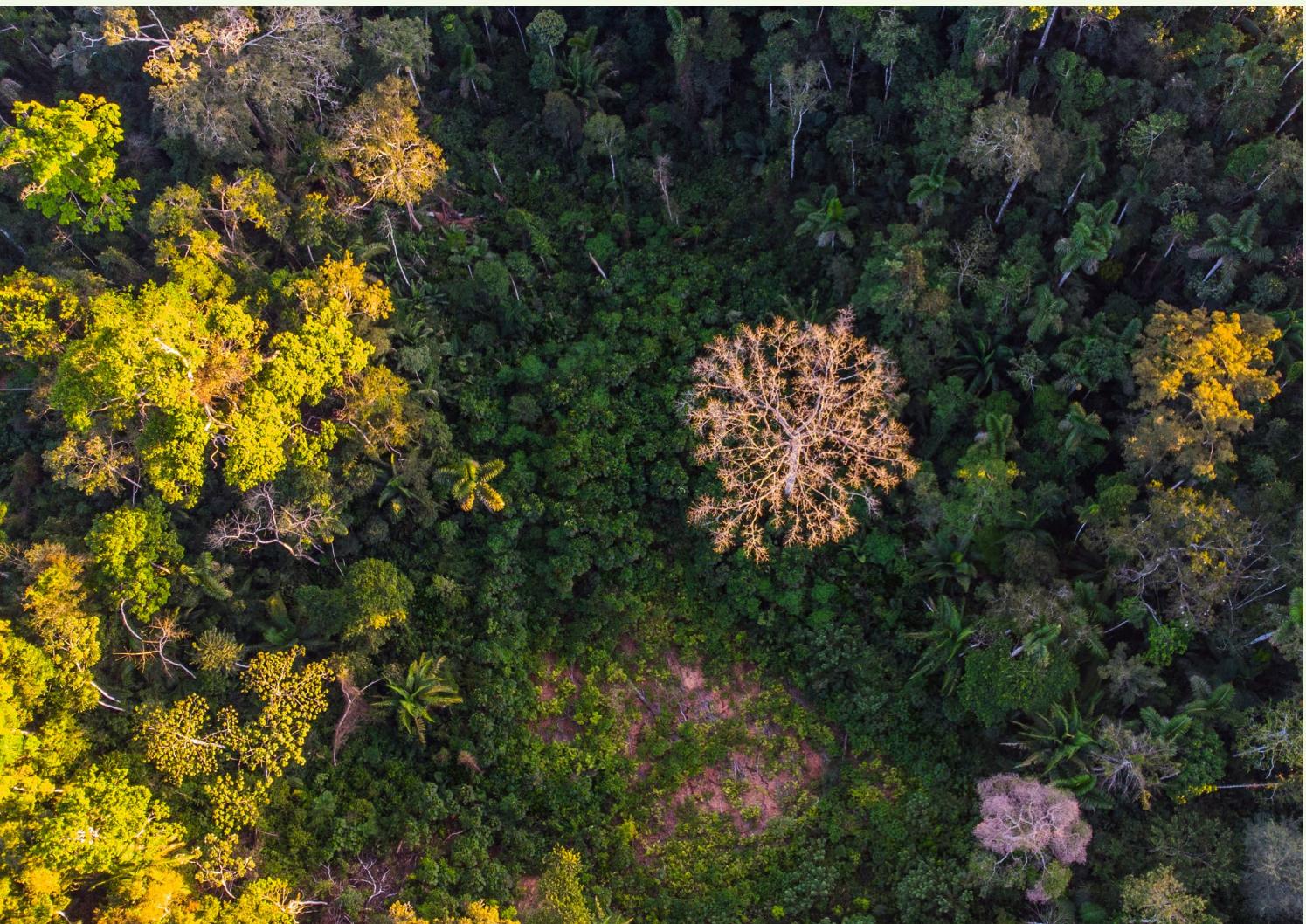
| ES Impact   | ES Pro Impacts | Impact Claim ID | Category | GBF Targets |    |    |    |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |
|---|----------------|-----------------|----------|-------------|----|----|----|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|
|   |                |                 |          | 1           | 2  | 3  | 4  | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| ES3.3: Maintenance of the capacity of watersheds to purify and regulate water flow  | 17             | Soil            |          |             |    |    |    |   |   |   |   |   | X  | X  |    |    | X6 | X7 |    |    |    | X4 | X5 | X5 |
| ES3.4: Enhancement of the capacity of watersheds to purify and regulate water flow  | 18             | Soil            |          |             |    |    |    |   |   |   |   |   | X  | X  |    |    | X6 | X7 |    |    |    | X4 | X5 | X5 |
| ES4.1: Maintenance of soil condition  | 19             | Water           |          |             |    |    |    |   |   |   |   |   | X  | X  |    |    | X6 | X7 |    |    |    | X4 | X5 | X5 |
| ES4.2: Enhancement of soil condition  | 20             | Water           |          |             |    |    |    |   |   |   |   |   | X  | X  |    |    | X6 | X7 |    |    |    | X4 | X5 | X5 |
| ES4.3: Enhancement - Reduction of soil erosion through reforestation/ restoration   | 21             | Water           |          |             |    |    |    |   |   |   |   |   | X  | X  |    |    | X6 | X7 |    |    |    | X4 | X5 | X5 |
| ES6.4: Enhancement of culturally valued populations or species  | 22             | Water           |          |             |    |    |    |   |   |   |   |   | X  | X  |    |    | X6 | X7 |    |    |    | X4 | X5 | X5 |
| ES5.1: Maintenance of areas of importance for recreation and/or tourism   | 23             | Recreation      |          |             |    |    |    |   |   |   |   |   |    |    |    |    | X6 | X7 |    |    |    | X4 | X5 | X5 |
| ES5.2: Enhancement of activities in areas of importance for recreation and/or tourism to deliver social, environmental and economic benefits. | 24             | Recreation      |          |             |    |    |    |   |   |   |   |   |    |    |    |    | X6 | X7 |    |    |    | X4 | X5 | X5 |
| ES5.3: Maintenance of populations of species of interest for nature-based tourism   | 25             | Recreation      |          |             |    |    |    |   |   |   |   |   |    |    |    |    | X6 | X7 |    |    |    | X4 | X5 | X5 |
| ES5.4: Enhancement of populations of species of interest for nature-based tourism   | 26             | Recreation      |          |             |    |    |    |   |   |   |   |   |    |    |    |    | X6 | X7 |    |    |    | X4 | X5 | X5 |
| ES6.1: Maintenance of cultural values and services  | 27             | Cultural        |          |             |    |    |    |   |   |   |   |   |    |    |    |    | X6 | X7 |    |    |    | X4 | X5 | X5 |
| ES6.2: Enhancement of cultural values and services  | 28             | Cultural        |          |             |    |    |    |   |   |   |   |   |    |    |    |    | X6 | X7 |    |    |    | X4 | X5 | X5 |
| ES6.3: Maintenance of culturally valued populations or species  | 29             | Cultural        | X        | X           | X  | X1 | X2 |   |   |   |   |   | X  |    |    |    | X6 | X7 |    |    |    | X4 | X5 | X5 |
| ES6.4: Enhancement of culturally valued populations or species  | 30             | Cultural        | X        | X           | X1 | X2 |    |   |   |   |   |   | X  |    |    |    | X6 | X7 |    |    |    | X4 | X5 | X5 |
| ES7.1: Maintenance of air quality   | 31             | Air             |          |             |    |    |    |   |   |   |   |   |    |    |    |    | X  |    | X6 | X7 |    | X4 | X5 | X5 |
| ES7.2: Enhancement of air quality   | 32             | Air             |          |             |    |    |    |   |   |   |   |   |    |    |    |    | X  |    | X6 | X7 |    | X4 | X5 | X5 |

Figure 8 Alignment between Verified Impact and GDF Targets. Source: FSC.

**Legend:**

- X** Strong alignment.
- X1** GBF Target 4 mentions actions to reduce or halt species extinction for both wild and domestic species. This is in line with Verified Impacts identified, but GBF Target 4 does not specify cultural value in the way Verified Impact does.
- X2** GBF Target 5 seeks to protect native species and promote sustainable use, which is covered by Verified Impacts. However, the only indicator currently identified by GBF is regarding fish stocks.
- X3** GBF Target 6 aims to reduce impact of alien species to under 50%, something not explicitly stated in Verified Impact but might be assumed by showing support for native species.
- X4** GBF Target 19 aims to mobilize funding for biodiversity from all sources. Verified Impact is fully aligned with this objective and is directly helping to generate this funding from both private and public sectors.
- X5** GBF Target 20 aims to strengthen capacity-building and technology and knowledge transfer while GBF Target 21 focuses on availability and accessibility of knowledge to guide further biodiversity action. Verified Impact helps to quantify the ecosystem services provided by forest. FSC is developing technology to help certificate holders access payments for ecosystem services.
- X6** GBF Target 14 aims to integrate biodiversity into decision making process. Verified Impact provides valuable primary data which organizations and governments can base their decisions on.
- X7** GBF Target 15 discusses disclosure and reduction of biodiversity-related risks and negative impacts. While Verified Impact is not a reporting scheme, it provides data to evaluate and quantify risks and a pathway to positive impact on biodiversity.

**Blank** The specified Verified Impact does not address the specified GBF Target.



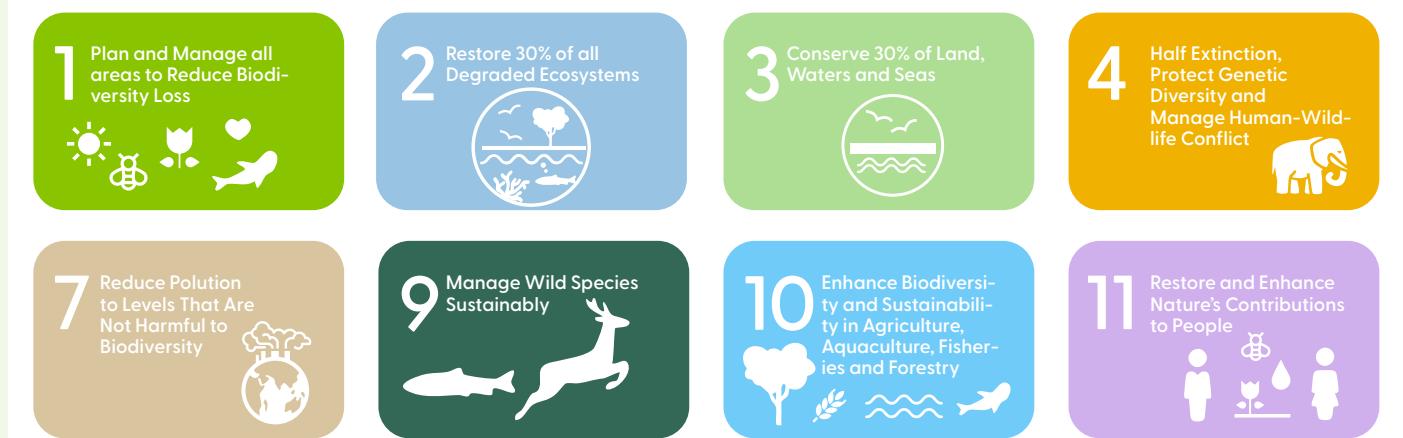
## Global Biodiversity Framework



### Alignment between ES PRO and KM-GBF

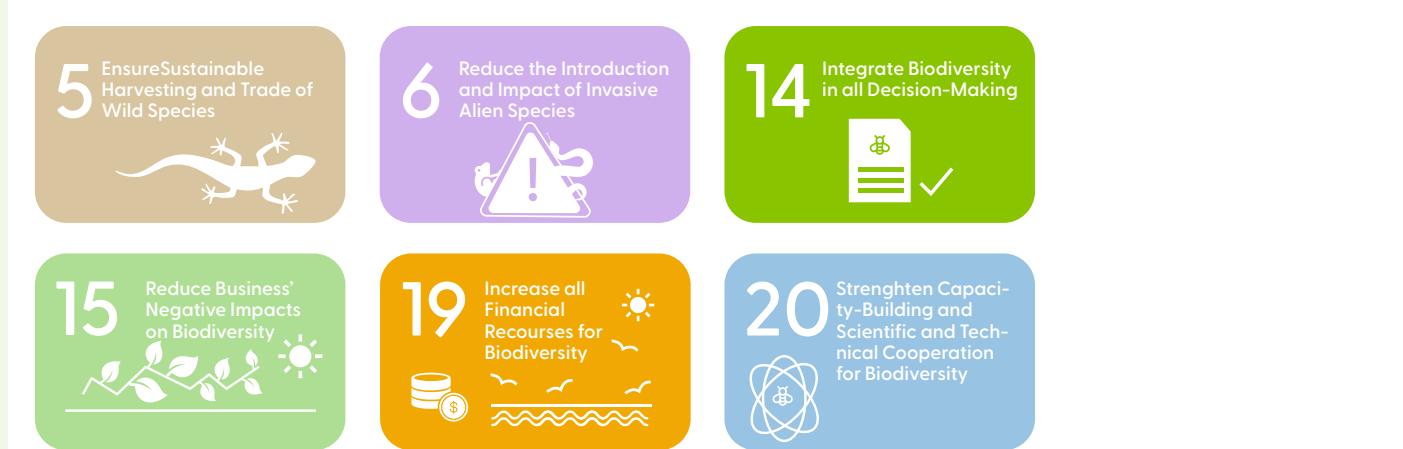
#### Full Alignment

(i.e. impacts verified via ES PRO can align with these GBF goals)



#### Partial Alignment

(i.e. impacts verified via ES PRO can align with these GBF goals partially)



## TASKFORCE ON NATURE-RELATED FINANCIAL DISCLOSURES (TNFD)<sup>36 37</sup>

The LEAP framework (Locate, Evaluate, Assess, Prepare) is the TNFD's structured approach for assessing nature-related dependencies, impacts, risks, and opportunities. It is designed to help organizations integrate nature-related considerations into their risk management and disclosure processes. The framework follows four key phases:

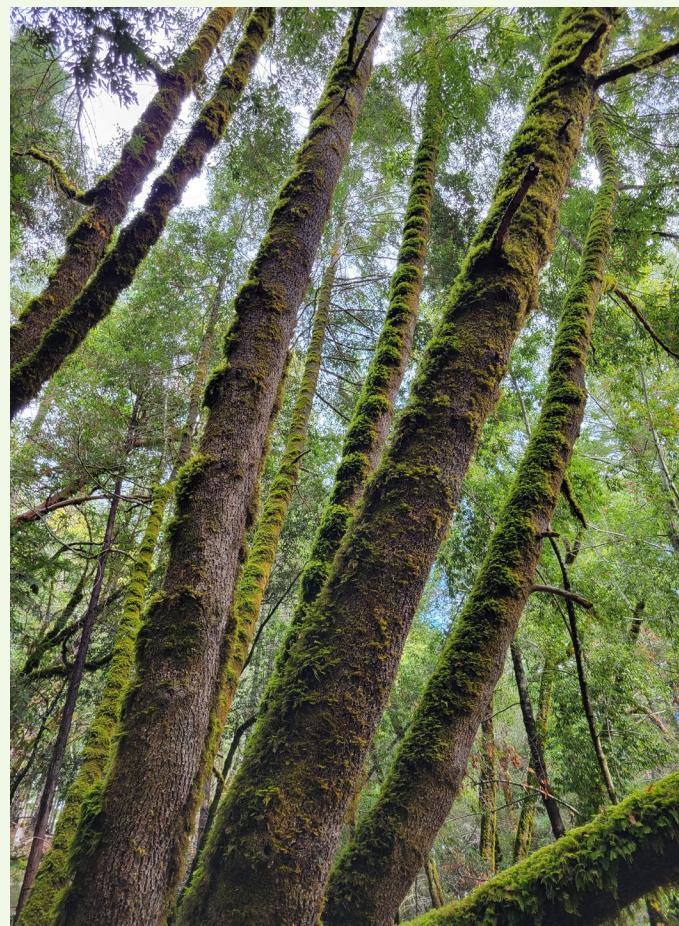
- Locate the organization's interface with nature.
- Evaluate its dependencies and impacts.
- Assess nature-related risks and opportunities.
- Prepare to respond and report in alignment with TNFD's disclosure recommendations.

To support implementation in specific industries, the TNFD published *Additional Sector Guidance for Forestry, Pulp, and Paper* to provide additional guidance for the forestry, pulp and paper sector, covering:

- Assessment of nature-related issues using the TNFD's LEAP approach.
- Disclosure of sector-specific metrics in line with the TNFD's recommended approach to metrics.
- Guidance on the application of the core global disclosure indicators and metrics to the sector.
- Core and additional sector disclosure indicators and metrics.

As part of this sector-specific guidance, FSC certification and its associated tools is listed as being relevant to the implementation of LEAP components, as follows:

| Locate  | Evaluate | Assess  |
|---|----------|---|
| FSC Verified Impact helps quantify the intangible value of forests with third-party validation.   |          | FSC Document Centre contains all the standards and guidance for certificate holders.  |
| FSC Search database provides FSC certification and licensing information.   |          |   |
| FSC Risk Hub provides an overview of FSC Risk Assessments (including control measures) for use when applying FSC requirements for sourcing FSC Controlled Wood.   |          |   |
| In reporting the core global disclosure metrics of resource use and replenishment, TNFD's guidance includes reporting information on the forest management conditions for the wood or fibre. This includes, for example, whether these are certified by a broadly recognized third-party certification system with a global presence such as FSC (excluding FSC Controlled Wood). |          | The proportion of such certified forest area (%) is also an additional TNFD sector disclosure metric for the metric category "Response" under the subcategory "Dependency, impact, risk and opportunity management: Value Chain." |
|   |          | The use of the abovementioned FSC tools in the investment decision-making process is further illustrated in the next and final section.   |



<sup>36</sup> Taskforce on Nature-related Financial Disclosures. (2023). *Guidance on the identification and assessment of nature-related issues: The LEAP approach* (p. 3). Taskforce on Nature-related Financial Disclosures. <https://tnfd.global/publication/additional-guidance-on-assessment-of-nature-related-issues-the-leap-approach/>

<sup>37</sup> Taskforce on Nature-related Financial Disclosures. (2024). *Additional sector guidance: Forestry, pulp and paper* (pp. 3, 44, 46, 60, 65). Taskforce on Nature-related Financial Disclosures. <https://tnfd.global/publication/additional-sector-guidance-forestry-pulp-and-paper/#publication-content>



# 6. Practical Tools for Investment Analysts

This section provides an overview of tools developed by FSC that investment analysts can use in their investment due diligence process. Each tool plays a distinct role in evaluating sustainability factors related to forestry investments, including certification status, risk assessment, impact measurement, and market transparency.



## FSC DOCUMENT CENTRE<sup>38</sup>

FSC Document Centre is a central source of authoritative information on FSC's certification system, including its standards, guidelines, procedures, and policies. Key resources include procedures for developing FSC Risk Assessments, which help identify and evaluate potential risks in forest-based supply chains, as well as procedures for verification of claims.

These offer valuable insight into FSC certification methodology, which can help investment analysts assess both the risks and opportunities of integrating FSC certification in their investment strategies.

## FSC IMPACT DASHBOARD<sup>39</sup>

The FSC Impact Dashboard, featured in the Monitoring and Evaluation - Impact Evaluation webpage, is a dynamic, data-driven platform showcasing the environmental, social, and economic impacts of FSC certification. Grounded in independent scientific research, it offers objective, clear, and compelling evidence of how FSC-certified forest management supports climate action, protects biodiversity, and enhances the livelihoods of local and indigenous

communities. It also highlights gains in profitability, market access, and operational efficiency.

For impact investors, the dashboard is a useful tool to evaluate FSC's sustainability performance and align investments with credible, responsible forest management practices that deliver measurable outcomes.

<sup>38</sup> <https://connect.fsc.org/document-centre>

<sup>39</sup> <https://connect.fsc.org/impact/impact-evaluations>

## FSC PERFORMANCE AND OUTCOMES DASHBOARD<sup>40</sup>

The FSC Performance and Outcomes Dashboard provides insights on the direct short-term outcomes of FSC forest management certification. Drawing on internal monitoring data such as that collected during forest management evaluation, it showcases high-level statistics on key topics such as people and safety and high conservation values within FSC-certified forests.

For investment analysts, the dashboard offers credible and transparent information on the outcomes of FSC certification. It helps integrate verified performance data into due diligence and investment analysis, supporting more informed decisions and reinforcing confidence in the sustainability claims of certified forestry operations.

## FSC RISK HUB<sup>41</sup>

FSC Risk Assessment Hub is designed to support the creation, review, and updating of risk assessments related to sourcing from the forest. This platform is intended to provide easy access and usability of FSC Risk Assessments to help visualize, assess and mitigate risks.

FSC Risk Assessments cover 64 indicators to identify and mitigate sustainability risks, including deforestation and non-compliance with relevant legislation. Stakeholders and experts can continuously provide inputs to the Risk Assessments. Any comments received are reviewed annually. For investment analysts, the platform provides insights into sustainability risks.

## FSC SEARCH<sup>42</sup>

FSC Search is a publicly accessible database that enables users to verify the status, scope and licensing information of FSC certificates. It also contains public summaries of audit reports for Forest Management certificate holders. Investment analysts can use the platform to verify certification status, assess conformity with FSC standards, and identify potential risks related to non-conformance or misrepresentation of certification claims.

In addition to certification verification, the advanced search function allows search by product category and country or area, thereby offering insights into market trends and the demand for certified goods. This data can support analyses related to sustainable forestry practices and supply chain transparency.

## FSC VERIFIED IMPACT<sup>43</sup>

FSC Verified Impact certification measures and reports the environmental and social impacts of forestry operations. It provides a structured framework for assessing sustainability practices and their contributions to measurable outcomes. The tool can support investment analysts in evaluating the impact of forestry-related investments using standardized metrics related to forest management, community engagement, and biodiversity conservation.

both within value chain impact demonstration and beyond value chain contributions. It includes filters by sector, materiality, and sourcing region, offering tailored insights on applicability and relevance. By integrating framework requirements with FSC VI claims, the tool provides a practical decision matrix for using credible, real-time data in corporate sustainability disclosures and goal setting across industries and geographies.

An in-depth analysis of FSC Ecosystem Services (ES) impacts was conducted to map their alignment with major voluntary reporting and target-setting frameworks, including GRI, IFRS, TNFD, SBTN, and CDP. The resulting Benchmark Tool enables companies to assess how FSC Verified Impact (VI) claims support

40 <https://connect.fsc.org/monitoring-and-evaluation/performance-and-outcomes>

41 <https://connect.fsc.org/fsc-risk-assessments>

42 <https://search.fsc.org/en/>

43 <https://connect.fsc.org/certification/verified-nature-impact>

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