
Biodiversity, ecosystems, and ecosystem services (BEES)- Preliminary assessment of evidence of investor interest

Date	November 2024
Project	Biodiversity, ecosystems and ecosystem services
Topic	Preliminary assessment of evidence of investor interest
Contacts	Jeff Stehm (jstehm@ifrs.org) Emily Gaston (emily.gaston@ifrs.org)

This paper has been prepared for discussion at a public meeting of the International Sustainability Standards Board (ISSB). This paper does not represent the views of the ISSB or any individual ISSB member. Any comments in the paper do not purport to set out what would be an acceptable or unacceptable application of IFRS[®] Sustainability Disclosure Standards. The ISSB's technical decisions are made in public and are reported in the ISSB *Update*.

Discussion agenda

- Background
 - Purpose of presentation
 - Research objectives and approach
 - Approach to market outreach
 - Approach to literature review
 - Preliminary Findings
 - Areas of investor interest
 - Drivers of investor interest
 - Information sources used by investors
 - Investor uses of information
 - Information challenges
 - Summary
 - Next Steps
 - Questions for ISSB
 - End Notes and References
-

Purpose of presentation

At the July meeting of the International Sustainability Standards Board (ISSB), the design and approach to new research projects regarding information on risks and opportunities associated with biodiversity, ecosystems and ecosystem services (BEES) and human capital were discussed.

The research is structured into a Phase 1 (building the foundation) and Phase 2 (analysing implications).

To keep the ISSB and the public updated on progress and provide the ISSB with the opportunity to comment, raise questions and make suggestions, this presentation provides preliminary results from Phase 1 of the BEES 'investor interest' research area, covering investor engagements and a literature review.

This is one of four research areas in Phase 1. It seeks to build baseline knowledge and understanding of the level of investor interest in information about BEES-related risks and opportunities, investors' information needs, use of information in investment decisions and information challenges.¹

The ISSB is not asked to make any decisions at this time.

Research Objectives and Approach



Research objectives and approach

The overarching research question that this research area aims to address is:

What are the BEES-related information needs of investors and how is the current disclosure practice meeting or failing to meet these needs?

The preliminary findings in this presentation build on extensive investor outreach from June to early October and desk research and analysis of relevant literature.

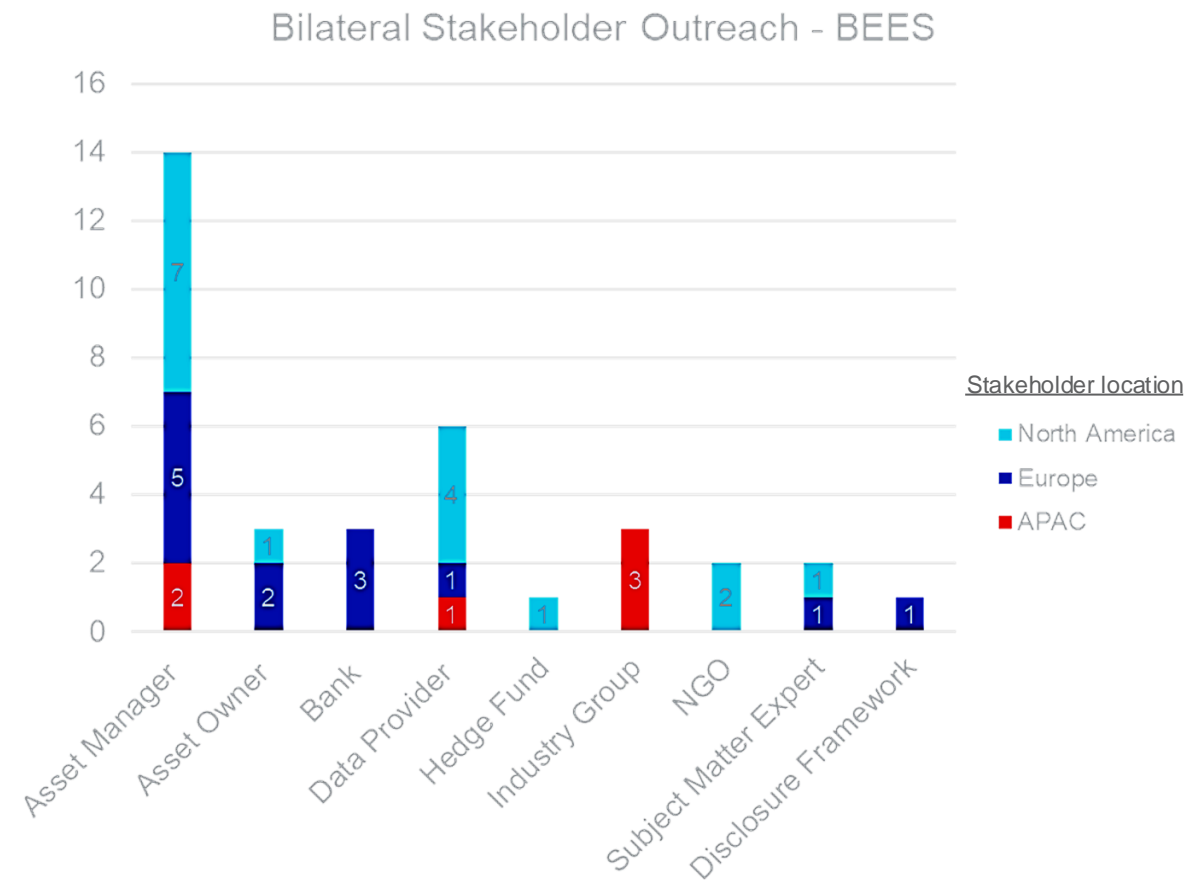
Investor engagement will continue and a more comprehensive assessment with final conclusions will be presented to the ISSB in a future meeting.

As outlined in the [July 2024 agenda paper for the ISSB](#),² key activities of this research area include:

- (a) Engagement with investors to identify:
- i. why investors are interested in assessing, and how they assess, BEES-related risks and opportunities, including consideration of time horizons, industry-specificity and the particular sub-topics within the broad topical areas of BEES;
 - ii. what information investors are using and how they are using it in their investment decisions, including how that varies across types of investors, asset classes, geographies and industries of entities they analyse; and
 - iii. information challenges and shortfalls and investors' needs around more or better BEES-related information moving forward; and
- (b) A review of existing literature as well as investor comments from various consultations relating to investors' information needs and uses of BEES-related information.

Approach to market outreach – bilateral engagements

- As of October 11, 2024, the staff held **35 bilateral engagements** with a **diverse set of investors and other members of the investment value chain**, including asset owners, asset managers, banks, data providers, industry groups, and investor-related NGOs (see chart).
- Engagement diversity was sought along the lines of investor type, investment style, sell-side and buy-side, invested asset classes, firm size, and geography.
- In further outreach, staff will **seek to expand engagements** with investors from **Latin America, the Caribbean, Middle East, and African countries** to make up for relatively lower numbers of meetings in these regions during the initial outreach.
- Engagements have leveraged ISSB groups including the ISSB Investor Advisory Group (IIAG), IFRS Sustainability Alliance and Sustainability Reference Group (SRG) representatives, but haven't been limited to these groups.



Approach to market outreach – roundtables

- **Five roundtables** were conducted to discuss investor interest in information related to BEES-related risks and opportunities. The five roundtables numbered **over 90 total participants** including:
 - Investors focused on emerging markets
 - Banks' credit portfolio managers
 - Investors from the IIAG
 - Institutional investors
 - Sell-side researchers, portfolio managers, NGOs
- Additional roundtables have been scheduled
- **In total** between bilateral engagements and roundtables, staff has engaged with **over 125 investors** so far.

Approach to literature review

Over 100 sources of literature on the topic of investors and nature/biodiversity risks, opportunities and disclosure were reviewed.³ The literature reviewed consisted of:

- Consultancy and data provider reports (23%)
- Academic papers and publications (19%)
- Investment industry publications (15%)
- International organisations and government reports (15%)
- Trade publications (13%)
- Investor research (6%)
- Standard-setter publications (5%)
- NGO reports (4%)

The credibility of the literature was judged based on a combination of factors such as sample size, study design, author(s) credibility, relevancy and recency of the report.

Preliminary Findings



Preliminary findings

The following slides present preliminary findings from investor engagements and the literature review in five areas**:

1. Areas of investor interest
2. Drivers of investor interest
3. Sources of information used by investors
4. How investors use that information in their investment process, and
5. Information challenges facing investors

**Details of the findings from the literature review are presented in Agenda paper 3C *Literature review on the evidence of investor interest* (November 2024) that is accompanying this presentation

1. Areas of investor interest

Area of Interest	Raised in Engagements	Raised in Literature
Specific BEES-related topics	<p>Topics mentioned in engagements in order of frequency:</p> <ul style="list-style-type: none"> • Freshwater use and water pollution • Land use (including deforestation and land pollution) • Biodiversity loss • Plastic pollution 	<p>The literature most often mentions investor focus on water (including pollution) and biodiversity loss followed by pollution (land/air/plastics) and deforestation</p> <p>Most investors identify specific BEES-related topics and the most dependent sectors to focus their assessments on.</p>
BEES-related risks and opportunities overall (i.e., at ecosystem level)	Ecosystem integrity and ecosystem services were some of the least mentioned topics (bottom half of frequency)	Many Investors recognise the importance of BEES-related risks and opportunities, but are only at an early stage in undertaking assessments of such risks and opportunities for investment decisions; methodological complexities and lack of data noted in literature
Interest in particular sectors or industries	<p>Most mentioned sector/industry:</p> <ul style="list-style-type: none"> • Food and agriculture • Consumer goods (apparel, textiles) • Forestry • Extractives and mining <p>Other sectors/industries with limited mentions:</p> <ul style="list-style-type: none"> • Real estate, Utilities, Infrastructure, Industrials, Chemicals, and High tech 	Companies most exposed to BEES-related risks, either from their direct operations or their supply chain. e.g., extractives, agricultural commodities, critical minerals.

2. Drivers of investor interest

Driver of Interest	Raised in Engagements	Raised in Literature ⁴
Client demand	Most frequently mentioned	Moderately to Very relevant as a driver
Risk management	Second most frequently mentioned (tie)	Very relevant as a driver
BEES-related regulatory driver (as driver of investor interest and as driver of available information)	Second most frequently mentioned (tie)	Somewhat relevant as a driver
Return/opportunity driver	Third most frequently mentioned	Very relevant as a driver
New disclosure frameworks (as driver of available information)	Some investors mentioned that new disclosure frameworks that have been published, such as TNFD, are stimulating further interest in nature-related risks and opportunities	Similar point made in some literature sources, highlighting expectations of better information availability

3. Sources of information used by investors

Sources of BEES-related Information		Raised in Engagements	Raised in Literature
Direct sources	Company reports and filings	Second most frequently mentioned	Yes, but information is limited and not comprehensive at current time ⁵
	Company engagements/ earnings calls	Fourth most frequently mentioned	Yes, but limited mentions as a source
Indirect Sources	Third-party data providers	Most frequently mentioned	Yes, literature notes that many investors use this source
	External ESG scores/ratings, particularly 'E' pillar and its subcomponents	Fifth most frequently mentioned (tied)	Yes, many investors use either overall ESG score or decompose the E pillar into sub-scores or raw data
	Public Sources (e.g., media, public data, NGO reports, research, etc.)	Third most frequently mentioned	Yes, almost all investors use, especially to identify company-related controversies
	In-house data sets, modeled data, estimated data	Fifth most frequently mentioned (tied)	Most literature noted the role of estimated data given lack of comprehensively reported data

4. Investor uses of information

Investment Process Stage	Raised in Engagements	Raised in Literature
Investment Strategy	Selection of external managers was most frequently mentioned	Setting investment objectives, approach, mandates, and policies
Investment Analysis & Selection	Integration most frequently mentioned, closely followed by screening; little mention of thematic investing	<ul style="list-style-type: none"> • Screening (positive and negative screening) - used extensively by most investors; screen thresholds based on a variety of factors such as ESG scores, sector or industry, and other BEES-related factors • Integration of BEES-related risks and opportunities into investor's regular investment process (e.g., one of many factors considered in fundamental analyses of investments, or in quantitative investment models); use of biodiversity indices noted • Thematic selection - Identification of BEES-related longer-term structural trends in markets (e.g., structural shifts in supply and demand for natural resources; alternative products, services and technologies which better preserve and support ecosystems)
Portfolio Management	Many investors mentioned use of BEES-related information for informing their engagements with companies and/or their proxy voting. Some investors start with this use of information and then expand to use in investment decisions	Some mention of stewardship activities

5. Information challenges – Data attributes and types

Challenge		Raised in Engagements	Raised in Literature
Data Attributes	Data availability	Most investors mentioned	CFA found lack of data availability a barrier for 26% of investors; Credit Suisse found it as a barrier for 70% of investors ⁶
	Data quality	Most investors mentioned	Mentioned occasionally
	Data comparability & interoperability	Most investors mentioned	TNFD has noted that not all public and private datasets that investors rely on are set up in a way where they can be combined and/or aggregated easily ⁷
	Data usefulness	Many investors mentioned	Mentioned occasionally
	Ability to estimate or model missing data	Some investors mentioned	Sparsely populated datasets require estimated or modeled data to fill in gaps. However, methodologies may skew estimates or are dependent on context and different models are needed for different contexts.
	Data cost	A few investors mentioned	No mention
	Data coverage	Not mentioned	Information coverage gaps regarding certain geographies, operations or ecosystems have been noted (e.g. ocean-related issues)
Data Types	Location data (assets and activities)	Most investors mentioned; considered critical by many investors	Noted as essential, but seriously lacking and often requiring bespoke solutions to collect the data.
	Supply chain data	Most investors mentioned; closely linked to location data	Noted as a significant challenge by WWF and Oliver Wyman (2024) ⁸

5. Information challenges – Information generation

Challenge		Raised in Engagements	Raised in Literature
Challenges for companies to generate useful information for investors	Measurement challenges	Some investors noted that single metrics frequently used to measure biodiversity provide little information around nature-related risk or opportunities. Others noted the complex and lengthy causal chain from impacts/dependencies through exposures to risks and effects on an entity’s prospects is not well understood yet	Lack of or gaps in measurement methods; multiple methods; challenges measuring at different spatial scales; measurement cost
	Potential information burdens	Some investors mentioned disclosure of information on nature-related risks and opportunities as a potential burden for companies	The literature noted the complexity, localised nature and multi-dimensional aspects of BEES-related information
	Lack of standard disclosure requirements, including lack of standard terminology and definitions and lack of a focused set of standardised metrics	Most investors mentioned this challenge. Some investors cited too many metrics with dubious connections to risk or financial outcomes	The literature has noted that company disclosure practices lack consistency, comparability, and standardised information. Morningstar reported 29% of 500 asset owners cited unstandardised data definitions as a problem; BNPP and CFA mentioned similar challenges. ⁹ No standardised metrics around the overall condition of natural capital and ecosystem services unlike GHG emissions for climate; however, subtopics often have a suite of standard metrics commonly used (e.g., water use)

5. Information challenges – Investor use of information

Challenge		Raised in Engagements	Raised in Literature
Investors' challenges using information	Difficulties determining key information that may affect investment decisions	Some investors mentioned. Challenge is to parse through the noise (e.g., too many metrics and irrelevant information)	Noted in some sources
	Insufficient expertise	Several investors mention upskilling fundamental analysts and portfolio managers so information feeds into broader investment framework	Credit Suisse reported about a third of investors cited this challenge ¹⁰
	Lack of consensus on natural capital valuation methods	Some investors mentioned	Credit Suisse reported about half of investors cited this challenge ¹⁰
	Difficulty integrating information into investment models	Some investors mentioned this	Data scarcity or inaccuracies complicate model parameter estimation and calibration; BEES models require multiple parameters; Credit Suisse reported about a fifth of investors cited this challenge.
	Difficulties in entity-level aggregation	Some investors mentioned. Challenge aggregating local site data of various measurements into an aggregate picture of risks and opportunities at the entity-level	Along with complexity, the literature noted that the information about different aspects of nature-related risks and opportunities at a local site level are challenging to aggregate at an entity-wide level

Key takeaways

- Engagements indicated that most investors had an **interest in information** about BEES-related risks and opportunities, while the literature was more mixed on the strength of investor interest.
- Most investors are at **an early stage** of considering how to use BEES-related information in investment decisions.
- Most investors state that **nature is more complex than climate** and there is no universal metric like GHG emissions for nature; nature-related risks are **localised**
- Most investors start with information on **specific aspects of nature** (e.g., water, pollution, deforestation) and **specific sectors or industries** (e.g., agriculture, forestry, extractives) and **use multiple sources of information**.
- Investors **use BEES-related information in multiple ways** in investment decisions depending on their investment strategies and approaches.
- Investors find the **information landscape for BEES-related risks and opportunities challenging** in many ways, including:
 - Non-standardised information, lack of data, poor data quality and high cost of obtaining and processing data
 - **Data gaps in certain crucial areas** such as location-specific information, supply chain information, quantitative information and information on effects on the entity's prospects from BEES-related impacts, dependencies, and associated risks and opportunities
 - Some investors are concerned about the potential amount of information (information overload and obscuring of material information)

Next steps

- Staff will continue to engage with investors, with a particular emphasis on investors from Latin America, the Caribbean, Middle East, and Africa.
 - Staff will analyse the findings from additional engagements, other consultations and literature and will prepare a final assessment paper integrating the findings from these sources. This paper will be discussed at a future ISSB meeting.
-

Questions for the ISSB

1. Does the ISSB have any questions on the preliminary findings of investor interest in information on BEES-related risks and opportunities, regarding:
 - a) Strength of investor interest and drivers of interest
 - b) Sources of information used by investors
 - c) How investors use the information currently available to them in making investment decisions
 - d) The information challenges faced by investors?
2. Does the ISSB have any suggestions for additional research on areas of investor information needs regarding BEES-related risks and opportunities?
3. Does the ISSB have any other comments?

End notes and references

¹ The other research areas are focused on understanding current state of disclosure, existing BEES-related standards and frameworks, and evidence of effects on an entity's prospects from BEES-related risks and opportunities.

² Agenda Paper 2B [*Biodiversity, ecosystems and ecosystem services and human capital research projects — Research design and approach*](#) (July 2024).

³ A search was conducted that included such search terms as investors/investment and disclosure in combination with terms such as nature, biodiversity, ecosystems, biodiversity risk, etc. Literature was also suggested by ISSB members and investors. This search identified almost 200 sources, of which over 100 were reviewed.

⁴ While drivers raised via engagements are quantitatively listed (considering frequency of mentions), terms in this column showing relevance of drivers of interest are based on a subjective assessment of the literature.

⁵ For example, the World Benchmarking Alliance found in their 2024 survey of 800 companies that none of the surveyed companies “holistically assess and disclose” nature-related dependencies.

⁶ CFA (2020) Future of Sustainability in Investment Management; Credit Suisse (2021) Unearthing Investor Action on Biodiversity.

⁷ TNFD (2023) Findings of a high-level scoping study exploring the case for a global nature-related public data facility.

⁸ WWF and Oliver Wyman (2024) Biodiversity and Infrastructure Investing

⁹ Morningstar (2023) Voice of the Asset Owner; BNNP (2024) The urgent need for better ocean-related data to make investment decisions; CFA (2020) Future of Sustainability.

¹⁰ Credit Suisse (2021) Unearthing Investor Action on Biodiversity