

Mind the Gap

Comparing Biodiversity and
Climate Disclosures Across the
CAC 40, FTSE 100, and S&P 500

• *What Matters* • *Disclosure Frameworks* • *Comparisons* • *The Gaps* • *Brief Practical Guidance*

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THE **BIODIVERSITY**
FOOTPRINT COMPANY

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About This Report

This report is part of the Quality Biodiversity Footprints Technical Series produced by The Biodiversity Footprint Company (TBFC). The focus of this working paper is on assessing three sets of listed companies against the key biodiversity questions every company should be able to disclose. Forthcoming papers in this series will address decision-making for no net loss accounting, species accounting, and ecosystem services measurement. This work builds upon previous publications on understanding data quality for decision-making.

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Cover Image: Southern ground hornbill (*Bucorvus leadbeateri*) VU. Credit: G. Teren

EXECUTIVE SUMMARY

This paper scores 120 of the world's largest listed companies on the quality of their biodiversity and climate disclosures. The results reveal a stark and systemic gap: companies disclose roughly two-thirds of assessed climate information, yet less than one-twentieth of the equivalent biodiversity information.

120

Companies assessed
across 3 exchanges

4.1%

Average biodiversity
disclosure score

68.5%

Average climate
disclosure score

17×

Climate scores exceed
biodiversity scores

The aim of this paper is threefold:

- Explain the key biodiversity disclosure questions every major company should answer quantitatively
- Take stock of the latest quantitative biodiversity disclosures and compare them with climate disclosures
- Highlight the gaps and point towards available tools to address them

Average Total Scores by Exchange

Exchange	Biodiversity Score	Biodiversity %	GHG Score	GHG %
CAC 40	1.93 / 28	6.9%	9.20 / 14	65.7%
FTSE 100	1.30 / 28	4.6%	10.03 / 14	71.6%
S&P 500	0.23 / 28	0.8%	9.55 / 14	68.2%
Overall	1.15 / 28	4.1%	9.59 / 14	68.5%

Key Findings

European firms lead, US firms trail. CAC 40 scores highest on BD (6.9%), driven by CSRD. S&P 500 averages 0.8%.

Species are a blind spot. No company provides statements of performance or position for material species.

Targets without foundations. SMART ecosystem targets score highest, yet measurement and accounting remain blank.

Cumulative accounting absent. No company reports accumulated BD state or cumulative emissions.

Disclosure Score Comparison: Biodiversity vs Climate (GHG)

■ Biodiversity ■ Climate (GHG)

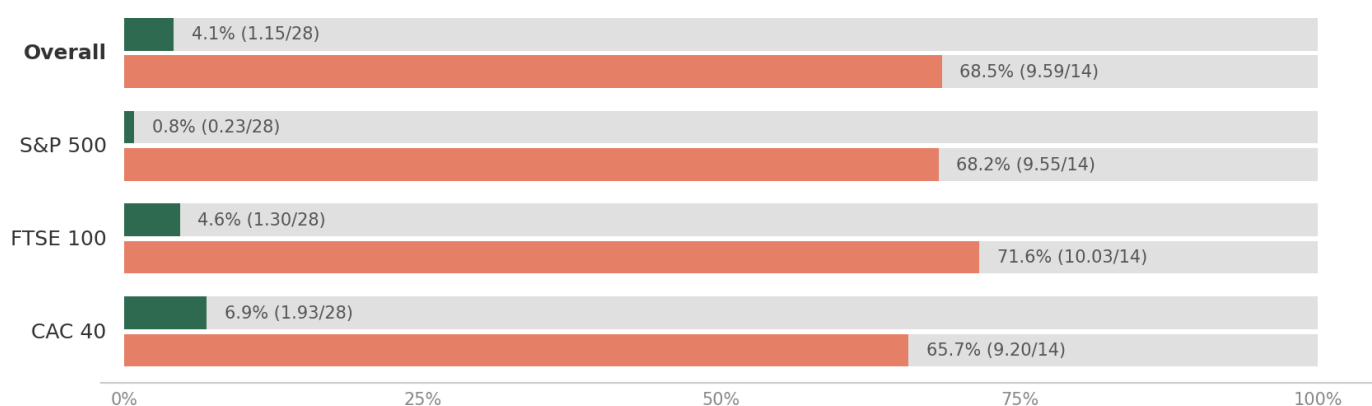


Figure 1. Disclosure Score Comparison: Biodiversity vs Climate (GHG) Average Scores per Exchange.

INTRODUCTION

Biodiversity loss is increasing globally (Brondizio et al. 2019) and now poses a critical and pervasive systemic risk to the economy, financial stability and human wellbeing (Jones et al. 2026). The IPBES Business and Biodiversity Assessment, approved in February 2026, identifies the private sector as a key driver of this trend and emphasizes that "collaboration, collective and individual actions are essential to create an enabling environment where businesses contribute to a just and sustainable future" (IPBES 2026, p. 6).

This urgency is underscored by Target 15 of the Kunming-Montreal Global Biodiversity Framework (GBF) (CBD 2023), which for the first time in a multilateral agreement commits governments to requiring all large and transnational companies and financial institutions to assess and disclose their risks, dependencies, and impacts on biodiversity. The first global stocktake of progress towards GBF targets is expected in 2026.

On the regulatory front, multiple frameworks now converge on corporate biodiversity reporting. The European Sustainability Reporting Standards (ESRS E4) require companies subject to the Corporate Sustainability Reporting Directive (CSRD) to disclose material biodiversity impacts, with compliance subject to limited assurance from 2025. The Taskforce on Nature-related Financial Disclosures (TNFD), with over 730 companies committed to adoption by early 2026, has submitted recommendations for alignment with ESRS. GRI 101: Biodiversity 2024 became effective on 1 January 2026. The Science Based Targets Network (SBTN) opened corporate validation for science-based nature targets in February 2025.

The IPBES Assessment concluded that current business conditions are largely incompatible with achieving a just and sustainable future for biodiversity, and that the failure to integrate the value of nature into economic and financial systems constitutes a critical systemic risk. The assessment identified improved corporate disclosure as one of the key levers for transformative change. GHG reporting coalesced around the GHG Protocol's scope-based framework (WRI & WBCSD 2004) and early voluntary reporting eventually gave way to rigorous, auditable carbon footprints grounded in standardised GHG accounting protocols. In contrast, biodiversity disclosure is only now gaining equivalent institutional momentum through the TNFD (2023) and ESRS E4, and our research aims to assess the gaps.

Corporate biodiversity disclosures are becoming more common, they remain inconsistent, non-standardized, and often lack measurable data (Sharma & Dhruv 2025; Wahl et al. 2026). This reflects the fragmented and competing nature of existing biodiversity reporting guidelines, frameworks, and requirements (Mair et al. 2024). Where GHG reporting has had two decades to mature, biodiversity disclosure is only now gaining equivalent institutional momentum — and the gap in practice is stark (Figure 2).

FROM CARBON FOOTPRINTS TO BIODIVERSITY FOOTPRINTS: PARALLEL JOURNEYS

Two journeys, same destination: credible footprints, science-based targets and positive impact for people and planet.

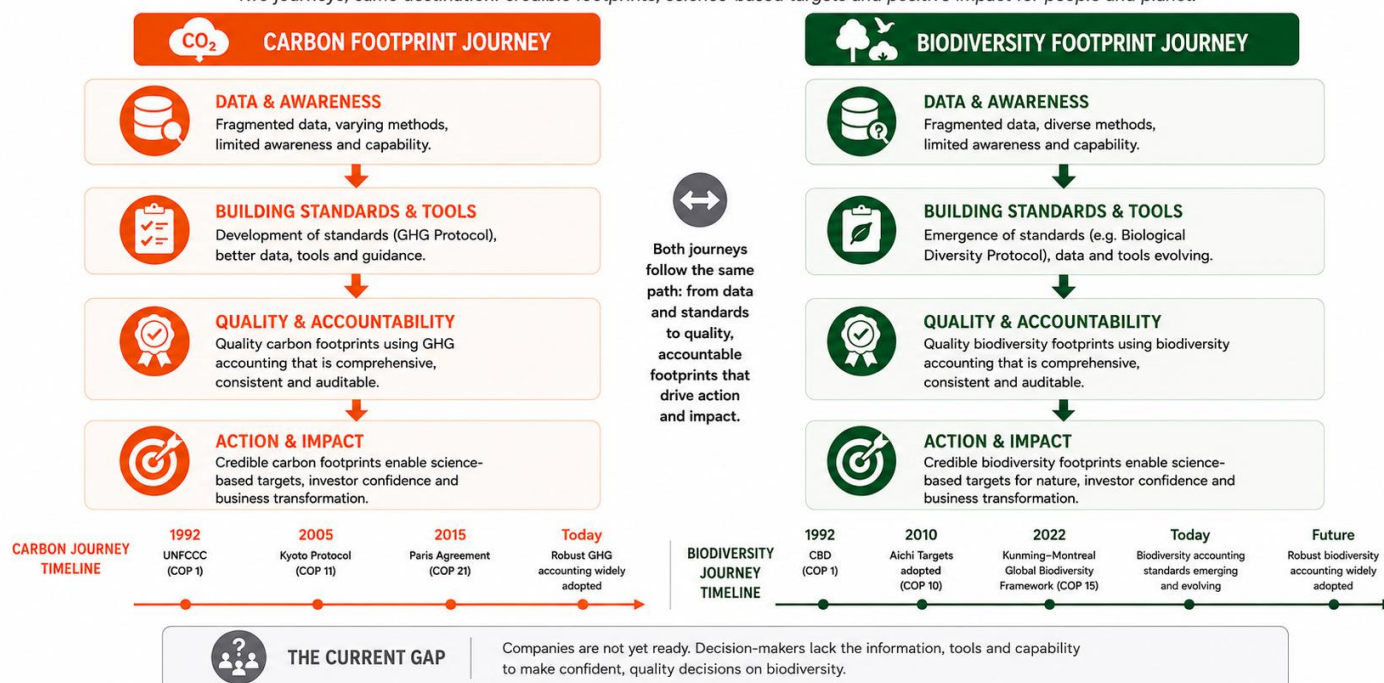


Figure 2. The parallels between the carbon footprint and biodiversity footprint journeys.

WHAT MATTERS FOR QUALITY DISCLOSURES?

Quantitative, non-monetary disclosures are essential to build the foundation for corporate biodiversity mainstreaming, meaningful target setting, and robust risk disclosures. Corporate climate action has largely been driven by high-quality GHG emissions disclosures. Biodiversity disclosures need to reach a similar level of maturity. There are five key disclosure dimensions:

1. Impact Inventory

Identify all impacted ecosystems and material species. Report what is affected and what the company considers material.

Impact inventories: To support informed decision-making, companies first need to disclose their biodiversity impact inventories, much as they do for emissions sources. The TNFD detailed the importance of how the state of nature is represented by both species and ecosystems (TNFD 2023). The Biological Diversity Protocol (BD Protocol), defines a biodiversity impact inventory as all impacted ecosystems and material species (Endangered Wildlife Trust 2020). Reporting organisations should therefore identify all ecosystems affected by their activities, along with the key species that shape decision-making, including both threatened species and species of management concern. Stakeholders need clear visibility on what is affected and what the company considers material.

2. Impact Measurement

Location, extent, and condition of impacted ecosystems. Population or habitat status of material species.

Impact measurement: Once impacted ecosystems and material species have been identified, stakeholders need information on the scale of those impacts. This includes the location, extent, and condition / state of impacted ecosystems so that users can understand what is happening on the ground (Bedford et al. 2025; Houdet 2024; TNFD 2023; United Nations et al. 2021). The same applies to species: Stakeholders need to know whether the habitats or populations of impacted material species are persisting, stable, declining, or at risk of extinction. Without such information, the significance of biodiversity impacts cannot be properly understood

3. Accounting Framework

How impacts change over time. Statements of Position and Performance for biodiversity.

Accounting framework: Stakeholders also need to understand how biodiversity impacts change over time. Trend information is essential to assess, interpret, and understand the outcomes of impact management or mitigation measures. Report users need visibility on the total scale of impacts at a given point in time, much like a balance sheet or Statement of Position, as well as on changes between two points in time, comparable to a Statement of Performance (Endangered Wildlife Trust 2020; Houdet et al. 2020). Tracking these changes helps ensure that all impacts are accounted for and clarifies how biodiversity state evolves over time.

4. Targets

SMART targets for ecosystems and material species with clear baselines, timeframes, and mitigation measures.

Targets: Once stakeholders understand both the scale of impacts and how these impacts change over time, they need to determine whether the company is effectively managing these impacts. The main source of this information is targeting disclosure. Companies should therefore set SMART targets for ecosystems and material species, meaning targets that are Specific, Measurable, Actionable, Relevant, and Time bound. Stakeholders also need clarity on the baseline (for example, 2020 in alignment with the GBF), the timeframe, the metrics used in line with impact measurement approaches, and the mitigation measures in place, so they can judge whether biodiversity risks and impacts are being managed appropriately. Such targets should signal the company's commitment to reversing biodiversity loss and should guide action plans and budgets.

5. Audit Trail

Impact data traceable to specific sites and dates. Confidence information. Third-party verification.

Audit trail: Lastly, confidence in disclosed information depends on whether impact data can be traced back to specific sites, mitigation measures, and points in time. Stakeholders look for indications of accuracy to strengthen trust in the reported data (Houdet et al. 2026). This confidence may be supported through different forms of assurance, for instance third-party verification. A robust audit trail is therefore essential, as it enables verification and underpins the credibility of biodiversity-related claims, especially those concerning progress toward targets.

COMPARISON OF CURRENT DISCLOSURE FRAMEWORKS

An initial Corporate Disclosure Frameworks Tracker was published in 2023 (Houdet and Teren, 2023). This paper has adapted the criteria and updated the analysis to GRI 101 Biodiversity 2024 (GRI 2026), SBTN (SBTN 2024), TNFD (TNFD 2023) and ESRS E4 Biodiversity and ecosystems (EFRAG 2025). See Table 1.

The table maps BD Protocol accounting methodology components — including impact inventories, measurement approaches, accounting frameworks, targets, and audit trail requirements against the current disclosure frameworks. While most frameworks address impact inventories, measurement, and target-setting to varying degrees, significant gaps remain in accounting framework integration — particularly around ecological equivalency and statements of position — as well as audit trail requirements around traceability and confidence reporting.

Perhaps most notably, no framework currently addresses ecological equivalency — the mechanism by which biodiversity gains and losses can be measured on a comparable basis — nor do any provide clear requirements for confidence or accuracy reporting. These gaps suggest that while disclosure frameworks are converging on what should be reported, the methodological infrastructure for how it should be measured, consolidated, and verified remains underdeveloped. Closing this gap will be essential if biodiversity disclosures are to achieve the same rigour and decision-usefulness that financial markets expect of climate-related reporting.

Table 1. Comparison of disclosure frameworks against the biodiversity accounting rules found in the BD Protocol.

ACCOUNTING METHODOLOGY

REPORTING FRAMEWORKS

BD Protocol



Science Based
Targets Network



Taskforce on Nature-related
Financial Disclosures



GRI 101:
Biodiversity 2024



ESRS E4 Biodiversity
& ecosystems

Impact inventory	Ecosystems	Yes	Focus on biome (low resolution)	Yes	Yes
	Material species	Yes	Yes	Yes	Yes
Impact measurement	Ecosystem location, extent & condition / state	Yes	Yes	Yes	Yes
	Habitat / population size of material species	Extinction risk (unclear metric)	Extinction risk (unclear metric)	Yes	Yes
	Ecological equivalency for gains / losses	Not mentioned	Not mentioned	Not mentioned	Not mentioned
Accounting framework	Statement of Performance — ecosystems	Not mentioned	Not mentioned	Yes	Yes
	Statement of Position — ecosystems	Not mentioned	Not mentioned	Reference to BD Protocol	Not mentioned
	Statement of Performance — material species	Not mentioned	Not mentioned	Yes	Yes
	Statement of Position — material species	Not mentioned	Not mentioned	Reference to BD Protocol	Not mentioned
Targets	SMART targets for ecosystems	Yes	Reference to SBTN	Yes	Yes
	SMART targets for material species	Yes	Reference to SBTN	Yes	Yes
Audit trail	Traceability of results to specific location	Unclear requirements	Unclear requirements	Yes	Unclear requirements
	Confidence / accuracy information	Unclear requirements	Unclear requirements	Unclear requirements	Unclear requirements

METHODOLOGY

Sample

The 40 largest companies by market capitalisation from each of three major stock exchange indices: the CAC 40 (Euronext Paris), the FTSE 100 (London Stock Exchange), and the S&P 500 (United States), yielding a total sample of 120 companies (see Annex 1). These indices were selected to provide geographic diversity across three of the world's largest capital markets, each operating under different regulatory regimes: The EU's CSRD, the UK's evolving sustainability disclosure landscape, and the US's largely voluntary reporting environment.

Assessment period

We used the most recent publicly available sustainability or integrated reports, typically covering FY2024 or 2025. Where companies published separate biodiversity or climate supplements, these were also consulted. All assessments conducted January–May 2026.

Scope

This paper does not aim to assess biodiversity or climate performance in itself. Rather, it evaluates the quality of disclosures across five core categories: (1) impact inventory, (2) impact measurement, (3) accounting framework, (4) targets and (5) audit trail. The assessment includes 14 questions on biodiversity disclosures and 7 on climate disclosures (Annex 2). The larger number of biodiversity questions reflects the need to distinguish between ecosystems and material species, whereas the climate assessment focuses only on greenhouse gas (GHG) emissions.

See Annex 1 for the list of 120 companies assessed.

See Annex 2 for the full list of questions.

Scoring system

0 – No disclosure

1 – Partial disclosure

2 – Complete disclosure

Maximum scores: BD = 28 | GHG = 14

Limitations

First, the assessment is based on publicly available reports only and companies may collect and use biodiversity data internally that they do not disclose. Second, the scoring system is intentionally simple (0, 1, or 2) to enable consistent application across 120 companies and two disclosure domains. Third, the sample is restricted to the largest companies by market capitalisation, which may not be representative of broader corporate disclosure practices. Fourth, the climate assessment serves as a benchmark for disclosure maturity rather than a comprehensive evaluation of GHG reporting quality.

DISCLOSURE SCORES BY QUESTION

- A breakdown of average scores per question further explains the gaps (Figure 3).
- Carbon has high scores across most disclosure categories, with near-universal reporting on GHG completeness (86–92%), targets (85–95%) and traceability (72–75%). The sole exception is GHG Q4 (Statements of Position or balance sheets), which no company in the sample addresses — i.e. no company discloses accumulated GHG emissions over time, only annual emissions.
- For biodiversity, the picture is fundamentally different. What limited disclosure exists is concentrated in the Impact Inventory category (ecosystem and species inventories, spatial mapping), led by the CAC 40, while the Accounting Framework categories (ecological equivalency, Statements of Performance and Position) are effectively unreported across all three exchanges. The only biodiversity question to attract meaningful scores is BD Q11 (SMART ecosystem targets), driven primarily by CAC 40 and FTSE 100 companies setting area-based commitments — though even here, no S&P 500 company scores above zero.
- While the highest average scores are for disclosing SMART targets for ecosystems, one might question the capacity of reporting organisations to achieve them given the lack of complete information on measurement and accounting.

Average Disclosure Scores by Question and Exchange
(as % of maximum score of 2)

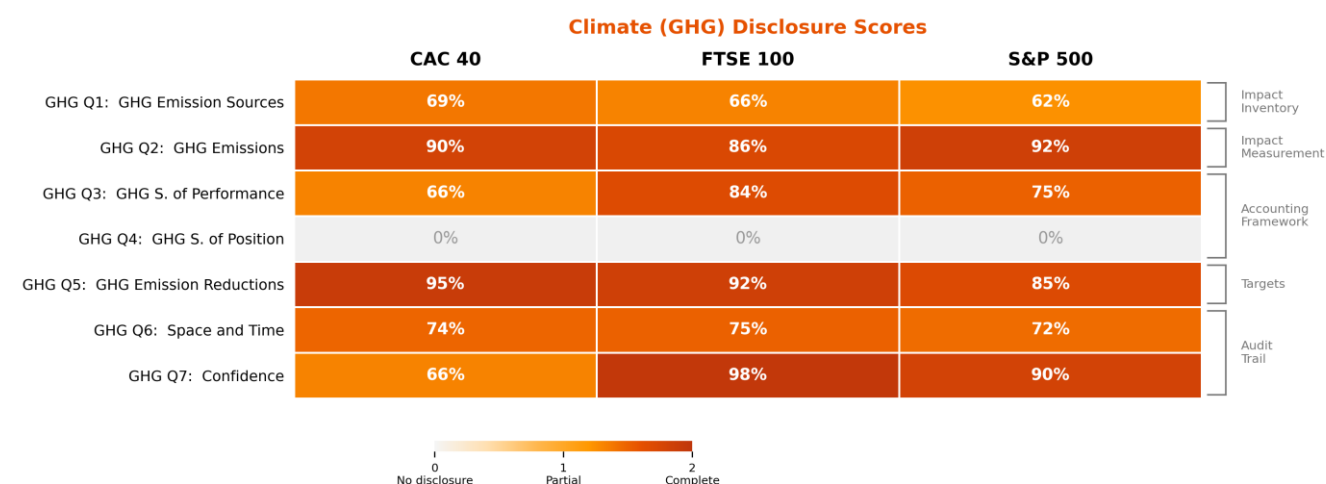
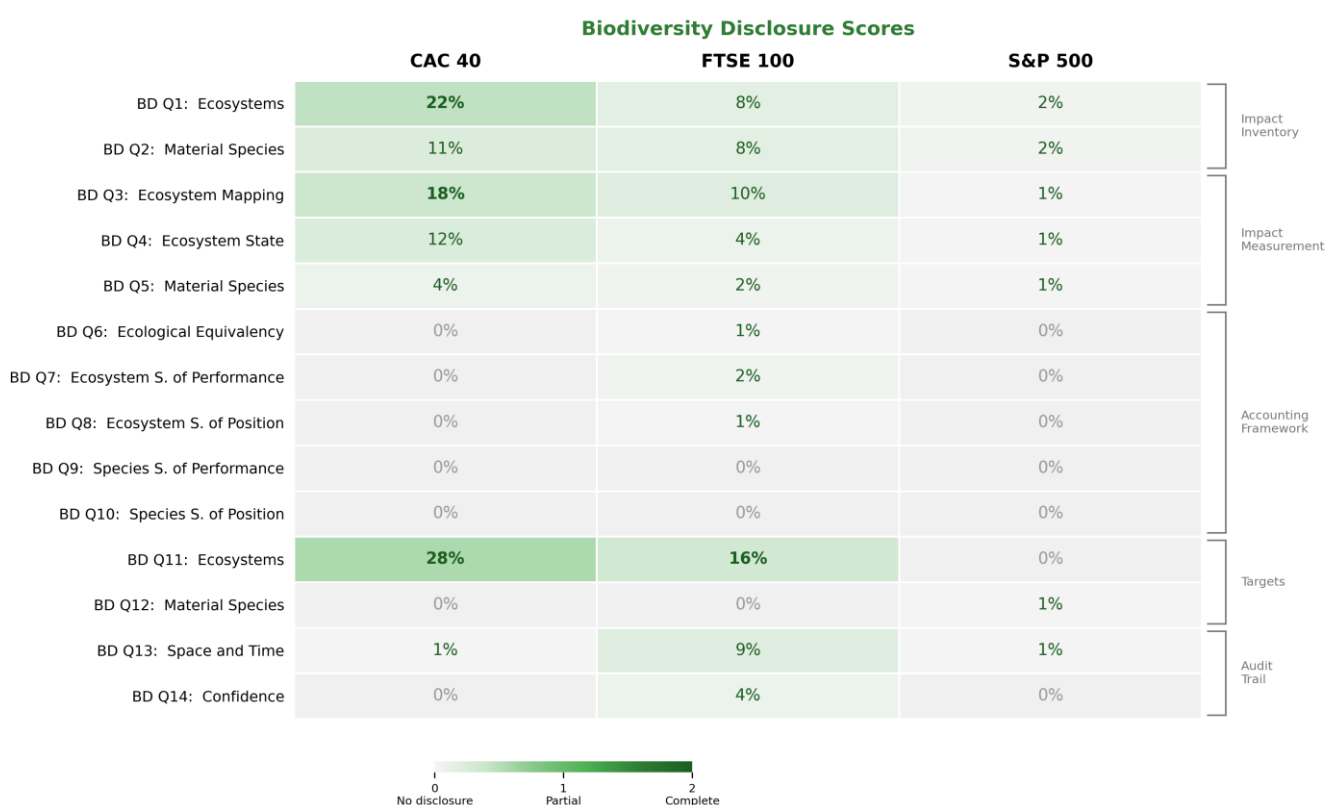


Figure 3. Average Disclosure Scores by Question and Exchange for Biodiversity and Climate. Scores as % of maximum (2).

DISCUSSION AND CONCLUSIONS

The results reveal a stark and systemic gap between corporate biodiversity and climate disclosures. While GHG reporting has reached reasonable maturity (65%+ of maximum), biodiversity disclosures average just 4.1%.

The species blind spot

Perhaps the most striking finding is the near-complete absence of species-related disclosures. Questions 5, 9, 10, and 12 score at or near zero across all exchanges. No company provides statements of performance or position for material species. The concept of 'material species' central to the BD Protocol and increasingly recognised in frameworks such as GRI 101, has not yet entered mainstream corporate practice.

Ecosystems disclosed, but not measured

Companies are more willing to identify impacted ecosystems (Q1, 10.8%) than to measure their state (Q4, 5.8%) or track changes over time (Q7/Q8, below 1%). The disconnect between identification and measurement means ecosystem inventories ecosystem inventories without accompanying state data cannot inform meaningful decision-making or target-setting.

Targets without foundations

SMART ecosystem targets (Q11) received the highest biodiversity score (14.6%), yet measurement and accounting questions remain blank. Companies are setting ecosystem targets without first establishing the measurement baselines and accounting frameworks needed to track progress. In the climate domain, target-setting is underpinned by mature emissions measurement and established accounting practices. No such foundation exists for biodiversity, risking targets that are aspirational but unverifiable.

The cumulative accounting gap

GHG Q4 on cumulative emissions scored zero across all 120 companies. The same holds for BD Q8 and Q10. Annual reporting alone cannot reveal whether a company's total environmental debt is growing or shrinking. The adoption of statements of position, as proposed by Houdet et al. (2021) for GHG disclosures and BD Protocol for biodiversity disclosures, would address this gap.

Regional differences and regulatory effects

CAC 40 consistently outperforms (avg. 1.93 vs FTSE 1.30, S&P 0.23), likely reflecting the EU's regulatory environment, including the CSRD and ESRS E4. The S&P 500's near-zero average suggests voluntary US disclosure has not catalysed meaningful biodiversity reporting. Climate shows much less variation (65–72%) reflecting globally harmonised GHG reporting requirements.

Implications and the path forward

For companies, the results point to a clear sequencing challenge: impact inventories must precede measurement, measurement must precede accounting, and accounting must precede credible target-setting. For investors and report users, the findings underscore that current biodiversity disclosures are insufficient for informed decision-making.

The tools to close these gaps are available. The BD Protocol (Endangered Wildlife Trust 2020) provides a comprehensive accounting architecture; ecosystem typologies, GIS databases, and state assessment methodologies are freely accessible, and constantly improving.

With that basis, the question-by-question guidance that follows outlines specific resources and approaches for each disclosure dimension assessed in this paper.

BRIEF PRACTICAL GUIDANCE FOR EACH DISCLOSURE QUESTION

Q	Practical Guidance
Q1	There are freely available typologies of historical ecosystems. Mapping assets, operations, or supply chains against these historical ecosystems should be relatively straightforward, provided consistent scales are applied. The main challenge is to avoid confusing ecosystems with land use categories. While anthropogenic systems provide a useful framework for analysing and managing human-modified landscapes in accordance with varying stakeholder objectives, they are not appropriate for biodiversity footprint accounting (Houdet & Teren 2022).
Q2	Answering this question requires a materiality assessment of the species affected by the business. There are two main types of material species: those of conservation concern (see the IUCN Red List) and those of management concern, such as species subject to control / eradication measures or those of cultural or economic importance (e.g. alien invasive species).
Q3	The mapping of the spatial extent of ecosystems according to appropriate typologies is readily feasible using GIS. Open-source platforms such as QGIS or Google Earth lower the barrier to entry.
Q4	There are several ways to measure ecosystem state, ranging from site-based surveys to model-based indices. The idea that a single indicator or metric can capture ecosystem state is misleading. Although ecosystem state can be aggregated into surface-area equivalents, such as hectare equivalents, as part of an accounting framework such as the BD Protocol and SEEA EA (United Nations et al., 2021), the underlying data may come from different methods depending on what is available at a reasonable cost (Bedford et al. 2025). Different data sources can be integrated into standardised data frameworks (the MESA methodology provides one such public example (Teren et al. 2026).
Q5	Measuring impacts on species is more challenging. Most assessments focus on species abundance, meaning the number of species at a site, rather than on changes in the size of the habitat or population of material species, typically in relation to a minimum viable population (Endangered Wildlife Trust 2020). Yet, because material species influence decision-making, a precise understanding of the state and trends of individual species is essential for effective risk management. Only site surveys can provide this information. Public records such as GBIF or iNaturalist can become supporting tools while the growing technologies, such as eDNA, are making species detection easier.
Q6	To properly apply the ecological equivalency principle when comparing gains and losses, complete and traceable records must be kept — covering spatial information, ecosystem state results, and gain/loss journal entries. Ecological guidance can be found in the various outputs of the Business and Biodiversity Offset Program (BBOP 2018). The BD Protocol offers the necessary architecture, grounded in biodiversity-focused double-entry bookkeeping rules (Houdet et al. 2020).
Q7	Periodic changes in ecosystem state can be structured in a Statement of Performance format by drawing on the BD Protocol grounded in biodiversity-focused double-entry bookkeeping rules. This comprises biodiversity journal entries, with debits and credit columns.
Q8	Accumulated changes in ecosystem state can be structured in a Statement of Position format by drawing on the BD Protocol, grounded in biodiversity-focused double-entry bookkeeping rules. Disclosing the full state of ecosystems does not imply restoring them back to their reference states though. It merely provides the correct set of information for comparable progress monitoring, across time, companies and jurisdictions.
Q9	As for ecosystems, periodic changes in the state of material species can be structured in a Statement of Performance format by drawing on the BD Protocol (Endangered Wildlife Trust 2020). Different metrics would apply to different species through (e.g. some would require population measurements while habitat-based approaches would be more suitable for cryptic species), and no aggregation is possible between species.
Q10	Accumulated changes in state of material species can also be structured in a Statement of Position format by drawing on the BD Protocol. This would explicitly showcase key species-level data, supporting relevant policy-related processes (e.g. species recovery plans).
Q11	The adoption of SMART ecosystem targets - specific, measurable, achievable, relevant, and time-bound - becomes possible when underpinned by a complete impact inventory, well-defined measurement methodologies, and comprehensive accounting records. Such targets would include clear temporal and spatial baselines per ecosystem quantified in state-adjusted surface area, meaningful mitigation measures, and explicit timeframes covering the various steps of the mitigation hierarchy.
Q12	A complete impact inventory, well-defined measurement methodologies, and comprehensive accounting records lay the groundwork for setting SMART material species targets. These targets would encompass clear temporal and spatial baselines per material species, quantified through population or habitat-based metrics, alongside meaningful mitigation measures and defined timeframes across each step of the mitigation hierarchy. The IUCN provides valuable guidance. Where national or regional species recovery plans exist, targets should align with or reference these to ensure coherence with broader conservation objectives. See practical guidance in Stephenson & Carbone (2021).
Q13	A GIS database would be essential for maintaining comprehensive records that allow all impact data to be traced back to a specific site. A GIS-based spatial data infrastructure is essential for maintaining the chain of custody from raw field data to reported figures. This spatiotemporal traceability underpins third-party verification and is a prerequisite for any future assurance requirements under CSRD or equivalent regimes.
Q14	Explicit confidence information should be attached to all methods, sources of data, and output results. Where this is absent, the methods and data in question should be scrutinised and potentially replaced with more reliable alternatives. Confidence reporting does not have to be onerous. For instance, we developed a simple "acceptable to best continuum" table for both data sources and individual data characteristics (Teren et al. 2026).

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ACRONYMS AND GLOSSARY

List of Acronyms

Abbreviation	Definition
BBOP	Business and Biodiversity Offsets Programme
BD Protocol	Biological Diversity Protocol
CAC 40	Cotation Assistée en Continu 40 (Euronext Paris)
CO₂e	Carbon dioxide equivalent
CSRD	Corporate Sustainability Reporting Directive
eDNA	Environmental DNA
EFRAG	European Financial Reporting Advisory Group
ESRS	European Sustainability Reporting Standards
ESRS E4	ESRS E4 — Biodiversity and Ecosystems
FTSE 100	Financial Times Stock Exchange 100 Index
GBF	Global Biodiversity Framework (Kunming-Montreal)
GBIF	Global Biodiversity Information Facility
GET	Global Ecosystem Typology (IUCN)
GHG	Greenhouse Gas
GIS	Geographic Information System
GRI	Global Reporting Initiative
ha eq.	Hectare equivalents
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IUCN	International Union for Conservation of Nature
LEAP	Locate, Evaluate, Assess, Prepare (TNFD Framework)
MESA	Manual Ecosystem State Assessment (see Teren <i>et al.</i> , 2026).
MSA	Mean Species Abundance
NBF	Negative Biodiversity Footprint
PBF	Positive Biodiversity Footprint
QGIS	Quantum GIS (open-source)
S&P 500	Standard & Poor's 500 Index
SBTN	Science Based Targets Network
SEEA EA	System of Environmental-Economic Accounting — Ecosystem Accounting (UN)
SMART	Specific, Measurable, Achievable, Relevant, Time-bound
TBF	Total Biodiversity Footprint
tCO₂e	Tonnes of carbon dioxide equivalent
TNFD	Taskforce on Nature-related Financial Disclosures
WRI	World Resources Institute
WWF	World Wildlife Fund

Glossary

Term	Definition
Biodiversity footprint	The total impact of an organisation on biodiversity, comprising a Positive Biodiversity Footprint (PBF) and a Negative Biodiversity Footprint (NBF).
Biodiversity impact	A change in the state of biodiversity caused by business activity, which can be positive or negative.
Biological Diversity Protocol (BD Protocol)	The first standardised accounting framework enabling any organisation to identify, measure, record, compile and disclose its biodiversity impacts on ecosystems and material species.
Condition-adjusted surface area	A measurement framework combining physical area with a measure of ecosystem condition compared to the reference state, expressed as hectare equivalents.
Ecological equivalency	The principle that only the same types of ecosystems or species can be compared within a net impact assessment (like-for-like).
Ecosystem	A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.
Ecosystem services	The contributions that ecosystems make to human well-being, distinct from the goods and benefits people subsequently derive from them.
Ecosystem state	The overall condition of an ecosystem at a given point in time, encompassing its composition, structure and function.
Ecosystem type	A classification of ecosystems (non-anthropogenic) defined at global or sub-global level, preferably reported at sub-global level 6 (IUCN GET).
Habitat	The resources and conditions present in an area that produce occupancy, survival and reproduction by a given organism.
Hectare equivalents (ha eq.)	The generic metric of ecosystem state: surface area (extent) adjusted for condition/integrity.
Land use	The human use of a specific area for a certain purpose, influenced by but not synonymous with land cover.
Material species	Taxa important to internal and/or external stakeholders whose consideration has the potential to alter decision-making.
Materiality	The significance of nature-related issues to business decision-making; may be single, double, societal or dynamic.
Minimum viable population	A lower bound on the population of a species such that it can survive in the wild.
Mitigation hierarchy	The sequence of actions: avoid, minimise, restore/rehabilitate, and offset residual impacts on biodiversity.
Natural capital	The stock of renewable and non-renewable natural resources that yield a flow of benefits to people.
Nature	The natural world, with emphasis on the diversity of living organisms and their interactions with their environment.
Net Gain	A target for development projects in which the impacts on biodiversity are outweighed by measures taken to avoid, minimise, restore and offset.
Statement of Performance	A report of periodic changes (gains and losses) in biodiversity state over a defined reporting period, analogous to a profit and loss statement.
Statement of Position	A report of accumulated biodiversity state at a given date, analogous to a balance sheet.
Validation	Internal or external processes to check the quality of an assessment, including technical credibility and appropriateness of assumptions.
Verification	Independent expert review to check that assessment documentation is complete, accurate and representative.

ANNEX 1: COMPANIES ASSESSED

#	CAC 40	Sector	#	FTSE 100	Sector	#	S&P 500	Sector
1	LVMH	Consumer Discretionary	1	AstraZeneca	Healthcare	1	Nvidia	Technology
2	Schneider Electric	Industrials	2	HSBC Holdings	Financials	2	Alphabet (Google)	Comms
3	Airbus	Industrials	3	Shell	Energy	3	Apple	Technology
4	TotalEnergies	Energy	4	Unilever	Consumer Staples	4	Microsoft	Technology
5	Sanofi	Healthcare	5	Rolls-Royce Holdings	Industrials	5	Amazon	Consumer Discretionary
6	Safran	Industrials	6	Rio Tinto	Basic Materials	6	Broadcom	Technology
7	Air Liquide	Basic Materials	7	British American Tobacco	Consumer Staples	7	Meta Platforms	Comms
8	L'Oréal	Consumer Discretionary	8	GlaxoSmithKline	Healthcare	8	Tesla	Consumer Discretionary
9	EssilorLuxottica	Healthcare	9	BP	Energy	9	Berkshire Hathaway	Financials
10	BNP Paribas	Financials	10	Barclays	Financials	10	Eli Lilly	Healthcare
11	AXA	Financials	11	Lloyds Banking Group	Financials	11	JPMorgan Chase	Financials
12	Hermès International	Consumer Discretionary	12	National Grid	Utilities	12	Visa	Financials
13	Vinci	Industrials	13	RELX	Comms	13	UnitedHealth Group	Healthcare
14	Danone	Consumer Staples	14	NatWest Group	Financials	14	Walmart	Consumer Staples
15	Société Générale	Financials	15	BAE Systems	Industrials	15	Costco	Consumer Staples
16	Engie	Utilities	16	Glencore	Basic Materials	16	Mastercard	Financials
17	Saint-Gobain	Industrials	17	London Stock Exchange Grp	Financials	17	Netflix	Comms
18	Legrand	Industrials	18	Standard Chartered	Financials	18	Procter & Gamble	Consumer Staples
19	Thales	Industrials	19	Reckitt Benckiser	Consumer Staples	19	Johnson & Johnson	Healthcare
20	Crédit Agricole	Financials	20	Compass Group	Consumer Discretionary	20	Home Depot	Consumer Discretionary
21	Publicis Groupe	Comms	21	Diageo	Consumer Staples	21	Abbott Laboratories	Healthcare
22	Dassault Systèmes	Technology	22	Anglo American	Basic Materials	22	Salesforce	Technology
23	Bureau Veritas	Industrials	23	3i Group	Financials	23	ExxonMobil	Energy
24	Pernod Ricard	Consumer Staples	24	Ashtead Group	Industrials	24	Bank of America	Financials
25	Michelin	Consumer Discretionary	25	Legal & General	Financials	25	Oracle	Technology
26	Capgemini	Technology	26	Aviva	Financials	26	Palantir Technologies	Technology
27	Bouygues	Industrials	27	Experian	Industrials	27	AMD	Technology
28	Kering	Consumer Discretionary	28	Prudential	Financials	28	Chevron	Energy
29	Veolia Environnement	Utilities	29	Tesco	Consumer Staples	29	AbbVie	Healthcare
30	Orange	Comms	30	SSE	Utilities	30	Adobe	Technology
31	Carrefour	Consumer Staples	31	InterContinental Hotels	Consumer Discretionary	31	Merck & Co.	Healthcare
32	ArcelorMittal	Basic Materials	32	Smith & Nephew	Healthcare	32	Coca-Cola	Consumer Staples
33	STMicroelectronics	Technology	33	Vodafone Group	Comms	33	PepsiCo	Consumer Staples
34	Eurofins Scientific	Healthcare	34	Imperial Brands	Consumer Staples	34	ServiceNow	Technology
35	Accor	Consumer Discretionary	35	Admiral Group	Financials	35	Thermo Fisher Scientific	Healthcare
36	Eiffage	Industrials	36	WPP	Comms	36	T-Mobile US	Comms
37	Stellantis	Consumer Discretionary	37	Sainsbury's (J)	Consumer Staples	37	Goldman Sachs	Financials
38	Euronext	Financials	38	Mondi	Basic Materials	38	Morgan Stanley	Financials
39	Renault	Consumer Discretionary	39	Centrica	Utilities	39	Linde	Basic Materials
40	Unibail-Rodamco-Westfield	Real Estate	40	Associated British Foods	Consumer Staples	40	Accenture	Technology

ANNEX 2: GUIDING CRITERIA FOR SCORING

Table 2. Guiding criteria used for scoring each question. BD maximum score = 28, GHG maximum score = 14.

Biodiversity Questions

Q	Theme	Question	Guidance for scoring
1	Impact Inventory	Does the company clearly state which ecosystems its operations are impacting?	A structured list of all impacted ecosystems classified using a recognised ecosystem typology (e.g. IUCN Global Ecosystem Typology). Land-use categories are not accepted as a substitute for ecosystem classification.
2	Impact Inventory	Does the company clearly state which species, impacted by its operations, are material?	A structured list of material species, grouped by threat status (e.g. IUCN Red List category) and accompanied by a documented rationale for why each species is considered material.
3	Impact Measurement	Are the location and extent of impacted ecosystems disclosed and dated?	The location and surface area of each impacted ecosystem are quantified and mapped using GIS coordinates, with the date of the assessment disclosed.
4	Impact Measurement	Is the state of impacted ecosystems disclosed?	Surface area adjusted for ecosystem state or condition, expressed in equivalent-area metrics such as hectare equivalents (ha eq.) or mean species abundance per km ² .
5	Impact Measurement	Are the impacts on the populations or habitats of material species disclosed?	Population metrics (e.g. number of breeding pairs or mature individuals) or habitat metrics (e.g. surface area adjusted for habitat suitability) disclosed for each material species.
6	Accounting Framework	Is the ecological equivalency principle applied when comparing gains and losses?	The company states explicitly that gains and losses are compared only within the same ecosystem type, or within the same material species, and discloses the methodology used.
7	Accounting Framework	Is there a statement of performance for ecosystems?	Losses and gains reported per ecosystem type over a clearly defined reporting period.
8	Accounting Framework	Is there a statement of position for ecosystems?	Total Biodiversity Footprint, Positive Biodiversity Footprints and Negative Biodiversity Footprints for each ecosystem type and company as a whole at a given date.
9	Accounting Framework	Are there statements of performance for material species?	Losses and gains reported per material species over a clearly defined reporting period.
10	Accounting Framework	Are there statements of position for material species?	Total, Positive and Negative Biodiversity Footprints disclosed for each material species, at a specified reporting date.
11	Targets	Are there SMART targets for ecosystems?	Targets meeting all five SMART criteria with clear temporal and spatial baselines for each ecosystem, meaningful mitigation measures, and explicit timeframes covering each step of the mitigation hierarchy.
12	Targets	Are there SMART targets for material species?	Targets meeting all five SMART criteria with clear temporal and spatial baselines for each material species, meaningful mitigation measures, and explicit timeframes covering each step of the mitigation hierarchy.
13	Audit Trail	Can results be traced back to a specific site and date?	Comprehensive records maintained in a GIS database that allow each impact data point to be traced back to a specific site and date.
14	Audit Trail	Is confidence/accuracy information disclosed about impacts?	Confidence or accuracy information disclosed for both input data and output results (e.g. uncertainty ranges, data-quality scores or assurance ratings).

GHG Questions

Q	Theme	Question	Guidance for scoring
1	Impact Inventory	Does the company clearly state its impact inventory per scope?	A structured list of emission sources broken down by scope (1, 2 and 3) and geographical area, using a recognised classification typology (e.g. GHG Protocol categories).
2	Impact Measurement	Are all GHG emissions disclosed per scope?	Emissions reported in tonnes of CO ₂ -equivalent (tCO ₂ e) for each scope, quantified using appropriate source-measurement approaches and emission factors.
3	Accounting Framework	Is there a statement of performance for GHG emissions?	Net emissions disclosed for the reporting period, calculated as gross emissions minus reductions and removals over the same period.
4	Accounting Framework	Is there a statement of position for GHG emissions?	Cumulative net emissions disclosed as at the reporting date, calculated as total accumulated emissions minus total accumulated reductions and removals.
5	Targets	Are there SMART targets for each scope?	Emissions-reduction or net-zero targets set for each scope, meeting all five SMART criteria (Specific, Measurable, Achievable, Relevant and Time-bound).
6	Audit Trail	Can results be traced back to a specific emission source and date?	Comprehensive records that allow each emissions figure to be traced back to a specific source and date, supported by third-party assurance.
7	Audit Trail	Is confidence / accuracy information disclosed about impacts?	Confidence or accuracy information disclosed for both input data and output results, supported by third-party assurance over process and data.



About The Biodiversity Footprint Company

The Biodiversity Footprint Company is a specialist biodiversity accounting and strategy consultancy focused on helping businesses measure, understand, and manage their impacts on nature. Our work combines scientific rigour with practical implementation, supporting organisations to develop quality biodiversity footprints, measurement and disclosure approaches, monitoring systems, and auditable biodiversity strategies

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