



Introduction

In 2022 The Pentland Centre for Sustainability in Business at Lancaster University published a [Navigation Guide on Reporting on Nature](#). It assessed 20 high profile companies across all the major corporate sectors that are dependent upon or impact nature and biodiversity. The intent was to help guide corporate executives active in the topic, by signposting best practice as well as issues for further study. Building on this, we are issuing a new 2023 Navigation Guide, again intended to highlight high level themes that need to be addressed and which have emerged over the last year.

Our 2023 Navigation Guide assessed 24 companies (see Appendix 1), selected for their leading position in sustainability. Our findings are consistent with wider studies such as carried out by the [World Benchmarking Alliance](#) and a recent [academic paper on ecosystem restoration](#).

The Review

We assessed 24 major global and UK businesses that are dependent upon or impact nature and biodiversity. Industry sectors included are mining, oil and gas, agricultural suppliers, food manufacturers, clothing, forest products, utilities, and land managers. We surveyed their 2022 annual financial and sustainability reports (sometimes combined) as well as websites for discussion and disclosure on nature & biodiversity. We looked specifically at:

- Dependencies: the maturity of understanding and discussion on resilience.
- Impacts: analysis of the [IPBES 5 drivers](#), baselines and monitoring and evaluation indicators.
- Risks and Opportunities: the maturity of discussion and quantification.
- Interconnectedness of issues: the maturity of understanding across climate, biodiversity and water.
- Commitments: ambition levels, and at what level set (corporate, landscape, site, brand).
- Frameworks focusing on guiding reporting: Science Based Targets for Nature (SBTN), Taskforce for Nature related Financial Disclosures (TNFD), Global Reporting Initiative (GRI).
- Actions: action level (be it landscape, site, context specific) and the use of offsets and biodiversity markets.

Key Findings

General

- Only a few companies consider biodiversity as a standalone issue, with most integrating or linking it with climate, water and in one case inequality.
- For most companies there is a disconnect between the expression of overall approaches (via policies, programmes, commitments and explanations), and the formal reporting. The latter appears to be constrained either by adherence to the GRI reporting framework (this is due to change imminently), or a lack of a coherent corporate target (beyond an ambition statement). In many cases, high level proxy indicators such as certification are used which reflect nature impacts with only a fraction of the approach described.

- Water related disclosures (water stressed areas, pollution, free flowing rivers) features repeatedly throughout the reports.
- Whilst plenty of companies commit to projects and action, it is not always clear how they are connected to the business dependencies or impacts or the described overall strategy.

Dependencies

- As observed in last year's Navigation Guide (p. 2) Forest products companies demonstrate the best understanding of their dependency upon nature and biodiversity. Very few others do (an exception being Iberdrola). Few food companies discuss their dependency beyond a few general references to pollination.
- The only discussion of resilience by some of the company cohort references the importance of nature to build climate resilience. Related to this is a poor disclosure on the impacts that companies have upon biodiversity. Only Iberdrola has a comprehensive discussion of the 5 IPBES drivers.
- Whilst many companies rely upon GRI for indicators, there is a trend to the development of proprietary indicators and baselines.
- There is virtually no disclosure or discussion of *risks*, beyond reputational risks associated with negative impacts that a company's operations may produce. Iberdrola has a comprehensive discussion of risk through the project cycle, but biodiversity is not included in the financial risk disclosure. The forest companies are the only ones to include biodiversity in the financial risk disclosure. With the exception of Bayer, there is little or no discussion of the impact that their product portfolio or business model has upon biodiversity. Some oil companies have GRI reporting on their production sites, but make no reference to their large-scale land usage for biofuel production.
- Consequently, there is no disclosure on biodiversity risk in quantitative terms.
- About half of the companies see biodiversity as providing an *opportunity* – for brand development, through products to lower/address risks, for climate mitigation or carbon credits. UPM and StoraEnso are building their corporate strategy around offering bio-based alternatives to fossil fuels. Rio Tinto have set up a unit to commercialise bio-based carbon credits. Quantification is limited – in some cases being the number of brands using biodiversity in their brand development.

Commitments

- These vary between different sectors. Mining, oil and gas and utilities tend towards a 'biodiversity positive' or 'net positive' ambition. Food companies with a larger land footprint are preferring a 'protect and regenerate' or 'protect and restore' framing. Forest companies are divided, using language ranging from 'safeguarding' to 'enhancing' or 'net

positive'. One major company only aspires to reduce environmental impacts of its products.

Actions

- Actions are variously reported as being carried out at site level (mine, farm), landscape or according to country/land use type. Other companies in the review sample rely upon value chain interventions, and particularly certification scheme requirements. Food companies are all united in focusing upon regenerative agriculture, though this seems to be more focussed upon climate than biodiversity. It is not clear that the outcomes of this approach are sufficiently orientated at reducing biodiversity impacts and building resilience to biodiversity threats.
- None of the companies reviewed referenced national biodiversity action plans in relation to their projects and interventions on the ground, nor their policy work. It is not clear therefore whether their actions are aligned with government priorities or not.

Discussion

The corporate sector continues to evolve its approach to biodiversity: progress is being made, both in actions 'on the ground' and disclosures about them. For some companies, biodiversity performance is being incorporated into executive remuneration. Nevertheless, we are still trying to digest if the progress is 'walking the talk' or 'talking the walk'.

There is plenty of talk in annual reports, and sustainability sections of websites as well as public activity and platforms active in promoting nature and biodiversity. '[Business for Nature](#)' which comprises 85 partner organisations, and hundreds of companies, has elaborated a well bought into 'business case' for nature:

*"Nature underpins our prosperity and wellbeing by providing economic value and security, supporting human development and equality, and increasing our resilience to climate change."*¹

And yet, there is a reluctance in most companies' reports to follow this through and disclose details of their approach that demonstrates an understanding of dependency, impact and status of biodiversity (both within corporate value chains and the broader context within which the business operates). The majority of companies jump from a boilerplate statement on nature and/or biodiversity into a description of actions underway which raises questions as to the relevance and significance of the actions.

There are multiple reasons why this may be the case:

1. ["Greenhushing": the concept popularised by SouthPole on climate](#). Greenhushing is the opposite of Greenwashing. SouthPole found that Companies are setting demanding targets, but not publicising them beyond what is mandatory. The reasons can be fear of failure, fear of scrutiny and fear of litigation. Certainly, there is a communications risk around disclosure when a company is the first in their sector to do so. The prevalence of a wide range of detailed sourcing data (suppliers and mill locations) and seabed status data

¹ <https://www.businessfornature.org/businesscase>, accessed 23 Oct 2023

(for seafood companies) suggests that meaningful disclosure does actually follow scrutiny and legislation, and further suggests that there is not currently enough of either.

2. Lack of guidance and knowledge: At the high level, there is certainly plenty of straightforward guidance on biodiversity, starting with the IPBES drivers: pollution; land use change; invasive species; climate change; and unsustainable resource use.

The Taskforce on Nature-related Financial Disclosures has also developed a series of reports highlighting key physical, transitional and systemic risks. It has also developed disclosure frameworks for different sectors (appendix 2).

The frameworks exist, so if the reason for not doing so is not greenhushing, perhaps it's the difficulty of assessing the materiality of the dependency or impact, or lack of consensus on the state of biodiversity in actual landscapes and sourcing locations. This opens up the need for more knowledge generation. Some companies are partnering with research institutes/universities to increase their knowledge on topics and develop monitoring frameworks. However, this raises the question of whether undertaking further studies is a mechanism for delaying action, or whether it's better to start somewhere and build a baseline.

3. Reporting frameworks are holding progress back: A 2023 [Science paper](#) based upon an analysis of the sustainability reports from 100 of the world's largest corporations, revealed that two-thirds of these companies state that they carry out various forms of restoration. It found that "across all sectors there is a marked lack of rigor in defining restoration, outlining methods, and quantifying outcomes". The authors conclude that "Put simply, the evidence base supporting large corporations' claims about ecosystem restoration is wholly insufficient." And that "International guidelines (such as GRI, SBTN, and TNFD) must provide a new framework for restoration activities that are additional voluntary contributions."

With high profile rankings based upon guidelines such as GRI there is little incentive for companies to report rigorously beyond standards specifications. For the few companies that are developing their own proprietary indicators and baselines, this will allow more relevant context-based reporting, and is to be welcomed. However, it will make comparisons across companies difficult, which is clearly a dilemma.

4. The global scale of reporting on nature and biodiversity: collecting, collating and interpreting site- and landscape level-data into a format that demonstrates that progress is being made against a global ambition for global companies is a challenge that will take time to execute. The best companies at this have a 10+ year track record and unwavering commitment, but for others the scale of the work needed could be off-putting. Increasing use of technology (satellite monitoring, eDNA & AI based detection) for species monitoring, and open-source data disclosure are being pioneered and will surely be needed.
5. Scientists have got it wrong: Perhaps biodiversity is not material for most companies, and all they need to do is manage public perception. Despite the countless articles highlighting

the consequences of biodiversity loss, there are few that have explained what these mean in terms of financial impacts on companies. Business' understanding of the issues around biodiversity is arguably 10 years behind climate change - the issue is accepted, but the view is that the problem will hit us in the medium to long term. It was only with the advent of TCFD that companies started building digital twins to analyse the financial impacts of climate change on business operations, and it is only very recently that people saw that climate change is an issue now, not in 2050. For biodiversity to 'fast forward' to the same point we need observational and scientific evidence of consequences and impacts.

Recommendations

Companies

1. Make clearer and better quality links between the statements of ambition on biodiversity and details of actions, to allow an understanding of the importance, intended nature outcomes and business relevance.
2. Provide more disclosure on biodiversity risks, the ecological status of, dependencies and operational impacts upon sourcing locations.
3. Develop more sophisticated relevant measures of global progress beyond the current limited proxy indicators. These are likely to be company specific yet with enough detail to allow external scrutiny.

Academia

1. Provide assessments of the biodiversity status of different landscapes/regions that can form the basis of corporate assessments and intervention (and reporting on a regional basis).
2. Quantify in financial terms biodiversity risks, dependencies and impacts for different business sectors.
3. Help companies build up coherent progress reporting based upon landscape and value chain data.
4. Fast-track the development of reporting frameworks that focus upon 'materiality for nature' rather than 'materiality for the company'.

Appendix 1

Links are provided to the main websites for each company, from which you can navigate to their 2022 sustainability reports/biodiversity disclosures. **NB: Following the release of our 2024 update, this document will no longer be updated and the links below are provided for reference only. The 2024 Navigation Guide can be found [on our website](#).**

Anglo-American

- <https://www.angloamerican.com/>

Associated British Foods

- <https://www.abf.co.uk/>

Bayer

- <https://www.bayer.com/>

Cargill

- <https://www.cargill.com/>

Crown Estate

- <https://www.thecrownestate.co.uk/>

Danone

- <https://www.danone.com/>

DSM-Firmenich

- <https://www.dsm.com/corporate/home.html>

Eni

- <https://www.eni.com/>

Equinor

- <https://www.equinor.com/>

Forestry Commission

- <https://www.forestryengland.uk/>

H&M Group

- <https://hmgroupp.com/>

Holcim

- <https://www.holcim.com/>

Iberdrola

- <https://www.iberdrola.com/home>

Mondi

- <https://www.mondigroup.com/>

MOWI

- <https://mowi.com/>

Nestlé

- <https://www.nestle.com/>

Network Rail

- <https://www.networkrail.co.uk/>

PepsiCo

- <https://www.pepsico.com/>

Rio Tinto

- <https://www.riotinto.com/>

Shell

- <https://www.shell.com/>

StoraEnso

- <https://www.storaenso.com/>

Syngenta

- <https://www.syngenta.com/>

Unilever

- <https://www.unilever.com/>

UPM

- <https://www.upm.com/>

Appendix 2

A TNFD discussion paper on proposed sector disclosure metrics is available [here](#).

Summary of Very High categories

Food & Agriculture

Impacts: Terrestrial & Freshwater Ecosystem use, Water use

Dependencies: Ground & surface water (flow, quality), pollination, soil quality, climate regulation, disease control, flood & storm protection, erosion control, pest control

TNFD Activity Drivers for intensive land use: Conversion of land for farming, plantations; Intensification of ag/forestry production; Fertiliser & Pesticide application; Tillage/removal of organic matter; Excessive irrigation

Mining & Metals

Impacts: Water use, Terrestrial Ecosystem use

Dependencies: none

Oil & Gas

Impacts: Water use

Dependencies: none

Power & Utilities

Impacts (solar, power transmission/distribution): Terrestrial Ecosystem Use, Water use

Dependencies (wind, solar, hydropower, power transmission/distribution): climate regulation, surface water, flow maintenance, flood/storm protection

The Pentland Centre continues to investigate this area of work. For more information, please contact:

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