

## Introduction and Context

Biodiversity is now seen as material by most companies, included in their materiality analysis and (for some) in the risk section of the annual report. Based upon announcements made, we can expect a significant increase in the scope and sophistication of reporting on biodiversity in the 2022 reporting cycle from January 2023 onwards. But where are we now? Three years ago the [IPBES report on biodiversity](#) set out the status of biodiversity and ecosystem services and a year ago the [DasGupta Review](#) detailed the economics of biodiversity. Together they delivered unprecedented insights and analysis of relevance for companies.

Just a few business sectors have the largest dependency and/or impact upon nature and biodiversity: Mining, Oil & Gas, Animal Nutrition & Pharmaceuticals, Agrochemicals, Seafood, Food, Fashion/Clothing, Forestry, Utilities & Land Management. Following the 2021 reporting cycle, the Pentland Centre for Sustainability in Business at Lancaster University analysed 20 high profile companies (See Annex 1) across these sectors to understand the state of play on reporting upon nature and biodiversity, and in particular what is best practice.

It is not our intention to design a new reporting standard – there are several of these already (e.g. GRI, WBA), and important progress is being made by TNFD. But progress is unlikely to be smooth. [We have previously argued](#) that the ESG framing that has characterised corporate approaches to climate change will need to evolve and develop a different dynamic to address nature and biodiversity. Companies, and investors in turn, will need to shift back more towards a sustainability framing to authentically demonstrate progress and performance on nature and biodiversity. This is due to the inherent complexity, spatially relevant and culturally imbued features of nature and biodiversity.

We intend therefore -- over the next few annual corporate reporting cycles -- to shed light on this process, by detailing progress, best practice and leading approaches on nature and biodiversity reporting. In assessing what is best practice, we have kept in mind that the intent of reporting is to provide meaningful information for investors, consumers, academics and civil society organisations. These groups firstly need to assess how a company understands its dependency and impacts upon nature, and secondly whether the actions being taken are commensurate with that dependency and impact. For the company, a deep understanding of its dependency and impacts should feed into the business strategy and corporate operations, better outcomes for the planet, society and investors.

Clearly, a set of indicators is only one aspect of demonstrating that understanding. Especially for biodiversity and nature where context is important. We therefore looked not only at the disclosures that meet current standards, but also evidence of that understanding – the qualitative information that complements the quantitative.

This Navigation Guide is just that – designed to help guide corporate executives (enterprise risk management, sustainability and ESG teams), asset managers, insurance sector, accountants, regulators, industry platforms and academics active in this topic. It is not intended as a critique of the reporting of the individual companies studied, though we do highlight a few themes that will need to be addressed at a broad level by all concerned. Rather it is intended to signpost best practice as well as issues for further study.

## Findings on Best Practice

### Demonstrating an Understanding of Dependency and Risk

A majority of those companies studied include biodiversity in their materiality assessment. Some also reference nature, though there is little to indicate an understanding of the differences. Mondi refers to ecosystem stewardship and ecological networks, indicating a high level of sophistication in understanding on the topic. The other forest companies, StoraEnso and UPM also demonstrate a good understanding, with landscape level approaches as well as detailed species indicators. This is perhaps understandable given the long-term focus on the sector due to debates on forest certification, as well as the clear foundation upon which the companies are built.

For most companies however, the importance of biodiversity, as reflected in their materiality assessment, is mostly modest. One company even explicitly states that biodiversity is 'not a principle risk'. That may be an internal view, but its peer group report the contrary.

Historically, corporate reporting on biodiversity has been guided by GRI, land defined largely as operational proximity to protected areas, and areas of high conservation value. Only a few companies report to GRI standards comprehensively. Holcim, Mondi, StoraEnso and UPM have the best reporting, covering all four aspects. However, companies report on this in isolation, with no easily understandable operational response.

A few companies mention biodiversity or environment in the risk section of the annual report, almost all in terms of the reputational risk. Associated British Foods provides the current best practice, framing their risk section in terms of use of natural resources as well as environmental impact.

We found no example of best practice when considering the five drivers of biodiversity loss identified by IPBES. Whilst most companies (though not all) reference climate change and make the connection to biodiversity, and a few (implicitly) refer to pollution, there is little reference to invasive alien species (only covered by Rio Tinto, StoraEnso and UPM). None refer to the direct exploitation/harvesting of wild species and only a few make passing reference to changes in land use (Bayer & Syngenta).

### Demonstrating Actions

At the corporate level there are few examples of a commitment or strategy that can be considered 'global', though some companies are well advanced. One standout example is Syngenta that has committed to enhancing biodiversity and soil health on three million hectares of farmland. This work has been in place for several years now and is well advanced in execution. The Syngenta approach is notable as, rather than waiting for an industry consensus on how to address biodiversity, a simple but effective strategy was defined and executed company-wide. The outcomes are now in place, and some early monitoring of impact has been undertaken.

The forest companies reviewed are also well developed on thinking about and developing actions on biodiversity – principally in their managed/owned forests. In all cases they have developed different and appropriate approaches for their plantation estate vs the semi-natural forests that they source from. For example, at UPM clear outcome level indicators exist for biodiversity, such as deadwood in forests. In other cases, companies use leading indicators such as certification standards eg FSC and MSC. The challenge is to convert these into insights on impact.

Monitoring of impact is underway, with Syngenta, MOWI, Unilever, Mondi, StoraEnso and UPM all assessing status and progress. The UK Forestry Commission (a non-ministerial Government department) has an impressive natural capital accounts section in its reporting.

Site-level biodiversity plans across all operations are also a feature of mining companies, with Holcim in particular having a long history of both management and rehabilitation. One exciting approach which is both site-specific but landscape level is Network Rail (a UK Government owned, 'arms-length' private company). It has produced a biodiversity action plan that is a description of the environmental assets and biodiversity in the 32,000km of track. This includes an assessment of land 1km each side of the track, allowing it to develop detailed action plans that are context specific and take into account connectivity into the landscape.

There is a low level of maturity by the companies assessed in terms of their thinking of biodiversity beyond a risk factor. UPM comes closest to using biodiversity as a foundation for its business, but does not embed this in the corporate DNA, such as its financial risk report. Holcim is unique in highlighting products to enhance biodiversity. Other companies do occasionally use biodiversity as part of their branding (e.g. Nestlé), though this does not appear to be corporate-wide.

## **Commentary**

TNFD and Science Based Targets are now adding new perspectives to biodiversity reporting. The 2022 reporting cycle (in early 2023), is expected to be influenced by new guidance provided by TNFD, SBTN and other bodies. We can expect biodiversity, which currently sits somewhere in the middle-to-low ranking in materiality analyses to be elevated in importance. This will require a close examination by companies, of the following aspects.

### **Biodiversity and Climate**

Notwithstanding the importance of climate change, it is clear that the focus on climate is crowding out a necessary emphasis on biodiversity.

The impression given by current reports is that biodiversity is primarily a reputational issue. Climate almost always leads any discussion in sustainability reports, and whilst many companies have made the double materiality case for why climate is important to them, they have not done so for biodiversity.

And yet for some companies, a focus on nature and biodiversity would make more sense. Whilst climate is one of the drivers of biodiversity loss, there are other pressures on biodiversity to also take into account. For companies dependent upon nature, a coherent nature strategy would, as a consequence, deliver upon climate. By contrast, a climate strategy may not necessarily deliver upon biodiversity. Which suggests that they should use biodiversity as the primary lens through which to view their business.

### **Global Goals?**

A second reckoning will be if and how global goals on nature and biodiversity can be set. For several years there has been the search for "the 1.5 degrees equivalent" for nature. Science based targets are set to influence future thinking on biodiversity. The desire to frame nature and biodiversity as a global-level goal maybe however be counterproductive. Early attempts are not promising: one company states its desire to 'reduce environmental impact ...by 30%'.

'Net positive' crops up frequently as a global ambition, though it is also explained in general terms such as "reduce impact, and protect and restore". Cross-comparisons are almost impossible. There is also a recognition that achieving net positive "may take time".

To be meaningful, corporate targets and actions will need to demonstrate that corporate actions are commensurate with the challenge. As the forest and mining companies, and Network Rail show, actions need to be ground-up and based upon the context. This will not help those asset managers funds expecting a tick-box answer.

### **Science and Traditional Knowledge**

Will interventions on the ground be based upon a top-down 'recipe' of science-based actions, or be built upon accumulated local/traditional knowledge that is specific to each site? Alternative knowledge systems do not currently feature in the thinking of companies. Rio Tinto is committed to hiring more staff from indigenous communities, which will no doubt influence internal thinking and practices. It will be interesting to see how this is reflected in their approach to nature and biodiversity. For food companies committed to regenerative agriculture, indigenous and local knowledge should also be a significant consideration.

### **Data Sources**

This short exercise has highlighted that there may be better ways to understand the dependencies, impacts and strategies of companies regarding biodiversity. Corporate reporting is variable and lacking, as Equilibrium Research found out in their [recent research](#) of almost 2000 companies for a European pension fund. Web searches and interviews are a rich source of information. What do procurement disclosures, corporate public relations, together with unstructured data, already tell us about corporate footprints and responses? The future of corporate reporting on nature and biodiversity may actually, already be out there.

The Pentland Centre will provide a new Navigation Guide on the 2022 reporting cycle in mid 2023. In the meantime it is investigating and researching the following topics that arise from this initial work:

- What do financial accounts, business scope and publicly available procurement information already tell us about a company's dependency and impact upon biodiversity?
- Science and traditional/inter-generational knowledge as different ways in which we can understand our relationship with nature and biodiversity.
- How scenario planning can help companies develop a deeper understanding of the consequences of biodiversity loss for corporate operations.

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## Annex 1

Companies Assessed, and links to key documents provided. Website content also reviewed

Research undertaken July & August 2022. **NB: Following the release of our 2023 update, this document will no longer be updated and the links below are provided for reference only. The 2023 Navigation Guide can be found [on our website](#).**

### Anglo-American

- <https://www.angloamerican.com/~media/Files/A/Anglo-American-Group/PLC/investors/annual-reporting/2022/aa-annual-report-full-2021.pdf>
- <https://www.angloamerican.com/sustainability/environment>
- <https://www.angloamerican.com/~media/Files/A/Anglo-American-Group/PLC/investors/annual-reporting/2022/aa-sustainability-report-full-2021.pdf>

### Associated British Foods

- <https://www.abf.co.uk/content/dam/abf/corporate/Documents/investors/annual-and-interim-reports/ar2021.pdf.downloadasset.pdf>
- <https://www.abf.co.uk/responsibility/reports>

### Bayer

- <https://www.bayer.com/sites/default/files/2022-03/Bayer-Sustainability-Report-2021.pdf>

### Cargill

- <https://www.cargill.com/doc/1432194192294/2021-cargill-annual-report.pdf>
- <https://www.cargill.com/doc/1432142299705/cargill-sustainable-shipping-2019.pdf>
- <https://www.cargill.com/doc/1432142322239/cargill-aqua-nutrition-sustainability-report.pdf>

### Crown Estates

- [https://www.thecrownestate.co.uk/media/4123/the-crown-estate\\_annual-report\\_2021-22.pdf](https://www.thecrownestate.co.uk/media/4123/the-crown-estate_annual-report_2021-22.pdf)
- [https://www.thecrownestate.co.uk/media/4141/tce\\_environmental\\_social\\_supplement\\_2022\\_linked\\_final.pdf](https://www.thecrownestate.co.uk/media/4141/tce_environmental_social_supplement_2022_linked_final.pdf)

### DSM

- <https://annualreport.dsm.com/ar2021/report-by-the-managing-board/planet/nature-biodiversity.html>
- [https://www.dsm.com/content/dam/dsm/corporate/en\\_US/documents/position-paper-biodiversity.pdf](https://www.dsm.com/content/dam/dsm/corporate/en_US/documents/position-paper-biodiversity.pdf)

## Eni

- <https://www.eni.com/assets/documents/eng/just-transition/2020/Eni-for-2020-eng.pdf>
- <https://www.eni.com/assets/documents/eng/reports/2021/Annual-Report-2021.pdf>
- <https://www.eni.com/assets/documents/eng/reports/2021/DNF-annual-report-2021-eng.pdf>

## Equinor

- <https://cdn.sanity.io/files/h61q9gi9/global/662cd9720f8ba28172f86e2eaf90d5a6590df3b3.pdf?biodiversity-position-equinor.pdf>
- <https://cdn.equinor.com/files/h61q9gi9/global/d44ff2e9498e7d9cee9e88c4f01e6c4135c7a2f8.pdf?sustainability-report-2021-equinor.pdf>

## Forestry Commission

- [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/996344/FE\\_ARA\\_2020-21\\_print.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/996344/FE_ARA_2020-21_print.pdf)
- [https://www.forestryengland.uk/sites/default/files/documents/Natural\\_Capital\\_Accounts\\_2020-21.pdf](https://www.forestryengland.uk/sites/default/files/documents/Natural_Capital_Accounts_2020-21.pdf)

## H&M

- <https://hmgroup.com/wp-content/uploads/2022/03/HM-Group-Annual-and-Sustainability-Report-2021.pdf>
- <https://hmgroup.com/sustainability/circular-and-climate-positive/biodiversity/>

## Holcim

- [https://www.holcim.com/sites/holcim/files/documents/26022021-finance-lafageholcim\\_fy\\_2020\\_report-full-en.pdf?v=e7c3272a](https://www.holcim.com/sites/holcim/files/documents/26022021-finance-lafageholcim_fy_2020_report-full-en.pdf?v=e7c3272a)

## Mondi (note the 2020 biodiversity report is no longer available on Mondi's website, the report linked to is for 2022)

- <https://www.mondigroup.com/globalassets/mondigroup.com/sustainability/reports-and-publications/2020-and-before-sd/mondi-sustainable-development-report-2020.pdf>
- <https://www.mondigroup.com/globalassets/mondigroup.com/sustainability/reports-and-publications/2022/mondi-gri-biodiversity-disclosures-2022.pdf>

## MOWI

- <https://en.calameo.com/read/006652081514dc6ea5180>

## Nestlé

- <https://www.nestle.com/sites/default/files/2022-03/creating-shared-value-sustainability-report-2021-en.pdf>
- <https://www.nestle.com/sites/default/files/2022-03/2021-annual-review-en.pdf>

### **Network Rail**

- <https://www.networkrail.co.uk/wp-content/uploads/2021/07/Annual-report-and-accounts-2021.pdf>
- <https://www.networkrail.co.uk/wp-content/uploads/2020/12/Network-Rail-Biodiversity-Action-Plan.pdf>

### **Rio Tinto**

- <https://www.riotinto.com/sustainability/environment/biodiversity>

### **Shell**

- <https://www.shell.com/sustainability/environment.html>
- <https://reports.shell.com/annual-report/2021/strategic-report/risk-factors.html>

### **StoraEnso**

- <https://www.storaenso.com/en/sustainability/biodiversity>

### **Syngenta**

- <https://www.syngenta.com/sites/syngenta/files/sustainability/reporting-sustainability/Syngenta-AG-ESG-Report-2021.pdf>

### **Unilever**

- <https://www.unilever.com/files/92ui5egz/production/e582e46a7f7170fd10be32cf65113b738f19f0c2.pdf>
- <https://www.unilever.com/files/92ui5egz/production/489410442380812907bc3d97be02ccda1a44ab4b.pdf>

### **UPM**

- <https://www.upm.com/responsibility/forests/biodiversity/>
- <https://ml-eu.globenewswire.com/Resource/Download/c5ddd21b-0981-44a4-9984-7aa37242df71>

