

Integrated Biodiversity Assessment Tool

DISCLOSURE PREPARATION REPORT: README

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1. Report Package Contents

The IBAT disclosure preparation report contains:

- ReadMe PDF. This ReadMe file with useful information to understand the report.
- CSRD-TNFD-GRI excel. An excel file with data relevant for reporting in line with the TNFD, GRI 101: Biodiversity 2024 and ESRS E4 Biodiversity and ecosystems from the World Database on Protected and Conserved Areas, the World Database of Key Biodiversity Areas and the IUCN Red List of Threatened Species for each uploaded site.
- Two sub folders.
 - TNFD/GRI subfolder. Contains two PDFs with results relevant for reporting in line with the TNFD and GRI 01: Biodiversity 2024.
 - CSRD subfolder. Contains 1 PDF with results relevant for reporting in line with the ESRS E4 Biodiversity and ecosystems.

2. Overview

This report provides results which can be used when reporting in line with the Taskforce for Nature Related Financial Disclosures (TNFD), the Global Reporting Initiative (GRI) and the European Sustainability Reporting Standards (ESRS). This report is particularly relevant for:

- TNFD: The “Locate” phase of the TNFD LEAP approach and disclosure “D” on Strategy.
- GRI: Disclosure 101-4 “Identification of biodiversity impacts” and Disclosure 101-5 ‘Sites with biodiversity impacts’ within GRI 101: Biodiversity 2024.
- ESRS: Disclosure requirements in E4 Biodiversity and ecosystems.

Results for reporting in line with the TNFD, GRI and ESRS are all presented in this report due to the alignment between the three. All three require organisations to assess the sensitivity of the sites in their direct operations and supply chain using species and ecosystems data. This assessment can then be used to prioritise sites for further data collection, monitoring and action.

Due to differences in definitions and requirements, results for ESRS E4 Biodiversity and ecosystems are presented in a different subfolder and are generated using a different methodology (see Methodology)

section). The excel contains all data used to generate the results for TNFD, GRI 101: Biodiversity 2024, and ESRS E4 Biodiversity and ecosystems to aid comparison.

3. Methodology

3.1 Methodology for TNFD and GRI 101: Biodiversity 2024

The TNFD and GRI require organisations to disclose the sites of assets and/or activities in the organisation's direct operations and, where possible, upstream, and downstream value chain(s) that meet the criteria for sensitive locations.

GRI and TNFD define sensitive locations as "locations where the assets and/or activities in its direct operations – and, where possible upstream and downstream value chain(s) – interface with nature in:

- Areas important for biodiversity; and/or
- Areas of high ecosystem integrity; and/or
- Areas of rapid decline in ecosystem integrity; and/or
- Areas of high physical water risks; and/or
- Areas of importance for ecosystem service provision, including benefits to Indigenous Peoples, Local Communities and stakeholders".

The World Database on Protected and Conserved Areas (WDPCA), World Database of Key Biodiversity Areas (WDKBA), IUCN Red List of Threatened Species and Species Threat Abatement and Restoration (STAR) metric are all recommended metrics and reference datasets to assess for areas important for biodiversity.

The TNFD/GRI results are split into two sections across two PDFs.

Section 1: Sites assessed as in or near an ecologically sensitive location

In the first section, sites are assessed as in or near an ecologically sensitive location based on their overlap with significant biodiversity features in the IBAT datasets. The WDPCA, WDKBA and IUCN Red List (in the form of the derived STAR metric) are used to assess if a site is in or near an ecologically sensitive location.

In the absence of a GRI or TNFD-provided definition of what constitutes "in or near", IBAT considers a site in or near an ecologically sensitive location if at least one of the following is true:

- ✓ The area of influence (site and buffer) overlaps with a protected area or KBA.
- ✓ The area of influence (site and buffer) has STAR Threat Abatement and/or STAR Restoration scores exceeding the global median values of 0.01 and 0.003 respectively.

Important note: Sites assessed as not in or near an ecologically sensitive location in this report are sites that are not in or near an ecologically sensitive location according to the datasets within IBAT. Sites flagged as not in or near an ecologically sensitive location in this report may be shown to be in or near an ecologically sensitive location based on datasets found outside of IBAT. It is recommended that other tools and datasets should be used in conjunction with IBAT to complete a holistic sensitivity mapping. This report currently only assesses sites regarding how important they are for biodiversity. It is important to consider the other criteria (in the definitions section) when determining whether a site is in or near an ecologically sensitive location, and therefore potentially a priority site.

Section 2. Significance scores assigned to sites assessed as in or near an ecologically sensitive location

In the second section, sites assessed as in or near an ecologically sensitive location in the first section are assigned a significance score in order to aid the prioritisation of sites.

Scores of high, medium, and low are presented based on the proximity of the site to a KBA or protected area relative to the appropriate buffer size (see 3.3 on buffers) based on the site type or based on the maximum STAR Threat Abatement and STAR Restoration scores found within the Area of influence (site + buffer). Only STAR Threat Abatement and/or STAR Restoration scores exceeding the global median values of 0.01 and 0.003 respectively are included in this classification.

Section 3.4 outlines how the significance scores for sites are determined in relation to protected areas, KBAs and the STAR metric.

Sites are then ordered in the potential likelihood of priority based on 1) site is a sensitive site for both protected areas/KBAs and STAR. 2) the presence of any "High" significance scores. 3) the total sum of significance scores for protected area, KBAs, and STAR (High = 3, Low = 1). Guidance for the interpretation of biodiversity significance scores can be found in section 3.5.

Appendices 1 and 2 provide a detailed mapping of how this report can support reporting in line with the TNFD and GRI.

3.2 Methodology for ESRS E4 Biodiversity and Ecosystems

ESRS E4 requires organisations to conduct a materiality assessment to determine which of their sites are material in their direct operations and value chain. Part of this materiality assessment requires an assessment on whether sites are located in or near "biodiversity sensitive areas". ESRS defines biodiversity sensitive areas as "Natura 2000 network of protected areas, UNESCO World Heritage sites and Key Biodiversity Areas (KBAs), as well as other protected areas". The materiality assessment also recommends organisations to use additional species and ecosystem metrics beyond those used to determine which sites are in or near biodiversity sensitive areas to determine which sites are material.

To aid reporting in line with the disclosure requirements in ESRS E4, the results in this report are split into three sections across one PDF.

Section 1: Sites assessed as in or near a biodiversity sensitive area

The first section assesses whether sites in direct operations and the value chain are located in or near a biodiversity sensitive area. Natura 2000, UNESCO World Heritage sites and other protected areas can be found in the World Database on Protected and Conserved Areas (WDPCA) which is used in this analysis. Key Biodiversity Areas (KBAs) are found in the World Database of Key Biodiversity Areas (WDKBA) which is also used in this analysis. The excel provided as part of this report, specifically the WDPCA data and WDKBA data tabs, provides information on the type of protected areas and KBAs, if any, in or near each site.

In the absence of an ESRS-provided definition of what constitutes "in or near", this considers a site "in or near" a biodiversity sensitive area if at least one of the following is true:

- ✓ The area of influence (site and buffer) overlaps with a protected area.
- ✓ The area of influence (site and buffer) overlaps with a KBA.

Section 2: Metrics for materiality assessment and significance scores for sites

In the second section, sites assessed as in or near a biodiversity sensitive area in section 1 are assigned a significance score. These scores can be used to help prioritise sites in a materiality assessment.

Scores of high, medium, and low are presented based on the proximity of the site to a KBA or protected area relative to the appropriate buffer size based on the site type. Section 3.4 outlines how the significance scores for sites are determined in relation to protected areas, and KBAs.

Sites are then ordered by potential priority based on 1) Whether the site is located in or near a protected area and/or KBA. 2) The presence of any "High" significance scores. 3) The sum of significance scores (High = 3, Low = 1). Guidance for the interpretation of biodiversity significance scores can be found in the ReadMe file. Guidance for the interpretation of biodiversity significance scores can be found in section 3.5.

The materiality assessment requires organisations to use additional species and ecosystem metrics beyond those used to determine which sites are in or near biologically sensitive areas. Additional species and ecosystem metrics available in IBAT which may be used in a materiality assessment can be found in the report excel file.

Section 3: Other disclosures requirements

Sections 1 and 2 provide information on how IBAT can be used in conducting a materiality assessment as required by ESRS E4 including identifying which sites are in or near biodiversity sensitive areas.

Section 3 provides information on other specific disclosure requirements within ESRS for which IBAT data is relevant. These include:

- Whether operations affect threatened species.
- The percentage of suppliers' facilities (upstream sites) which are located in risk prone areas.

Appendix 3 provide a mapping of how this report can support reporting in line with the ESRS E4.

3.3 Buffers

This report automatically applies different buffers to different site types, with buffer distance values guided by available literature and expert knowledge. These buffers are also designed to account for potential inaccuracies in the global datasets (e.g., protected area boundaries). Site Type refers to the type of business activity occurring at the site. If your site type does not match any named business activity you can assign a 5, 10, 20 or 50km Maximum Impact.

The selection of site and operation types is optional but will help guide some outputs of the Disclosure Preparation Report. If no Site Type is selected, a default site type named '20km Maximum Impact Buffer' will be automatically applied, that will be used for Disclosure Preparation Reports. It should be noted that this buffer size may not accurately reflect the real-world risks posed to biodiversity features, which could be greater or lower than the risks reported.

IBAT allows users to define their own buffer distances to analyse potential species presence in greater detail and generate a more tailored species list. The reports also apply a precautionary 50 km buffer for the IUCN Red List to account for uncertainties in species distribution data and the dynamic nature of species ranges. This buffer helps to identify potential species presence within a site, striking a balance between ecological uncertainty and operational practicality.

We encourage users to review the full list of species provided in the CSV files and consider which additional species may occur within the site or which ones might be absent from the outputs of the buffer size you selected.

Table 1. Buffer distances assigned to different site types.

Buffer Distance	Site Type(s)	Justification	References
5km	Offices, Warehouses, Low-input agriculture	A 5 km buffer is recommended as the minimum buffer size to be used. Low-input agriculture is placed here as the degree of freshwater pollution is expected to be lower (see 10 km buffer justification).	UNEP-WCMC, The Area of Influence of site-based operations – Direct Impacts (2021). UNEP-WCMC, The Area of Influence of site-based operations – Indirect Impacts (2022).
10km	High-input agriculture, Onshore wind, Construction, Oil and gas (terrestrial)	A 10 km buffer is suggested as being likely to cover the impacts from most pressures (Amec Foster Wheeler 2015; UNEP-WCMC 2021). Freshwater pollution impacts are likely to be experienced at larger distances (e.g., average of 13.4 km for mines and oil and gas operations (UNEP-WCMC 2021)). As agriculture is one of the main contributors to eutrophication and pollution globally (Poore & Nemecek 2018) it is deemed that a 10 km buffer is most relevant.	Amec Foster Wheeler (2015) Habitats Regulations Assessment: 14th Onshore Oil and Gas Licensing Round (No. Doc Ref. 33917r008i2). Oil and Gas Authority. UNEPWCMC, The Area of Influence of site-based operations – Direct Impacts (2021). J. Poore, T. Nemecek, Reducing food's environmental impacts through producers and consumers. Science. 360, 987–992 (2018).
20km	Offshore wind, Oil and gas (marine), Hydropower	Marine operations have the potential to have larger areas of influence when compared to terrestrial, especially if noise is excessive. UNEP-WCMC suggested a buffer size of 20 km for marine oil and gas operations (UNEP-WCMC 2021). A 20 km buffer is also likely to be sufficient to account for a majority of wide-ranging species (Weaver J 2020).	UNEP-WCMC, The Area of Influence of site-based operations – Direct Impacts (2021). Weaver J, "Wales National Development Framework - Habitats Regulations Assessment" (Sefydliad Materion Cymreig Institute of Welsh Affairs, 2020).
50km	Mining	Mining has been observed to contribute to deforestation effects up to 50 km away (Sonter et al. 2017; Maddox et al. 2019).	L. J. Sonter, D. Herrera, D. J. Barrett, G. L. Galford, C. J. Moran, B. S. Soares-Filho, Mining drives extensive deforestation in the Brazilian Amazon. Nature Communications. 8, 1013 (2017). T. Maddox, P. Howard, J. Knox, N. Jenner, Forest-Smart Mining: Identifying Factors Associated with the Impacts of Large-Scale Mining on Forests (World Bank, 2019).

Important note: The buffers assigned to each site type in this report provide an initial approach to differentiate areas of influence based on different impacts of different operations. IBAT Partner UNEP- WCMC is currently conducting research to create a more refined buffer methodology. The buffers used in this report may be updated in the future.

3.4 Significance scores

Table 2. Criteria used to assess the biodiversity significance of each site based on the proximity of the site to a KBA or protected area relative to the appropriate buffer size according to the site type.

Buffer Distance	Site Type	Biodiversity Significance			
		None	Low	Medium	High
5km	Offices, Warehouses, Low-input agriculture	>5km	1.5-5 km	0.5 -< 1.5 km	<0.5 km
10km	High-input agriculture, Onshore wind, Construction, Oil and gas (terrestrial)	>10km	3-10 km	1 -< 3 km	<1 km
20km	Offshore wind, Oil and gas (marine), Hydropower	>20km	6-20 km	2 -< 6 km	<2 km
50km	Mining	>50km	15-50 km	5 -< 15 km	<5 km

Table 3. Criteria used to assess the biodiversity significance of each site based on the maximum STAR Threat Abatement and STAR Restoration scores found within the Area of influence (site + buffer).

	Biodiversity Significance		
	Low	Medium	High
STAR Threat Abatement	Max STAR Threat Abatement value is < 0.05	Max STAR Threat Abatement value is between 0.05 – 0.15	Max STAR Threat Abatement value is > 0.15
STAR Restoration	Max STAR Restoration value is < 0.02	Max STAR Restoration value is between 0.02 – 0.05	Max STAR Restoration value is > 0.05

Important note: The significance scores of the sites are based on the datasets within IBAT. The significance score and prioritisation of sites would likely change if datasets outside of IBAT were included in this exercise. It is recommended that other tools and datasets should be used in conjunction with IBAT to complete a holistic sensitivity mapping. Please note that if sites are marine, they would not have significance scores included in the results because the STAR metric only covers the terrestrial realm.

3.5 Guidance on interpretation of significance scores.

Table 4. Guidance for interpretation of biodiversity significance scores.

Significance Indicator	Interpretation Guidance
Protected Areas / KBAs	<ul style="list-style-type: none"> Higher risk scores indicate a greater potential that activities at the site may have an adverse impact on nearby protected areas and/or KBAs. Proximity to, or even overlap with, a designated area does not necessarily mean that the area is being impacted by company activities. It indicates a risk that company activities may be affecting the area. Companies should engage with stakeholders at the specific site to identify if they have assessed whether the nearby protected areas/KBAs are impacted by operations. If, through on-the-ground surveys, users can validate that nearby protected areas and/or KBAs are not impacted by operations then the site may no longer be deemed to be a potential priority. If a site is aligning with IFC PS6, direct impacts on protected areas and internationally recognised areas will trigger application of Paragraph 20, which means that the site will have to: <ul style="list-style-type: none"> Demonstrate that the proposed development in such areas is legally permitted; Develop the site in a manner that is consistent with any management plans; Consult with protected area staff; and Develop, and implement additional programmes to 'promote and enhance the conservation aims of the' areas
STAR	<ul style="list-style-type: none"> Higher STAR scores identify areas with higher numbers of threatened species, and/or that cover a higher proportion of each threatened species' range. Business activities in these areas therefore pose a higher risk of contributing to species' extinction risk, whereas measures to reduce threats in these sites could make a more significant contribution to reducing extinction risks than other sites. STAR scores can be disaggregated by threat to help identify the main threats that contribute to the species' extinction risk, and whether these risks are linked to operations at each site (this information is provided in the csv files attached to this report). Users should check whether the site has mitigation actions to reduce the impacts on species of high extinction risk. If not linked to your project, site or operations, check whether these threats are present in the landscape and identify if your site could support reduction of these threats. The STAR scores can be calibrated using data from site surveys to confirm the species and threats operating at the site. This would facilitate more appropriate site-based interventions, monitoring and target setting for contributions towards reducing species extinction risk. Higher STARR scores identify areas that could provide suitable habitat for threatened species if restoration activities were implemented to improve the habitat condition. STARR therefore shows opportunities to restore areas with previously high biodiversity values. Higher numbers of threatened species potentially being present at a site carry significant risks. Sites that are classified as high risk are most likely to have species that are Critically Endangered, Endangered, or have

	<ul style="list-style-type: none"> • restricted ranges and thus may qualify the area as Critical Habitat (as per IFC PS6). • Impacts to threatened or restricted-range species may be significant for the long-term survival of the species and • therefore require careful application of the mitigation hierarchy (with potentially species-specific measures). Sites • impacting these species are more likely to be scrutinised by stakeholders. • Marine sites (or those that intersect with marine areas) may have many threatened species potentially present due to • larger range sizes of marine species, on average. Further site surveys are recommended for any sites that are flagged as high risk due to the numbers of threatened species to confirm whether they are present at the site and impacted by the site operations. • Users should review the list of species (provided in species_data.csv), especially those that are classified as • Vulnerable/Endangered/Critically Endangered or restricted range. Note that the species lists are derived from overlap • of a site with the range of each species, and not those confirmed to occur. • Users should cross-reference with existing species' surveys at each site (or conduct new field surveys) to identify if • each species is actually present.
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4. About IBAT

The Integrated Biodiversity Assessment Tool (IBAT) provides key decision-makers with access to critical information on biodiversity priority sites to inform risk management and decision-making processes that address potential biodiversity impacts. Developed through a partnership between BirdLife International, Conservation International, International Union for Conservation of Nature (IUCN) and United Nations Environment World Conservation Monitoring Centre (UNEP-WCMC), the vision of IBAT is that decisions affecting critical natural habitats are informed by the best scientific information and in turn decision- makers will support the efforts to enhance the underlying datasets and scientific information.

5. Limitations of This Report

This report provides an indication of biodiversity-related features (protected areas, KBAs and species) whose distributions overlap or fall close to the specified site. While it provides an early indication of potential biodiversity concerns, the report does not provide details of potential direct, indirect, downstream or cumulative impacts. Furthermore, the report provides an assessment based on global datasets and is not a substitute for additional investigation and due diligence, especially concerning national and/or local conservation priorities.

Species do not occur throughout their distributions, and population densities and the relevance and severity of threats may vary across their ranges. STAR scores in this report do not reflect such local variations. Overlap with a species' current Area of Habitat does not necessarily indicate that the species occurs within the particular Area of Interest.

STAR scores included in this report are calculated for species of amphibians, birds and mammals for which current or historical Area of Habitat occurs in the Area of Interest. Only species assessed as Near Threatened, Vulnerable, Endangered or Critically Endangered on the IUCN Red List of Threatened Species are included - Data Deficient species do not contribute to STAR scores but would also be important for accessing biodiversity in the area.

The STAR layers are currently only available for terrestrial habitats. Therefore, for sites which partially overlap with marine areas (i.e. coastal sites), the STAR scores will only be generated for the terrestrial part of the Area of Interest. Additionally, the STAR scores only cover 3 taxonomic groups at the moment

- birds, mammals and amphibians.

The values used to generate the STAR categories in the global maps closely approximate but do not exactly match the values used to calculate the scores for the Area of Interest in this report. This is due to how the STAR values underlying the scores for the Area of Interest are generated vs the way they are generated for the global maps. The differences are marginal however, so it can be assumed that both site and global maps are sufficiently accurate for comparing within and between sites.

Geographical regions have significant differences in their protected area and/or KBA coverage. For example, the KBA identification process has not been completed in every country, nor for all taxa, and is biased towards key sites for bird conservation. The World Database of Protected and Conserved Areas (WDPCA) is based on records provided primarily by national governments and is also incomplete in various ways. Protected areas in certain countries might not be publicly available.

6. Disclaimer

The designations employed and the presentation of material on IBAT maps do not imply the expression of any opinion whatsoever on the part of the IBAT Alliance concerning the legal status of any country, territory, city, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

7. Recommended Citation

The report should be cited as:

IBAT Disclosure Preparation Report. Generated under licence 4449-21453 from the Integrated Biodiversity Assessment Tool on 01 September 2021 (GMT).
www.ibat-alliance.org

Datasets should be cited as:

- UNEP-WCMC and IUCN, 2021. Protected Planet: The World Database on Protected Areas (WDPA)[On-line], Cambridge, UK: UNEP-WCMC and IUCN. Available at: www.protectedplanet.net - October 2021.
- BirdLife International ([year e.g. 2017]). The World Database of Key Biodiversity Areas. Developed by the KBA Partnership: BirdLife International, International Union for the Conservation of Nature, Amphibian Survival Alliance, Conservation International, Critical Ecosystem Partnership Fund, Global Environment Facility, Re:wild, NatureServe, Rainforest Trust, Royal Society for the Protection of Birds, Wildlife Conservation Society and World Wildlife Fund. Available at www.keybiodiversityareas.org. [Accessed (please insert date of download dd/mm/yyyy)].
- IUCN. The IUCN Red List of Threatened Species. Version 2019-3. (2019).
<https://www.iucnredlist.org>

9. Data Used to Generate This Report

The data used in this report are sourced from the following data providers:

- UNEP-WCMC and IUCN, 2024. Protected Planet: The World Database on Protected Areas (WDPA)[On-line], Cambridge, UK: UNEP-WCMC and IUCN. Available at: www.protectedplanet.net - October 2024.

- BirdLife International (year e.g. 2024). The World Database of KBAs. Developed by the KBA Partnership: BirdLife International, International Union for the Conservation of Nature, Amphibian Survival Alliance, Conservation International, Critical Ecosystem Partnership Fund, Global Environment Facility, Re:wild, NatureServe, Rainforest Trust, Royal Society for the Protection of Birds, Wildlife Conservation Society and World Wildlife Fund. Available at "http://www.keybiodiversityareas.org" - October 2023 version.
- IUCN. The IUCN Red List of Threatened Species. Version 2023-1. (2024). www.iucnredlist.org

8. Glossary

Alliance for Zero Extinction (AZE) site: the last remaining refuge of one or more Endangered (EN) or Critically Endangered (CR) species.

Biodiversity Sensitive Area (CSRD definition): Natura 2000 network of protected areas, UNESCO World Heritage sites and Key Biodiversity Areas (KBAs), as well as other protected areas, as referred to in Appendix D of Annex II to Commission Delegated Regulation (EU) 2021/2139 (8). Annex II to Commission Delegated Regulation (EU) 2021/2139 (8) defines a protected area as "a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long- term conservation of nature with associated ecosystem services and cultural values".

Important Bird and Biodiversity Areas (IBAs): Important Bird and Biodiversity Areas (IBAs) are priority sites for bird conservation because they regularly hold significant populations of one or more globally or regionally threatened, endemic or congregatory bird species, or highly representative bird assemblages.

IUCN Protected Area Management Categories: Assigned to legally protected areas by national government agencies to allow international comparison between national protected area networks, based on management objectives of a protected area. Assigning IUCN categories to protected areas is encouraged, although their use is voluntary, and therefore not all protected areas have an IUCN category assigned to them. These protected areas are designated or recognised at the national level and should not be treated as less important than protected areas to which a management category has been assigned or reported. The six categories are:

- Ia: To conserve regionally, nationally, or globally outstanding ecosystems, species (occurrences or aggregations) and/or geodiversity features: these attributes will have been formed mostly or entirely by non-human forces and will be degraded or destroyed when subjected to all but very light human impact. Strictly protected areas set aside to protect biodiversity and also possibly geological/ geomorphological features, where human visitation, use and impacts are strictly controlled and limited to ensure protection of the conservation values.
- Ib: To protect the long-term integrity of natural areas that are undisturbed by significant human activity free of modern infrastructure and where natural forces and processes predominate, so that current and future generations have the opportunity to experience such areas. Large area of unmodified or slightly modified land, and/or sea, retaining its natural character and influence, without permanent or significant human habitation, which are protected and managed so as to preserve their natural condition.
- II: To protect natural biodiversity along with its underlying ecological structure and supporting environmental processes, and to promote education and recreation. Large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities.
- III: To protect specific outstanding natural features and their associated biodiversity and habitats. Areas set aside to protect a specific natural monument, which can be a landform, sea mount,

submarine cavern, geological feature such as a cave or even a living feature such as an ancient grove.

- IV: To maintain, conserve and restore species and habitats. Protected areas aim to protect particular species or habitats and management reflects this priority. Many category IV Protected Areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category.
- V: To protect and sustain important landscapes/seascapes and the associated nature conservation and other values created by interactions with humans through traditional management practices. Areas where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.
- VI: To protect natural ecosystems and use natural resources sustainably, when conservation and sustainable use can be mutually beneficial. Generally large areas, with most of the area in a natural condition, where a proportion is under sustainable natural resource management and where low- level non-industrial use of natural resources compatible with nature conservation is seen as one of the main aims of the area.

IUCN Red List of Threatened Species (IUCN RL or Red List): International standard for assessing threat status for species. The Red List is compiled by IUCN's global network of experts, specialist groups and partners. For further information, please see the IUCN Red List of Threatened Species website (<https://www.iucnredlist.org>). Red List categories are:

- Critically Endangered (CR): Highest risk of extinction. A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered, and it is therefore considered to be facing an extremely high risk of extinction in the wild.
- Endangered (EN): Very high risk of extinction. A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered, and it is therefore considered to be facing a very high risk of extinction in the wild.
- Vulnerable (VU): Risk of extinction. A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable, and it is therefore considered to be facing a high risk of extinction in the wild.
- Near Threatened (NT): A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered, or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.
- Least Concern (LC): A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable, or Near Threatened. Widespread and abundant taxa are included in this category.
- Data Deficient (DD): A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. Data Deficient is therefore not a category of threat. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that threatened classification is appropriate.

Key Biodiversity Areas (KBAs): Key Biodiversity Areas (KBA) are “sites contributing significantly to the global persistence of biodiversity”, in terrestrial, freshwater and marine ecosystems. Sites qualify as global KBAs if they meet one or more of 11 criteria, clustered into five categories: threatened biodiversity; geographically restricted biodiversity; ecological integrity; biological processes; and, irreplaceability. KBAs comprise an “umbrella” set of internationally recognised priority sites for biodiversity that include

Important Bird and Biodiversity Areas (IBAs); and Alliance for Zero Extinction (AZE) sites. For further information please see the Key Biodiversity Areas website <https://www.keybiodiversityareas.org/>.

Material Location (TNFD Definition): Locations where an organisation has identified material nature-related dependencies, impacts, risks and opportunities in its direct operations and upstream and downstream value chain(s).

Priority Location (TNFD Definition): Locations that are material and/or sensitive.

Protected Area designation: Within IBAT users can filter protected areas data by designation in the following categories:

- National: Protected areas designated or proposed at the national or sub-national level
- Natura 2000: A European network of protected sites under the European Habitats and Birds Directives, aiming to protect the most valuable and threatened European habitats and species.
- Regional Seas: Protected areas established under Regional Seas Conventions such as OSPAR.
- World Heritage: A landmark or area which is selected by the UNESCO as having cultural, historical, scientific or other form of significance, and is legally protected by international treaties. The sites are judged important to the collective interests of humanity.
- Ramsar: Wetlands protected by national governments to fulfil their obligations under the Convention on Wetlands of International Importance (commonly called the Ramsar Convention).
- MAB: A global network of sites established by countries and recognised under UNESCO's Man and Biosphere Programme to promote sustainable development based on local community efforts and sound science.

Protected Area governance: Within IBAT users can filter protected areas data by governance in the following categories:

- Governance by government, which includes federal or national ministry or agency, subnational ministry or agency, and government-delegated management.
- Shared governance, which includes transboundary governance, joint governance, and collaborative governance.
- Private governance, which includes individual landowners, non-profit organisations, for profit organisations, governance by indigenous peoples and local communities, including indigenous peoples and local communities.

Risk Prone Area (CSRD Definition): With threatened species on the IUCN Red List of Species, the Birds and Habitats Directive or nationally list of threatened species, or in officially recognised Protected Areas, the Natura 2000 network of protected areas and Key Biodiversity Areas.

Sensitive Location (TNFD and GRI Definition): Locations where the assets and/or activities in its direct operations – and, where possible upstream and downstream value chain(s) – interface with nature in:

- Areas important for biodiversity; and/or
- Areas of high ecosystem integrity; and/or
- Areas of rapid decline in ecosystem integrity; and/or
- Areas of high physical water risks; and/or
- Areas of importance for ecosystem service provision, including benefits to Indigenous Peoples, Local Communities and stakeholders

Threatened Species: Species assessed as Critically Endangered (CR), Endangered (EN), or Vulnerable (VU) on the IUCN Red List of Threatened Species.

APPENDICES

Appendix 1. Overview of requirements for TNFD recommended disclosure Strategy D and the Locate phase of TNFD's LEAP approach that can be supported with the data provided by the IBAT.

Strategy Disclosure D Requirements	Outputs to Use from IBAT
<ul style="list-style-type: none"> A list and/or spatial map of the sites where the organisation has assets and/or activities: <ul style="list-style-type: none"> In its direct operations and upstream and downstream value chain(s), where material nature-related dependencies, impacts, risks, and opportunities have been identified, and whether any of these sites meet the criteria for sensitive sites; and; In its direct operations and, where possible upstream and downstream value chain(s), that are in sensitive sites. 	<ul style="list-style-type: none"> Maps of each site are provided. Boundaries of protected areas and KBAs are overlain to illustrate proximity to important biodiversity and conservation features. Each site is assessed as either sensitive or not sensitive according to the datasets hosted within IBAT. A site is identified sensitive if any protected area or KBA fall entirely or partly within the buffered area or if the STAR Threat Abatement and/or STAR Restoration scores exceeds the global median value.
<ul style="list-style-type: none"> A description of how the organisation has defined sensitive sites, with reference to the tools, data sources and indicators and metrics used; 	<ul style="list-style-type: none"> Reference sensitivity scoring section of methodology. Reference IBAT using reference provided. Reference data sources used by IBAT to create this report: <ul style="list-style-type: none"> World Database on Protected Areas World Database of Key Biodiversity Areas IUCN Red List of Threatened Species Species Threat Abatement and Restoration Metric (STAR) (References for data found in ReadMe.)
<ul style="list-style-type: none"> A description of the process followed to identify priority sites for disclosure. 	<ul style="list-style-type: none"> Refer to methodology.
<ul style="list-style-type: none"> A description of the level of geographic specificity achieved, if and how sites have been aggregated, and the rationale for any aggregation, with reference to general requirement 3; and; The organisations intentions to improve or expand its site assessment activities over the short, medium and long term. 	N/A

Appendix 2. Overview of requirements for Global Reporting Initiative (GRI) Disclosures 101-4 and 101-5 that can be supported with IBAT.

Disclosure 101-4 and 101-5 Requirements	Outputs to Use from IBAT
101-4-a. explain how it has determined which of its sites and which products and services in its supply chain have the most significant actual and potential impacts on biodiversity. This is the	IBAT helps determine which sites potentially have the most significant impact on biodiversity by providing information on the ecologically sensitivity of the area in and around a site. Sites assessed as sensitive are sites where direct

only disclosure under 101-4. All the rest of the disclosures in the table are under 101-5.	operations are likely going to have the most significant impacts on biodiversity. (The extent to which the activities at the operational sites lead to direct drivers of biodiversity loss should also be considered).
101-5-a. report the site and size in hectares of its sites with the most significant impacts on biodiversity.	The report presents the geographic site (name and coordinates) of each site assessed to be in a sensitive site.
101-5-b. for each site reported under 101-5-a, report whether it is in or near an ecologically sensitive area, the distance to these areas, and whether these are: <ul style="list-style-type: none"> i. areas of biodiversity importance; ii. areas of high ecosystem integrity; iii. areas of rapid decline in ecosystem integrity; iv. areas of high physical water risks; v. areas important for the delivery of ecosystem service benefits to Indigenous Peoples, local communities, and other stakeholders; 	A site is in an ecologically sensitive area when it is completely or partially located in the ecologically sensitive area. A site is near an ecologically sensitive area when the ecologically sensitive area does not overlap the site, but it falls within the area of influence or within the radius set by the organization. The organization is required to report the distance only in cases where the site is near an ecologically sensitive area. The organization should report the size in hectares of the ecologically sensitive areas within its sites. IBAT can provide information on areas of biodiversity importance.
101-5-c. report the activities that take place in each site reported under 101-5-a.	
101-5-d. report the products and services in its supply chain with the most significant impacts on biodiversity and the countries or jurisdictions where the activities associated with these products and services take place.	

Appendix 3. Requirements and recommendations from ESRS E4 that can be supported with IBAT.

Disclosure Requirement from ESRS E4	Outputs to Use from IBAT
<p><i>Disclosure Requirement SBM 3 – Material impacts, risks and opportunities and their interaction with strategy and business model.</i></p> <p>16. The undertaking shall disclose:</p> <ul style="list-style-type: none"> (a) a list of material sites in its own operations, including sites under its operational control, based on the results of paragraph 17(a). The undertaking shall disclose these locations by: <ul style="list-style-type: none"> i. specifying the activities negatively affecting biodiversity sensitive areas; ii. providing a breakdown of sites according to the impacts and dependencies identified, and to the ecological status of the areas (with reference to the specific ecosystem baseline level) where they are located; and iii. specifying the biodiversity-sensitive areas impacted, for users to be able to determine the location and the responsible competent authority 	<ul style="list-style-type: none"> • A list of sites in or near biodiversity sensitive areas. • IBAT provides data that can help determine the ecological status of sites. • Details of which threatened species are potentially found within and around each site.

<p>with regards to the activities specified in paragraph 16(a) i. [...] (c) whether it has operations that affect threatened species.</p>	
<p><i>Disclosure Requirement related to ESRS 2 IRO-1 Description of processes to identify and assess material biodiversity and ecosystem-related impacts, risks, dependencies and opportunities.</i></p> <p>17. The undertaking shall describe its process to identify material impacts, risks, dependencies and opportunities. The description of the process shall include whether and how the undertaking:</p> <p>(a) identified and assessed actual and potential impacts on biodiversity and ecosystems at own site locations and in the upstream and downstream value chain, including assessment criteria applied;</p> <p>(b) identified and assessed dependencies on biodiversity and ecosystems and their services at own site locations and in the upstream and downstream value chain, including assessment criteria applied, and, if this assessment includes ecosystem services that are disrupted or likely to be; [...]</p> <p>19. The undertaking shall specifically disclose whether or not it has sites located in or near biodiversity-sensitive areas and whether activities related to these sites negatively affect these areas by leading to the deterioration of natural habitats and the habitats of species and to the disturbance of the species for which a protected area has been designated.</p>	<ul style="list-style-type: none"> • Metrics which indicate the ecological status in around sites which can be used when determining material impacts, risks, dependencies, and opportunities. • A list of sites in or near biodiversity sensitive areas.
<p><i>Disclosure Requirement E4-2 – Policies related to biodiversity and ecosystems.</i></p> <p>24. The undertaking shall specifically disclose whether it has adopted:</p> <p>(a) biodiversity and ecosystem protection policy covering operational sites owned, leased, or managed in or near a biodiversity sensitive area; [...]</p>	<ul style="list-style-type: none"> • A list of sites in or near biodiversity sensitive areas.
<p><i>Disclosure Requirement E4-5 – Impact metrics related to biodiversity and ecosystems change.</i></p> <p>27. When preparing the information required under this Disclosure Requirement, the undertaking shall consider and may describe: [...]</p> <p>(c) the biodiversity components of the metrics: species specific, ecosystem specific; [...]</p> <p>33. The undertaking shall report metrics related to its material impacts on biodiversity and ecosystems.</p> <p>35. If the undertaking identified sites located in or near biodiversity-sensitive areas that it is negatively affecting (see paragraph 19(a)), the undertaking shall disclose the number and area (in hectares) of sites owned, leased or managed in or near these protected areas or key biodiversity areas.</p> <p>40. If the undertaking identified material impacts related to the state of species, the undertaking may report metrics it considers relevant. The undertaking may:</p> <p>(b) consider population size, range within specific ecosystems as well as extinction risk. These aspects provide insight on the health of a single species' population and its relative resilience to human induced and naturally occurring change;</p>	<ul style="list-style-type: none"> • Species and ecosystem metrics which indicate the ecological status in around sites which can be used when determining material impacts, risks, dependencies, and opportunities. • The number and area (in hectares) of sites owned, leased or managed (labelled as direct operations) in or near these biodiversity sensitive areas. • Metrics that can help identify potential material impacts

<p>(c) disclose metrics that measure changes in the number of individuals of a species within a specific area;</p> <p>(d) disclose metrics on species at extinction risk that measure:</p> <p>i. the threat status of species and how activities/pressures may affect the threat status; or [...]</p> <p>41. If the undertaking identified material impacts related to ecosystems, it may disclose:</p> <p>(b) with regard to ecosystems condition:</p> <p>ii. metrics that measure multiple species within an ecosystem rather than the number of individuals within a single species within an ecosystem (for example: scientifically established species richness and abundance indicators that measure the development of (native) species composition within an ecosystem against the reference state at the beginning of the first reporting period as well as the targeted state outlined in the Kunming-Montreal Global Biodiversity Framework, or an aggregation of species' conservation status if relevant); or [...]</p>	<p>related to the state of species.</p>
<p><i>Disclosure requirements related to ESRS 2 IRO-1 – Description of the processes to identify and assess material biodiversity and ecosystem-related impacts, risks and opportunities.</i></p> <p>AR 4. The materiality assessment under ESRS E4 includes the undertaking's:</p> <p>(b) impacts on the state of species (i.e., species population size, species global extinction risk); [...]</p> <p>AR 7. Phase 1 (LEAP approach) relates to the localisation of relevant sites regarding its interface with biodiversity and ecosystems. To identify these relevant sites the undertaking may:</p> <p>(c) identify the current integrity and importance of biodiversity and ecosystem at each location taking into consideration the information provided in paragraphs 16 and 17;</p> <p>(d) develop a list of locations where the undertaking is interfacing with locations in or near biodiversity-sensitive areas taking into consideration the information provided in paragraphs 16 and 17; and [...]</p> <p>AR 8. In Phase 2, to evaluate its actual or potential impacts and dependencies on biodiversity and ecosystems for relevant sites, the undertaking may:</p> <p>(c) indicate the size, scale, frequency of occurrence and timeframe of the impacts on biodiversity and ecosystems taking into consideration the disclosures under paragraphs 16 and 17. Furthermore, the undertaking may disclose:</p> <p>i. the percentage of its suppliers' facilities which are located in risk prone areas (with threatened species on the IUCN Red List of Species, the Birds and Habitats Directive or nationally list of threatened species, or in officially recognised Protected Areas, the Natura 2000 network of protected areas and Key Biodiversity Areas);</p>	<ul style="list-style-type: none"> • Species metrics to use in the materiality assessment to help assess the potential impact on the state of species. • Metrics which indicate current integrity and importance of biodiversity and ecosystem at each location. • A list of sites in or near biodiversity sensitive areas. • A list of supplier sites in risk prone areas.

<p>ii. the percentage of its procurement spend from suppliers with facilities which are located in risk prone areas.</p>	
<p><i>Disclosure Requirement E4-2 – Policies related to biodiversity and ecosystems.</i></p> <p>AR 12. The undertaking may also provide information on how the policy refers to the production, sourcing or consumption of raw materials, and in particular how it:</p> <p>(a) limits procurement from suppliers that cannot demonstrate that they are not contributing to significant damage to protected areas or key biodiversity areas (e.g., through certification);</p>	<ul style="list-style-type: none"> • A list of supplier sites and whether they are in or near a protected areas or key biodiversity areas.