European Commission

How can corporate biodiversity assessment and reporting align more closely with the Kunming-Montreal Global Biodiversity Framework?

A discussion paper from the Align project

Align

Aligning accounting approaches for nature

Contributing authors: Jacob Bedford (UNEP-WCMC), Emma Calhoun (UNEP-WCMC), Yann Verstraeten (ICF), Sharon Brooks (UNEP-WCMC), Annelisa Grigg (GlobalBalance), Martin Lok (Capitals Coalition), Johan Lammerant (Arcadis), Natasha Ali (UNEP-WCMC), Matea Vukelic (UNEP-WCMC), Katherine Despot-Belmonte (UNEP-WCMC), Joshua Berger (CDC Biodiversité), Alice Cros (CDC Biodiversité)

With thanks to members of the Align Community of Practice who provided input via an online workshop

Suggested reference

UNEP-WCMC, ICF, Capitals Coalition, Arcadis (2024) Discussion paper- How can corporate biodiversity measurement and reporting align more closely with the Kunming-Montreal Global Biodiversity Framework? Align Project - Aligning accounting approaches for nature.

Project consortium

The Align project – Aligning accounting approaches for nature - came into being with the objective to co-develop recommendations for a standard on corporate biodiversity measurements and valuation. Align was a three and a half-year project aiming to provide businesses and financial institutions with principles and criteria for biodiversity measurement and valuation. The Align project was funded by the European Commission. It was led by UNEP-WCMC, the Capitals Coalition, Arcadis and ICF with the support of WCMC Europe.

Contents

Summary

There is a growing dialogue on the opportunities and importance of alignment between corporate biodiversity strategies and the Kunming-Montreal Global Biodiversity Framework. This includes the alignment of corporate biodiversity assessments (the process of businesses and financial institutions screening and measuring their biodiversity dependencies, impacts, risks and opportunities), as well as their reporting and disclosure with the Kunming-Montreal Global Biodiversity Framework. However, there remains a lack of clarity on what 'alignment' in this context means in practice. This clarity is needed to guide all involved actors on how to measure progress on their contribution to achieving the Framework's targets.

In this discussion paper, we outline the results of a scoping exercise undertaken on issues of alignment between business measurement approaches, and the Kunming-Montreal Global Biodiversity Framework. We lay out three avenues for alignment and provide some associated actions for key actors, including businesses, indicator developers & data producers, corporate frameworks and standard setters, and governments. This work complements other work on corporate biodiversity assessments and the Kunming-Montreal Global Biodiversity Framework undertaken by the Align project, which focuses on measurement of impacts on ecosystems- 'Measuring ecosystem condition- a primer for business'.

Key messages

Actions by the private sector are key to achieving the goals and targets of the **Kunming-Montreal Global Biodiversity Framework** (KM-GBF) as part of a whole of society approach. It is therefore important that private sector contributions are understood and measured effectively. Three avenues would enable greater alignment of corporate assessment and reporting on biodiversity with the KM-GBF (Figure 1):

- **Businesses apply the KM-GBF targets to guide their strategies**. To be able to measure business contributions to the KM-GBF targets there is a need for their translation to a business context. This relates not only to global targets but also to associated national level targets within national biodiversity strategies and action plans (NBSAPs). These need to be translated into actionable and relevant targets within a business' strategy, supported by using appropriate methods for monitoring their implementation.
- **Businesses transpose relevant elements of the indicators and data of the monitoring framework for the KM-GBF**. The indicators within the monitoring framework for the KM-GBF are adopted for use by the Parties of the Convention on Biological Diversity (CBD) to monitor progress implementing the KM-GBF. This includes at the global scale, planning national action and when reporting on national implementation of the KM-GBF. Some of the indicators of the monitoring framework are associated with specific data sets. Some of the indicators could be applied by businesses depending on criteria such as the spatial granularity associated data sets, their responsiveness, and ability to attribute changes to specific actors.

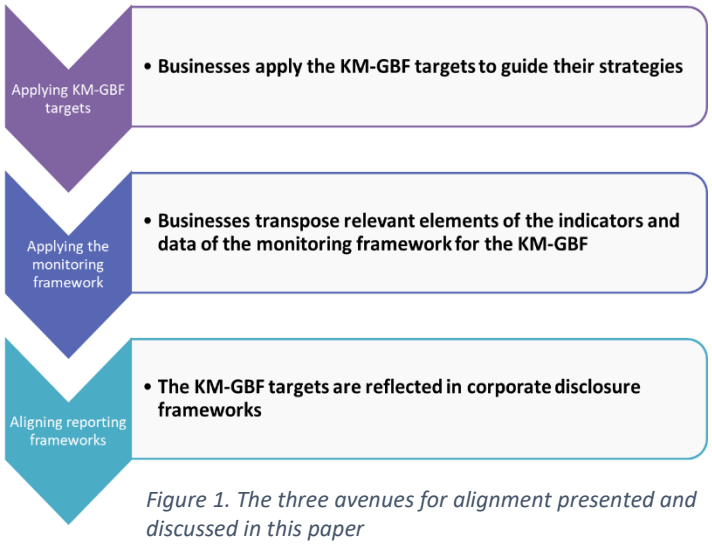


Figure 1. The three avenues for alignment presented and discussed in this paper

- **The KM-GBF targets are reflected in corporate disclosure frameworks**. Analysis of a selection of recently developed reporting and disclosure frameworks and standards reveal a degree of alignment with the KM-GBF in terms of the thematic areas covered, mainly centred around reducing threats to biodiversity. This provides potential to help guide business assessments and actions that contribute to the KM-GBF. However, some areas are not covered at all, despite being relevant for businesses and financial institutions.

1 Introduction

The Kunming-Montreal Global Biodiversity Framework (KM-GBF) was adopted in December 2022 as part of a package of decisions which includes the associated monitoring framework for the implementation of the KM-GBF (hereafter Monitoring Framework), among other decisions[1]. All Parties to the CBD have committed to setting national targets and actions to implement the KM-GBF through revising or updating their national biodiversity strategies and action plans (NBSAPs) and will report on their national implementation at set intervals.

The targets of the KM-GBF are grouped into three clusters: reducing threats to biodiversity, meeting people's needs through sustainable use and benefit-sharing, and tools and solutions for implementation and mainstreaming. Target 15[2] of the KM-GBF is aimed at governments to take various measures, including to ensure that large and transnational companies assess and disclose impacts, dependencies, risks and opportunities on biodiversity, and that they take actions to reduce nature loss. It is the first time that corporate assessment and disclosure, with a requirement also to take action, has been explicitly included within a CBD strategic plan. Target 15 directly acknowledges businesses and financial institutions (FIs) as key actors in the biodiversity agenda. Although all targets, including Target 15, relate first and foremost to actions that governments need to implement, most of them (including explicitly Target 15) can only be achieved with the contributions of private sector. For example, Target 1 requires all areas - including private landholdings - to be included in biodiversity-inclusive spatial plans or effective management processes, and Target 19 includes increasing public and private financial resources available to implement NBSAPs. This increase in resources requires the development of innovative financing mechanisms and products and the engagement of the finance and broader private sector. The KM-GBF is therefore to be considered as a 'framework for all', guiding multiple actors, including business and FIs in their actions for nature (referred to in Section C of the KM-GBF as a 'whole of society' approach).

The Monitoring Framework that sits alongside the KM-GBF comprises a set of agreed indicators for Parties to track progress towards the KM-GBF goals and targets at a global scale, as well as to use in their national planning and reporting processes to support implementation, review and reporting of national progress towards the goals and targets of the KM-GBF. However, not all of them are readily available and some still need to be developed. The headline indicators within the monitoring framework are intended for use in CBD Parties' planning and reporting processes in national biodiversity strategies and action plans and national reports. As a result of this intended use, there are no indicators specifically tailored for use by business and financial institutions in the KM-GBF monitoring framework.

The vital contribution of non-state actors, including business, in delivering on the KM-GBF can be best understood through wider use of the Monitoring Framework by a range of actors at different scales.

[1] https://www.cbd.int/gbf/related

[2] Target 15 requires that governments '*Take legal, administrative or policy measures to encourage and enable business, and in particular to ensure that large and transnational companies and financial institutions: (a) Regularly monitor, assess, and transparently disclose their risks, dependencies and impacts on biodiversity, including with requirements for all large as well as transnational companies and financial institutions along their operations, supply and value chains and portfolios; (b) Provide information needed to consumers to promote sustainable consumption patterns; (c) Report on compliance with access and benefit-sharing regulations and measures, as applicable; in order to progressively reduce negative impacts on biodiversity, increase positive impacts, reduce biodiversity-related risks to business and financial institutions, and promote actions to ensure sustainable patterns of production.*'

Standards for corporate biodiversity reporting and disclosure are emerging through various policy, market, and multi-stakeholder initiatives that are expected to drive uptake of measurement approaches to report against a set of indicators. These include voluntary frameworks and standards, such as the Taskforce on Nature-related Financial Disclosures (TNFD) and Global Reporting Initiative (GRI) and mandatory standards, such as the European Sustainability Reporting Standards (ESRS) of the Corporate Sustainability Reporting Directive (CSRD) within the EU. These standards and frameworks can complement the monitoring framework for the KM-GBF through guiding what and how businesses measure and disclose information related to biodiversity. However, the process and the way that such complementary initiatives can be used to support national and global monitoring is yet to be understood.

To ensure business action is supporting national priorities under the KM--GBF, businesses would need to measure and transparently report on their 'contributions' at the national scale. This measurement and reporting can ensure a multi-actor approach to achieving the collective targets of the KM-GBF. This disclosure both increases accountability of business and FIs as key actors, and also has potential to directly support the monitoring of targets at the national and international level.

A dialogue is therefore emerging as to how corporate assessment and reporting of impacts and dependencies on biodiversity can best be aligned with and support achievement of the targets of the KM-GBF, and how corporate and national level monitoring biodiversity can be harmonized. However, there is a lack of clarity on what 'alignment' between corporate biodiversity measurement and the KM-GBF means in practice. This alignment is needed to guide businesses and governments better on how to measure their collective actions on biodiversity and contribute to achieving the KM-GBF. We suggest that alignment can take many forms, and can be achieved through three main avenues in parallel:

1. **Businesses apply the KM-GBF targets to guide their strategies**
2. **Businesses transpose relevant elements of the indicators and data of the monitoring framework for the KM-GBF**
3. **The KM-GBF targets are reflected in corporate disclosure frameworks**

In this discussion paper these avenues are further elaborated and the current state and potential for implementation for each are evaluated. High-level actions to support increased alignment are then proposed.

2 Businesses applying the KM-GBF targets to guide their strategies

The KM-GBF aims to guide and promote the revision, development, updating, and implementation of policies, goals and targets at all levels. In this sense, business may use the KM-GBF to guide actions and target setting within internal strategies, as well measurement and reporting to stakeholders. Businesses and FIs that have already developed a nature strategy can revise and update them in much the same way as governments will revise and update their national strategies and action plans in line with the KM-GBF. The contributions of businesses and FIs to achieving the targets of the KM-GBF may be most effectively implemented when the targets are 'translated' into a business context[3]. This translation enables companies to measure and report their contribution to targets for internal performance evaluation as well as supporting national level monitoring of implementation. For example, guided by Target 10, an agricultural company may set an internal target of sustainably managing a certain percentage of their land holdings by 2030. In turn, when transparently reported this could theoretically support national level monitoring of targets around areas of land under sustainable agriculture.

The broad business contexts for measurement highlighted in the Align recommendations[4] are a) screening for potential impacts and dependencies and b) measuring realised outcomes. Both of these are relevant in the context of the KM-GBF.

Screening in the context of the KM-GBF may involve screening for potential risks and opportunities in relation to the different goals and targets being achieved by companies, both in terms of the KM-GBF targets (Table 2) and associated NBSAPs. This may include, for example:

- Identifying locations where targeted actions would contribute to the KM-GBF targets and NBSAP implementation. For example, identifying areas to avoid in project planning processes, or areas to prioritize for resource allocation towards management action because of their high ecological integrity, high species extinction risk (aligned with Targets 1 and 4) or protected areas (aligned with Target 3).
- Identifying opportunities within landscapes of operation to support restoration activities, either directly or through financing (aligned with Target 2).
- Identifying areas where impacts to biodiversity may have greatest impact on livelihoods of Indigenous Peoples and local communities, women and girls and other groups of people who are considered vulnerable.
- Identifying how products can be best designed to contribute to targets around pollution and waste (using Life Cycle Analysis approaches for example)

[3] Smith, Thomas, et al. "Biodiversity means business: Reframing global biodiversity goals for the private sector." *Conservation Letters* 13.1 (2020): e12690.

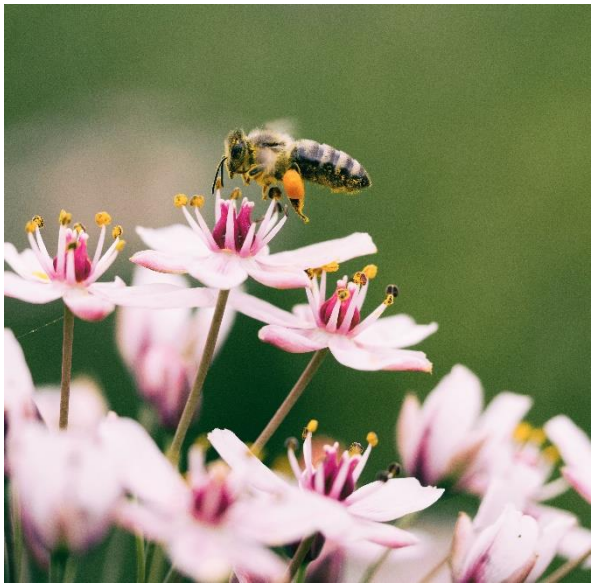
[4] UNEP-WCMC, Capitals Coalition, Arcadis, ICF, WCMC Europe (2022) recommendations for a standard on corporate biodiversity measurement and valuation, Aligning accounting approaches for nature

The current landscape of readily available measurement methodologies and tools developed to support corporate biodiversity assessments lack the thematic coverage of the full set of targets included in the KM-GBF[5], hindering business in screening their impacts and dependencies and actions to manage them in relation to KM-GBF targets.

Measuring realised contributions to KM-GBF targets can cover Pressure, State and Response indicators[6].

- 'Pressure' indicators can reflect business contributions to reducing threats to biodiversity, and contributions to ensuring sustainable use of biodiversity.
- 'State of nature' indicators can be used to understand progress of business contributions towards achieving KM-GBF targets by providing information on outcomes on the state of biodiversity. Compared to screening, measuring realised outcomes requires approaches and data that have a higher level of accuracy and spatial precision based on company-specific information. Where possible, monitoring of outcomes should involve context specific, directly measured quantitative and qualitative data, structured in an accounting framework in concordance with the Align project's recommended best practices[7].
- 'Response' indicators reflect the management actions businesses are taking. They can be used to track actions directly in relation to KM-GBF targets. For example, assessing the total financial spend of a business on biodiversity management actions, using readily available data from financial accounts.

Table 1 below provides hypothetical illustrative examples of how businesses and financial institutions may screen and measure their contributions to the targets of the KM-GBF.



[5] Zhu, Y. et al (2024). Glaring gaps in tools to estimate businesses' biodiversity impacts hinder alignment with the Kunming-Montreal global biodiversity framework. *Journal of Cleaner Production*, 142079.

[6] Addison, P. F et al. (2020). Bringing sustainability to life: A framework to guide biodiversity indicator development for business performance management. *Business Strategy and the Environment*, *29*(8), 3303-3313.

[7] UNEP-WCMC, Capitals Coalition, Arcadis, ICF, WCMC Europe (2022) recommendations for a standard on corporate biodiversity measurement and valuation, Aligning accounting approaches for nature

Table 1. Examples of screening and measuring processes (illustrative cases) for a subset of the KM-GBF targets

KM-GBF Target		Example business implementation- Screening risks and opportunities	Example business implementation- Measuring realised contributions
Target 2	Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and marine and coastal ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.	Identification of land owned or leased that has potential for restoration, e.g. by overlay of an available restoration potential data layer with location of business operations as an initial step in identifying potential areas to invest in restoration activities.	Changes in ecosystem extent and condition in relation to restoration activities, are tracked through use of a corporate biodiversity accounting framework, to support any claims of net gain.
Target 6	Eliminate, minimize, reduce and or mitigate the impacts of invasive alien species on biodiversity and ecosystem services by identifying and managing pathways of the introduction of alien species, preventing the introduction and establishment of priority invasive alien species, reducing the rates of introduction and establishment of other known or potential invasive alien species by at least 50 per cent by 2030, and eradicating or controlling invasive alien species, especially in priority sites, such as islands.	Potential risk of enhancing spread of invasive species at locations of operation assessed through use of public databases on the distribution of invasive species.	Presence/absence of identified invasive species are confirmed at site-level through surveys and are selected as target species for regular monitoring through field surveys.
Target 7	Reduce pollution risks and the negative impact of pollution from all sources by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects, including: (a) by reducing excess nutrients lost to the environment by at least half, including through more efficient nutrient cycling and use; (b) by reducing the overall risk from pesticides and highly hazardous chemicals by at least half, including through integrated pest management, based on science, taking into account food security and livelihoods; and (c) by preventing, reducing, and working towards eliminating plastic pollution.	Use of a model-based footprinting approach with sector average data to estimate the potential biodiversity impacts of hazardous chemicals associated with activities in a company's supply chain.	Business engages with suppliers to collect primary data on release of hazardous chemicals to increase the accuracy of model-based footprinting analysis.
Target 10	Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, in particular through the sustainable use of biodiversity, including through a substantial increase of the application of biodiversity friendly practices, such as sustainable intensification, agroecological and other innovative approaches, contributing to the resilience and long-term efficiency and productivity of these production systems, and to food security, conserving and restoring biodiversity and maintaining nature's contribution to people, including ecosystem functions and services.	Use of a model-based footprinting approach to compare the potential impacts on biodiversity of different production practices used by suppliers	Use of a corporate biodiversity accounting approach at priority locations to track changes in ecosystem condition and populations of material species at production sites resulting from improved production practices.

3 Businesses applying the indicators and data from the monitoring framework for the KM-GBF

As noted above, the global Monitoring Framework associated with the KM-GBF includes a set of headline, component and complementary indicators that can be used to monitor implementation of each of the KM-GBF goals and targets.

- Headline indicators represent a minimum set of core information and use methodologies agreed by Parties to the CBD. Most of these indicators are calculated at a national level based on national data from national monitoring networks and sources, although in some cases, headline indicators may draw on global datasets (for example the IUCN Red List Index).
- Component indicators are optional indicators that are used together with headline indicators, to measure implementation of key components of the goals and targets.
- Complementary indicators are optional indicators that provide thematic focus or in-depth analysis of each goal and target (e.g. for a particular ecosystem type). In addition, countries may also use their own national indicators to monitor implementation.

Some of the indicators within the Monitoring Framework have established, agreed methodologies and associated spatial/temporal data as a starting point. This means that they are readily applicable for planning, monitoring, and reporting processes at national level. On the other hand, a large proportion of the indicators prior to COP16 (held in October 2024) have methodologies that are still under development with no associated data available yet. As these indicators are further developed, the spatial and temporal data behind them will be increasingly available.

The indicators and monitoring framework are designed to meet the needs of governments and are therefore not all applicable for use by businesses. However, it is useful to investigate opportunities for application by business as this could enable business and government to use the same data and methods for tracking progress towards targets and support inclusion of business contributions to reported national level progress. From analysis of the Monitoring Framework for the KM-GBF, three broad, but not mutually exclusive, categories are identified here to classify utility of indicators for business application.

Indicators associated with specific spatial data layers. Indicators that have existing geospatial data layers would be relevant to businesses if data are (or can be generated) at fine-scale granularity and overlaid with locations of operations. This is particularly the case if the data are updated at a high enough temporal frequency to avoid significant time lags. For example, geospatial data layers of ecosystem integrity may be used to screen for sensitive locations or contextualise individual business impacts against landscape level trends. Examples from the Monitoring Framework include the Forest Landscape Integrity Index, Red List of Ecosystems and the Agrobiodiversity Index. A high degree of responsiveness is required (and not always present) for geospatial data layers to apply to other business applications such as tracking attributable impacts over time. This is because not all indicators have time-series data that can show change over

time and may not have the granularity required to be responsive to actions taken by individual businesses.

Indicators in development. Indicators that do not yet have associated spatial or temporal data, but methodologies and data are likely to be developed to support application by countries in the coming years. In terms of business use, these are more 'generic' variables that could guide businesses on key variables to measure internally. For example, 'area of restoration' (intended to track country level implementation of restoration targets) could be adopted to measure and report an area of land within a business' operations under restoration.

Government specific indicators. Indicators that directly track actions that are specific to government have the least applicability for business use. These comprise a significant proportion of the monitoring framework. Examples in this category include 'Number of countries that implement their biosafety measures' and 'Trends in the number and value of government fossil fuel support measures'. These examples show that these indicators require reconfiguration to make them relevant for a business or FI. Any associated data would not reflect actions taken by individual businesses, but data would need to be gathered by the company. Instead, the results of these indicators reported by governments may be able to provide context for business assessments, for example through informing exposure to nature-related transition risk.

As well as the indicators and their associated methodologies, it is likely that the underlying monitoring data used to populate indicators for national reporting will have utility for business use. Examples of national level monitoring data include:

- Records of protected, threatened and invasive species for indicators relevant to Targets 4 and 6.
- Spatial boundaries of designated areas such as national parks, relevant to Target 3.
- Air pollutant emissions data from different pollution source types, relevant to Target 7.
- Statistics of land/sea use change, relevant to Target 1.
- National accounts of ecosystem extent, condition and services compiled using United Nations System of Environmental-Economic Accounting (UN SEEA) framework methodology.

These monitoring data have the potential to fill data gaps and support corporate biodiversity assessment. For example:

- Using national data on protected areas for initial risk screening to identify areas to avoid when implementing the mitigation hierarchy.
- Applying species records, as well as maps of ecosystem types in the environmental impact assessment process, to inform mitigation strategies and Biodiversity Action Plans.
- Using national ecosystem accounting data to inform corporate policy and decision-making. For example, combining ecosystem accounts with land ownership data can enable assessment of ecosystem values by private land holders.

4 Aligning corporate reporting and disclosure frameworks with the KM-GBF

The emergence of voluntary market-led reporting and disclosure initiatives such as the Taskforce on Nature-related Financial Disclosures (TNFD), and regulatory obligations such as the EU Corporate Sustainability Reporting Directive (CSRD) are spurring businesses and financial institutions to include biodiversity in their sustainability reports. These efforts aim to address current information failures, guiding more informed investment decisions and increased accountability of the business community.

Target 15 of the KM-GBF is expected to further build momentum around the development of corporate biodiversity reporting and disclosure frameworks and standards. The implementation of the KM-GBF has potential to promote harmonization between different reporting and disclosure frameworks, and in turn lead to high-level harmonization between corporate and national level reporting on progress implementing the KM-GBF (Box 1).

The approach to materiality underpinning corporate disclosure frameworks is a key factor influencing their alignment with the Global Biodiversity Framework. For effective implementation of the KM-GBF companies must go beyond a financial (or single) materiality approach to consider their impacts through a lens of double materiality. This approach recognises the obligations placed on their operating countries through their ratification of the CBD and adoption of the KM-GBF.

Box 1: Growing alignment between regulatory and voluntary standards and frameworks in a KM-GBF context

In a quest to streamline non-financial reporting requirements for companies, increased collaboration across initiatives and frameworks has taken place in recent years. The cooperation agreement between the Global Reporting Initiative (GRI) and the European Financial Reporting Advisory Group (EFRAG) announced in November 2023 is an example of such strengthened cooperation[8] likely to lead to a unified understanding of biodiversity impacts and dependencies for organisations. As part of this cooperation, the Interoperability Index between GRI and the European Sustainability Reporting Standards (ESRS) was released demonstrating how the standards correlate. The tool emphasises the high degree of commonality already achieved and lays down solid foundations to build a reciprocal digital taxonomy. As a result of collaboration on the technical work, the respective standards – the GRI Biodiversity Standard and the EU sustainability reporting standards – will build on existing practices, incorporate common expertise and, crucially, will incorporate a double materiality approach[9]. The recent announcement by the International Sustainability Standards Board (ISSB) of a research project on the disclosure of risks and opportunities associated with biodiversity, ecosystems and ecosystem services may lead to further standard setting in this area and offers the potential to more fully align with the commitments under the KM-GBF.

[8] Other ongoing initiatives seeking to strengthen cooperation include EFRAG and TNFD (TNFD-ESRS Interoperability Mapping to be released soon), TNFD and SBTN (focusing on target setting for companies), TNFD and PBAF (focusing on the finance sector).

[9] See Box 2.

Alignment of voluntary and regulatory standards with the KM-GBF

Table 2 provides a comparative analysis of the requirements of CSRD ESRS, the Sustainable Finance Disclosures Regulation (SFDR), the EU Taxonomy of sustainable economic activities, TNFD and GRI. The table highlights where their associated indicators and metrics (where available) align with the targets of the KM-GBF. It should be noted that the degree of alignment between a disclosure metric and a KM-GBF target is variable. While some may directly assess business contributions to a target (for example areas under restoration), others may reflect actions that are supportive of the overall outcomes of implementation (for example disclosure on spatial footprint, which can inform the overall target of planning and managing land for biodiversity).

Key take aways from the analysis include:

- Alignment between ESRS E4, TNFD and GRI requirements and the thematic areas covered by KM-GBF targets (e.g., species population, land conversion, etc.), and is particularly apparent for theme 1 ("Reducing threats to biodiversity").
- Thematic coverage is less apparent for other aspects, including considerations of gender equality or gender-responsiveness within corporate disclosure. Some of the less well covered elements operate at the intersection of corporate and government responsibilities e.g. reducing harmful subsidies (target 18) or strengthening capacity building (target 20) but are essential for delivering the transformative change required to deliver the KM-GBF.
- The importance of stakeholder engagement (important for delivering against target 22) is emerging with assessment and disclosure guidance within key frameworks but is not yet translated into disclosure indicators [10].
- While certain disclosure requirements that are foundational across frameworks (e.g. actions of the mitigation hierarchy linked with avoidance, reduction and minimisation, restoration and rehabilitation) may be hard to connect to any of the KM-GBF targets, this should not raise concerns of misalignment, but is driven instead by the difference in nature and final objectives that exist between the KM-GBF (providing a global direction to conserve, sustainably use and restore nature) and the disclosure requirements (providing the means to drive change within companies).

Box 2: Double and Single Materiality

The concept of materiality is well established in financial reporting. It means that if a "reasonable person" would consider information important it is "material" and should therefore be disclosed.

A financial (or single) materiality view considers that if nature-related impacts on a business may have financial consequences they ought to be disclosed (the outside-in perspective).

A double materiality view considers that the impacts a business has on nature and society are also important, should therefore be considered material, and ultimately disclosed (the inside-out perspective).

[10] UNEP-WCMC (2024) Accountability for Nature: Comparison of Nature-Related Assessment and Disclosure Frameworks and Standards

Table 2. Alignment between the KM-GBF targets and relevant disclosure requirements, indicators and metrics within EU and global regulatory and voluntary frameworks for biodiversity. References to the relevant part of the disclosure framework is given in brackets.

KM-GBF Target	Target description	Level of thematic coverage	Disclosure requirements, metrics and indicators from relevant corporate frameworks identified in analysis	
1. Reducing threats to biodiversity				
1	Plan and Manage all Areas to Reduce Biodiversity Loss	High	Impact metrics (e.g., land conversion, ecosystem management change) (ESRS E4-5), Transition plan (E4-1)	CSRD- ESRS E4[11]
			Share of investments in investee companies with sites/operations located in or near to biodiversity-sensitive areas where activities of those investee companies negatively affect those areas	SFRD[12]
			Total spatial footprint (km^2) (e.g., total surface controlled/managed by the organization, total disturbed area) (C1.0); Level of ecosystem condition by type of ecosystem and business activity; Species extinction risk (C5.0)	TNFD[13]
			Size of the high biodiversity value area (101-5b); Policies or commitments to halt and reverse biodiversity loss (101-1a)	GRI[14]
2	Restore 30% of all Degraded Ecosystems	Medium	Actions linked to restoration (E4-3)	CSRD-ESRS E4
			Total spatial footprint (km^2) (e.g. total surface controlled/managed by the organization, total disturbed area) (C1.0); Total extent of land/freshwater/ocean-use change (C2.0/2.1 & A 1.1); Level of ecosystem condition by type of ecosystem and business activity; Species extinction risk (C5.0)	TNFD
			Size in hectares of the area under restoration/rehabilitation, restored/rehabilitated (101-2b)	GRI

[11] The table does not differentiate between disclosure requirements that are obligatory ("shall") or voluntary ("may") according to the Regulation, nor to the exceptions that exist for certain categories of companies not having to report (e.g. potential omissions for certain sizes and year of preparation of the sustainability statement). For a full overview of the disclosure requirements, one can refer to the Commission Delegated Regulation adopted on 31 July 2023. See: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202302772

[12] All indicators relevant to the Principal Adverse Impacts indicators found in Table 1 and 2 in the Commission Corrigendum supplementing Regulation (EU) 2019/2088

[13] TNFD's core global disclosure indicators and metrics for nature-related dependencies and impacts are listed in Table 6, p.83 of the Recommendations of the Taskforce on Nature-related Financial Disclosures. Only the most immediate and relevant connections with the KM-GBF targets have been retained within the examples provided here

[14] GRI 101: Biodiversity standard 2024: https://www.globalreporting.org/search/?query=GRI+101%3a+Biodiversity

KM-GBF Target	Target description	Level of thematic coverage	Disclosure requirements, metrics and indicators from relevant corporate frameworks identified in analysis	
3	Conserve 30% of Land, Waters and Seas	Medium	Impact metric linked to population size, range, extinction risk, changes in the number of individuals, threat status of species, etc. (ESRS E4-5); Adoption of a biodiversity and ecosystem protection policy of operational sites (ESRS2 E4-2); Impact metric (e.g., population size, range, extinction risk) (ESRS E4-5)	CSRD-ESRS E4
			Share of investments in investee companies whose operations affect threatened species	SFDR
			Quantitative measurement of change to ecosystem condition and extent (SA 6.6 & SA 6.7); Level of ecosystem condition by type of ecosystem and business activity; Species extinction risk (C5.0)	TNFD
			IUCN Red List of Threatened Species or CITES Appendices for disclosure (101-6)	GRI
4	Halt Species Extinction, Protect Genetic Diversity, and Manage Human-Wildlife Conflicts	High	Impact metric linked to population size, range, extinction risk, changes in the number of individuals, - threat status of species, etc. (ESRS E4-5); Adoption of a biodiversity and ecosystem protection policy of operational sites (ESRS2 E4-2); Impact metric (e.g., population size, range, extinction risk) (ESRS E4-5)	CSRD-ESRD E4
			Share of investments in investee companies whose operations affect threatened species	SFDR
			Quantitative measurement of change to ecosystem condition and extent (SA 6.6 & SA 6.7); Level of ecosystem condition by type of ecosystem and business activity; Species extinction risk (C5.0)	TNFD
			IUCN Red List of Threatened Species or CITES Appendices for disclosure (101-6)	GRI
5	Ensure Sustainable, Safe and Legal Harvesting and Trade of Wild Species	Medium	Description of consultations with affected communities on sustainability assessments of shared biological resources and ecosystems (ESRS 2 IRO-1)	CSRD- ESRS E4
			Quantity of high-risk natural commodities sourced from land/ocean/freshwater (C 4.1/2)[15]	TNFD
			Subject to a separate disclosure standard (GRI 13); Coordinates for the sites of transport and fishing activities (101-5)	GRI
6	Reduce the Introduction of Invasive Alien Species by 50% and Minimize Their Impact	Medium	Invasive alien species included in direct impact drivers as part of materiality assessment (ESRS 2 IRO-1); Management of invasive species introduction pathways; Number of invasive alien species or the extent of surface covered by invasive alien species.	CSRD- ESRS E4

[15] High-risk natural commodities refer to commodities or products where production has significant negative impacts on nature. Organisations should refer to the SBTN High Impact Commodity List in the first instance, supplemented by TNFD sector-specific guidance for details on the types of high-risk natural commodities for each sector, where relevant. Organisations should also indicate what proportion of these commodities represented are threatened and CITES-listed species.

KM-GBF Target	Target description	Level of thematic coverage	Disclosure requirements, metrics and indicators from relevant corporate frameworks identified in analysis	
			Proportion of high-risk activities operated under appropriate measures to prevent unintentional introduction of Invasive Alien Species, or low-risk designed activities (C4.0)	TNFD
			Direct drivers of biodiversity loss (Disclosure 101-6), including invasive alien species (101-6d)	GRI
7	Reduce Pollution to Levels that are Not Harmful to Biodiversity	High	Policies, targets, action plans and resources in relation to pollution risks are subject to specific standard (ESRS E2)	CSRD-ESRS E4
			Proportion of activities considered eligible (vs non-eligible) and aligned (vs non-aligned) in the EU Taxonomy pollution objectives (Art. 10 of (EU) 2021/2178)	EU Taxonomy[16]
			Volume of wastewater discharged (C2.1); Weight of hazardous and nonhazardous waste generated by type (tons) (C2.2); Plastic footprint as measured by total weight (tons) (C2.3); Total pollutants released to soil split by type (C2.4); Total non-GHG air pollutants (C3.3)	TNFD
			Type and quantity of pollutants generated (101-6c)	GRI
8	Minimize the Impacts of Climate Change on Biodiversity and Build Resilience	High	Policies, targets, action plans and resources in relation to climate change are subject to specific standard (ESRS E1)	CSRD-ESRS E4
			Proportion of activities considered eligible (vs non-eligible) and aligned (vs non-aligned) in the EU Taxonomy climate objectives (Art. 10 of (EU) 2021/2178) translated by the Green Asset Ratio (Turnover (%), CapEx (%))	EU Taxonomy
			GHG emissions - Scope 1, 2 and 3 GHG emissions (refer to TCFD) (C 1.0)	TNFD
			Scope 1, Scope 2 and Scope 3 GHG emissions using GRI 305 (101-6)	GRI
2. Meeting people's needs through sustainable use and benefit-sharing				
9		Medium	List of key stakeholders negatively or positively impacted by actions and how they are impacted, including Indigenous/vulnerable group (ESRS E-3).	CSRD ESRS E4

[16] The EU Taxonomy Regulation is intended to increase transparency in the market and help reduce greenwashing, by providing information to investors about the environmental performance of assets and economic activities of large financial institutions and large non-financial companies. Art 8 specifies the type of information that large financial institutions and non-financial companies subject to the Non-Financial Reporting Directive (NFRD) (replaced and adapted in the meantime by the CSRD) must provide to investors and wider stakeholders. It is supported by EU Taxonomy Article 8 disclosures delegated act specifying the information that financial and non-financial undertakings must disclose. https://finance.ec.europa.eu/system/files/2021-07/sustainable-finance-taxonomy-article-8-faq_en.pdf

KM-GBF Target	Target description	Level of thematic coverage	Disclosure requirements, metrics and indicators from relevant corporate frameworks identified in analysis	
	Manage Wild Species Sustainably to Benefit People		Description of how company ensures that the actions taken to manage its impacts on biodiversity avoid and minimize negative impacts and maximize positive impacts for stakeholders (101-2-f)	GRI
10	Enhance Biodiversity and Sustainability in Agriculture, Aquaculture, Fisheries, and Forestry	High	Pressure metrics (e.g., conversion of land cover, change in spatial configuration of landscape, changes in ecosystem structural/functional connectivity) (ESRS E4-5)	CSRD-ESRS E4
			Extent of land/freshwater/ocean ecosystem that is sustainable managed (C1.1)	TNFD
			Share of investments in companies without a policy to address deforestation	SFDR
			Transformative actions taken and additional conservation actions taken (101-2-a-v)	GRI
11	Restore, Maintain and Enhance Nature's Contributions to People	Medium		
			Water withdrawal and consumption from areas of water stress (C 4.0); Quantity of high-risk natural commodities sourced from land/ocean/freshwater (C 4.1); Quantity of natural commodities sourced from priority ecosystems (C 4.2)	TNFD
			Ecosystem services and beneficiaries affected or potentially affected by the organization's activities 101-8); Water withdrawal and water consumption in megaliters (101-6)	GRI
12	Enhance Green Spaces and Urban Planning for Human Well-Being and Biodiversity	Low	Land artificialization of real estate assets as a share of non-vegetated surface area compared to the total surface area of the plots of all assets	SFDR
13	Increase the Sharing of Benefits from Genetic Resources, Digital Sequence Information and Traditional Knowledge	Medium	Information on the fair and equitable benefit-sharing from benefits arising from genetic resources utilization (ESRS E4-2)	CSRD-ESRS E4
			Description of the process to ensure compliance with access and benefit-sharing regulations and measures (101-3)	GRI

KM-GBF Target	Target description	Level of thematic coverage	Disclosure requirements, metrics and indicators from relevant corporate frameworks identified in analysis	
3. Tools and solutions for implementation and mainstreaming				
14	Integrate Biodiversity in Decision-Making at Every Level	Medium	Transition plan in line with the targets of no net loss by 2030, net gain from 2030 and full recovery by 2050 (Disclosure Requirement E4-1)	CSRD-ESRS E4
			Describe the effect nature-related dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place. (Disclosure B)	TNFD
			Policies to halt and reverse biodiversity loss (Disclosure 101-1)	GRI
15	Businesses Assess, Disclose and Reduce Biodiversity-Related Risks and Negative Impacts	The disclosure frameworks analysed support companies in measuring their impacts and are therefore aligned with the aims of target 15.		
16	Enable Sustainable Consumption Choices To Reduce Waste and Overconsumption	Low	Biodiversity-friendly consumption and production metrics (list of third-party certification schemes) (ESRS E4-2)	CSRD-ESRS E4
17	Strengthen Biosafety and Distribute the Benefits of Biotechnology	Low	Thematic coverage of this target is not readily apparent in the disclosure requirements analysed	
18	Reduce Harmful Incentives by at Least $500 Billion per Year, and Scale Up Positive Incentives for Biodiversity	Low	Thematic coverage of this target is not readily apparent in the disclosure requirements analysed	

KM-GBF Target	Target description	Level of thematic coverage	Disclosure requirements, metrics and indicators from relevant corporate frameworks identified in analysis	
19	Mobilize $200 Billion per Year for Biodiversity From all Sources, Including $30 Billion Through International Finance	Low	Thematic coverage of this target is not readily apparent in the disclosure requirements analysed	
20	Strengthen Capacity-Building, Technology Transfer, and Scientific and Technical Cooperation for Biodiversity	Low	Thematic coverage of this target is not readily apparent in the disclosure requirements analysed	
21	Ensure That Knowledge Is Available and Accessible To Guide Biodiversity Action	Low	Assessment of material risks linked to the poor quality of data hampering biodiversity-related assessments. Reference to data sources (e.g. TNFD, ENCORE, etc.) (ESRS IRO-1).	CSRD-ESRS E4
22	Ensure Participation in Decision-Making and Access to Justice and Information Related to Biodiversity for all	Medium	List of key stakeholders involved in key actions including impacts and benefits created for affected communities, Indigenous groups or other vulnerable groups (ESRS E4-3)	CSRD-ESRS E4
			Value of investment in nature-related community development programmes intended to enhance positive impacts for Indigenous Peoples	TNFD
23	Ensure Gender Equality and a Gender-Responsive Approach for Biodiversity Action	Low	Thematic coverage of this target is not readily apparent in the disclosure requirements analysed	

5 Conclusions

Action by public and private sectors is required for the achievement of the goals and targets of the KM-GBF. As the policy dialogue surrounding the KM-GBF focuses on implementation during the Conference of the Parties to the CBD (COP16), the ability to measure progress on actions by both state and non-state actors will be key for success. This discussion paper aims to provide clarity to this dialogue, specifically around the concept of 'alignment' between corporate biodiversity assessment and the Kunming-Montreal Global Biodiversity Framework.

- Businesses can use the KM-GBF to guide nature strategy development and should look to cascade the most relevant targets down into their own targets and actions. 'Screening' approaches outlined in the Align project recommendations can support businesses identifying opportunities for contributing to targets. There are however current gaps in business metrics and tools for some of the KM-GBF targets and this needs to be addressed by tool developers and data producers. Measuring realised outcomes of these contributions is best done with directly measured, spatially specific data, in line with best practice outlined in the recommendations of the Align project.
- Greater clarity, specificity and consensus among multiple actors around key terms and concepts included within the targets of the KM-GBF and developing NBSAPs (such as 'sustainable use') will give greater clarity to business when screening and measuring their contributions.
- The review of the indicators within the Monitoring Framework suggests that only some of the indicators in the KM-GBF monitoring framework have the associated data and readily adaptable methodologies that mean they have potential for use by business. This means there is little overlap in the specific datasets and metrics used to assess progress between governments and businesses, hindering the ability to directly monitor business actions in support of the implementation of the KM-GBF targets. Ensuring indicators are developed with associated data with sufficient spatial and temporal resolution will increase their utility within corporate assessments.
- The thematic areas covered by the KM-GBF are broadly reflected in corporate-facing reporting and disclosure standards and frameworks, specifically on aspects of biodiversity state, and reductions in pressures. Implementing a double materiality approach to ensure companies are assessing and disclosing impacts on nature and people, and not only those that are financially material can further support alignment with the KM-GBF.

A summary of suggested high-level actions by different actors to help alignment between corporate biodiversity assessment and the KM-GBF is provided in Figure 2.

Businesses	Indicator and tool developers	Corporate disclosure frameworks and standard setters	Governments
•Assess which of the KM-GBF targets they have the highest potential to contribute to •Translate global and national targets into their own internal strategies and targets •Ensure strategies consider all relevant KM-GBF targets, including the needs of Indigenous Peoples and local communties, women and girls and other groups of people considered vulnerable •Use screening to identify locations where targeted action would most support the implementation of the KM-GBF •Follow recommended best practices for measuring location-specific impacts and dependencies that mirror the KM-GBF targets •Engage with NBSAP revision or update and support monitoring of implementation through reporting and disclosing nationally relevant information	•Develop indicators and spatial data layers with both private sector and public sector users in mind •Translate the targets of the KM-GBF into data and tool offerings •Develop tools and methods that incorporate pathways and scenarios in line with the KM-GBF targets •Where possible, make data and methods open source to maximise use by multiple actors and increase transparency •Support alignment of national ecosystem accounting and corporate biodiversity accounting practice	•Frame disclosure requirements to encompass broad thematic coverage of the KM-GBF, and fill identified gaps (see Table 2) •Produce indexes that show how their requirements can enable contribution to the KM-GBF to be tracked (as done by TNFD) •Encourage flexible reporting against national priorities outlined in NBSAPs •Encourage use of common datasets and metrics by both businesses and governments through inclusion in disclosure frameworks and associated guidance •Support sharing of lessons learned at the sector level on how to translate KM-GBF into disclosure metrics	•Effectively translate Target 15 into the revision or update of NBSAPs and encourage/require alignment with existing corporate disclosure standards when implementing Target 15 at the national level •Link targets and actions in NBSAPs to specific priority sectors. •Where possible, define quantitative targets that allow businesses to assess proportionate contributions using metrics and indicators promoted by disclosure frameworks e.g. TNFD, GRI, CSRD •Support the production of monitoring data that is of sufficient spatial and temporal granularity that allows application by business •Develop data infrastructure to facilitate data sharing between public and private sector

Figure 2. Proposed set of indicative actions for business, indicator developers and standard setters and governments for aligning corporate biodiversity measurement closer with the KM-GBF. This table of actions was discussed in an online workshop with the Align project's Community of Interest held in April 2024.