# INTEGRATING BIODIVERSITY INTO NATURAL CAPITAL ASSESSMENTS

## **Application Guidance**

Part of a series of Biodiversity Guidance to accompany the Natural Capital Protocol





#### **Key messages**

- The results of your biodiversity-inclusive natural capital assessment can be used to direct a range of business actions, including the development of biodiversity inclusive strategies, policies, and action plans.
- Interpreting, testing and communicating the results of your assessment do not require additional biodiversity-specific guidance, so users are referred to the Protocol for general guidance.
- Biodiversity target setting is one strategy that businesses can pursue following a biodiversity-inclusive natural capital assessment. Approaches exist that can be used to develop targets in line with global, regional, and national biodiversity goals. There are alternative options using frameworks such as no net loss of biodiversity.
- Guidance is provided on how best to include biodiversity-inclusive natural capital assessments as part of the way you do business.

## **APPLY STAGE**



#### What is the Apply Stage?

The Apply Stage of the Natural Capital Protocol introduces guidance on how you can **interpret**, **apply**, and **act** on the results of a natural capital assessment, building on information provided in the Measure and Value Stage. This **Application Guidance** details how to apply and act upon biodiversity-inclusive natural capital assessment results, to help define a clear strategy (including setting informed **biodiversity targets**), or develop a biodiversity-inclusive policy or action plan. This aims to help you embed the results within your business and work towards your objective outlined in Step 02 of the Protocol and the **Scoping Guidance**. The **Application Guidance** builds on information provided in the **Measuring and Valuing Guidance**.

#### What additional biodiversity guidance is provided for the Apply Stage?

Table A.1 provides an overview of the questions and actions of Steps O8 and O9 of the Apply Stage in the Protocol and outlines the actions for which the **Application Guidance** provides additional information. This Guidance has been developed to address the following questions asked within the Protocol:

**Step 08**: How can you interpret, validate, and verify your assessment process and results?

**Step 09**: How will you apply your results and integrate natural capital into existing processes?

This Guidance does not provide a detailed methodology on how to comprehensively carry out all of these actions, but provides further detail on how to ensure natural capital assessment results can be used effectively to mainstream biodiversity into decision-making.

Table A.1		
The Apply Stage: Mapping betwe	en the Protocol and t	he Biodiversity Guidance

Protocol Step		Questions this Step will answer	Proto	ocol actions	Additional guidance included?
no	Interpret and	How can you interpret,	8.2.1	Test key assumptions	No
UO	test the results	validate, and verify your assessment process and results?			Refer to Protocol page 96 for guidance
			8.2.2	Identify who is affected	No
					Refer to Protocol page 97 for guidance
			8.2.3	Collate results	No
					Refer to Protocol page 97 for guidance
			8.2.4	Validate and verify the	No
			assessment process and results	Refer to Protocol page 99 for guidance	



Protocol Step		Questions this Step will answer	Protocol actions	Additional guidance included?
			8.2.5 Review the strengths and	No
			weaknesses of the assessment	Refer to Protocol page 101 for guidance
00	Take action	How will you apply	9.2.1 Apply and act upon the	Yes
your results and integrate natural capital into existing processes?	results	See action 9.2.1		
	9.2.2 Communicate internally	No		
	processes.	and externally	Refer to Protocol page 106 for guidance	
	9.2.3 Make [biodiversity-	Yes		
		inclusive] natural capital assessments part of how you do business	See action 9.2.3	

#### **Additional notes**

You should address all actions associated with each Step in the Apply Stage. This Guidance provides additional information for only some of the actions where it is most appropriate.

#### How should you plan for this Stage?

Before you get started with the Apply Stage of your assessment, it is important to consider any planning requirements. The Protocol, for example, identifies some of the resource needs that should be considered for each phase of the assessment.

For applying your biodiversity-inclusive natural capital assessment, there are a number of published resources including guidelines, frameworks, and measurement tools that can provide support. Table A.2 provides a non-exhaustive list of these resources.



Table A.2
Examples of biodiversity-specific resources that can inform your biodiversity-inclusive natural capital assessment

Author	Title/Name (Year)	Туре	Description
Business and Biodiversity Offsets Programme (BBOP)	Business Planning for Biodiversity Net Gain: a Roadmap (2018)	Report	Designed to guide users to develop and apply best practice towards achieving no net loss or net gain of biodiversity through the application of the mitigation hierarchy.
Business for Nature	Business commitments for nature (n.d.)	Webpage	An example list of international commitments that companies are committing to towards reversing nature loss.
Convention on Biological Diversity	Global Partnership for Business and Biodiversity (2019)	Report	An overview of the national and regional business and biodiversity initiatives which may be relevant to business sectors and activities. It provides an overview of the initiative's activities, structures, and services.
Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services	Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (2019)	Report	Designed to provide a summary for policymakers of the global assessment of biodiversity and ecosystem services. Includes sections on relevant global biodiversity targets which could help inform the development of your own biodiversity targets.
IPIECA (The global oil and gas industry association for advancing environmental and social performance) and International Association of Oil & Gas Producers	Biodiversity and ecosystem services fundamentals (2016)	Report	Designed to provide best practice guidance for the oil and gas sector on how businesses can address their impacts on biodiversity and ecosystem services. This guidance provides a management framework of six interrelated Biodiversity and Ecosystem Services (BES) practices with an overview of tools for application within these practices.
(IOGP)  International Council on Mining and Metals (ICMM)	Good Practice Guidance for Mining and Biodiversity (2006)	Report	Designed to provide best practice guidance for mining professionals to improve biodiversity management throughout the mine cycle and to support relationships between mining and biodiversity stakeholders.
Gesellschaft für Internationale Zusammenarbeit (GIZ)	Standards and labels for the promotion of biodiversity-friendly production and commercialization. An overview (2017)	Report	Designed to provide an overview of how existing standards and labels can promote biodiversity-friendly production and commercialization and how businesses can incorporate these within their own activities.
Evidensia	Online library	Online tool	Online tool designed to collate evidence, information, and insights on sustainability of supply chain initiatives and tools, such as standards and certification, which businesses could use to help build a sustainable supply chain.



# Step 08 Guidance: Interpret and test the results

#### 8.2.1 Test key assumptions

FOR THIS ACTION, REFER TO THE PROTOCOL PAGE 96 FOR GENERAL GUIDANCE.

8.2.2 Identify who is affected

FOR THIS ACTION, REFER TO THE PROTOCOL PAGE 97 FOR GENERAL GUIDANCE.

#### 8.2.3 Collate results

FOR THIS ACTION, REFER TO THE PROTOCOL PAGE 97 FOR GENERAL GUIDANCE.

8.2.4 Validate and verify the assessment process and results

FOR THIS ACTION, REFER TO THE PROTOCOL PAGE 99 FOR GENERAL GUIDANCE.

8.2.5 Review the strengths and weaknesses of the assessment

FOR THIS ACTION, REFER TO THE PROTOCOL PAGE 101 FOR GENERAL GUIDANCE.

# 9 Step 09 Guidance: Take action

#### 9.2.1 Apply and act upon the results

At this point, your natural capital assessment will have identified biodiversity-related risks and opportunities, building upon the assessed impacts and dependencies, which should be used to inform a series of corporate actions in relation to biodiversity. This could include actions related to your business sector, your operations, or your strategy, or alternatively, it could include creating a new biodiversity target within your company or sector.

Table 9.1 lists examples of company actions that may be taken following a biodiversity-inclusive natural capital assessment, and refers to the relevant Business Applications outlined in the **Scoping Guidance**.

Click here to see how a water company is restoring habitats its business operations are dependent on.

# **Table 9.1**Examples of business actions taken as a result of a biodiversity-inclusive natural capital assessment

Example company action based on assessment results	Based on assessed impacts or dependencies	Business Application
Biodiversity-informed procurement strategy	Dependencies	BA4: Compare options
Consider changing procurement strategy for upstream materials to reduce operational and financial risk (e.g., sourcing products with lower risk based on their biodiversity dependency). Provides an opportunity to be a leading business addressing biodiversity-related risks within your supply chain, increasing market competitiveness, and reducing reputational risk.		
Disclosure of biodiversity assessment	Impacts/dependencies	BA5: Biodiversity accounting for internal reporting and/or external disclosure
Disclosure of assessment results to stakeholders provides evidence of biodiversity impacts and dependencies, increased transparency, and potential reduction of reputational risks.		uisciosure
Biodiversity certifications	Impacts	BA6: Certification by third parties
Work towards gaining relevant biodiversity certifications for production/sourcing of commodities which have increased risk (through high dependency and impact on biodiversity) to improve data collection and monitoring as well as reduce reputational and market risk.	impacts	S. to. certification by third parties
Support biodiversity restoration	Dependencies	BA7: Screening and assessment of
Support biodiversity restoration efforts where these support business operations (e.g., restoring pollinator-supporting habitats, to reduce operational and financial risk).		biodiversity risks and opportunities
Invest in natural infrastructure	Dependencies	BA7: Screening and assessment of
Enhance natural infrastructure across business operations (e.g., use of forests in flood defense schemes to reduce operational and financial risk, restoration of wetlands to improve water quality and reduce treatment costs, and to support market competitiveness.	Dependencies	biodiversity risks and opportunities
aoc oompetitiveness.		



As a result of your biodiversity-inclusive natural capital assessment, you may wish to set a biodiversity target to manage your biodiversity risks and opportunities. This could be because:

- 1) You recognize that the actions you want to implement will be more effective, cohesive, and impactful if they contribute to a specific biodiversity target.
- 2) You have identified several interconnected issues through your biodiversity-inclusive natural capital assessment (including feedback loops between impacts and dependencies) which warrant a combined approach, guided by a specific target.
- 3) You want to respond to momentum and pressure around target setting in the context of businesses contributing to the **Sustainable Development Goals** (SDGs), the future global biodiversity framework under the **Convention on Biological Diversity** (CBD), or as a result of lessons from your own company and/or businesses setting targets on climate change.
- 4) Setting a specific biodiversity target may have been the objective of your biodiversity-inclusive natural capital assessment from the outset.

Target setting can be challenging, but can also help to provide direction to a business's activities. The following section provides guidance to help you understand the existing frameworks, how you might adhere or contribute to them, and how to go about creating your target.

a. What existing frameworks are there to guide your biodiversity target? There are currently a range of existing targets and frameworks that you can use to inform the development of your own biodiversity targets. These include global goals and targets set by governments, such as the Sustainable Development Goals (SDGs) or those of the Convention on Biological Diversity (CBD). These global goals have also led to the development of national targets and priorities such as those within National Biodiversity Strategy and Action Plans (NBSAPs). No net loss or net gain commitments and policies are specific targets that are set by individual companies, financial institutions, as well as governments, and are inferred within the draft post-2020 global biodiversity framework. They can apply to different components of biodiversity including species and habitats, and a number of metrics have been developed to support implementation (refer to Measuring and Valuing Guidance action 6.2.5 for more information on metrics). Some examples of these current frameworks and targets are outlined below in table 9.2, however this list is not exhaustive. Please refer to the EU Business @ Biodiversity Assessment Update Report 2 (2019) table 5 for more information on additional frameworks such as environmental management systems (ISO 14001, EMAS), voluntary standards at a sector/product level (e.g. Roundtable on Sustainable Palm Oil), and others.



#### Table 9.2

Examples of global, national, and company-led frameworks and targets for informing biodiversity target setting

UN Sustainable Development Goals	Global goal		
	DG Goals 14 and 15 focus on the protection of biodiversity and ecosystems within marine and terrestrial nvironments. In addition to these two Goals, the remaining 15 SDGs also include biodiversity-explicit targets (CBD 020a).		
Benefits	Limitations		
Provides a comprehensive list of indicators to measure progress towards a number of easily understood goals.  Ecosystem services are essential for several of the SDGs, making this framework useful for companies that want to conserve ecosystem services (Wood et al. 2018).	Not designed with businesses in mind. Some of the information used for these indicators would be particularly difficult for businesses to access/obtain. However, there are examples for how businesses can adhere to these goals (United Nations Global Compact and KPMG 2015).		
Aichi Targets (and the post-2020 biodiversity framework)	Global goal		

There are twenty Aichi Targets, covering the period 2011-2020, which were established at a global level but with a flexible framework to allow integration into national or regional targets. Due to the flexible framework, individual countries were able to set their own targets and ensure their national needs and priorities were integrated.

The Convention on Biological Diversity will meet in Q2/Q3 2021 to adopt the post-2020 global biodiversity framework (CBD 2019) to replace the Aichi Targets. The framework will provide a pathway towards achieving the 2050 Vision of "Living in harmony with Nature" and aims to provide realistic, measurable, and time-bound targets with respective indicators and clear ways to report, monitor, and produce baselines.

Benefits	Limitations
Global policy framework adopted by all Parties to the Convention on Biological Diversity.	The Aichi Targets are difficult for businesses to engage with, however there are plans to address this within the proposed post-2020 global biodiversity framework (CBD 2019).
Science Based Targets for nature	Global goal

Targets which define and promote best practice for businesses by accounting for the five Earth systems: climate, fresh water, land, ocean, and biodiversity (SBTN 2020). Note that while companies can already set science based targets for climate, Interim Guidance on science based targets for nature, including biodiversity, will be launched in late 2020.

Benefits	Limitations
Actor-based targets specifically designed for businesses, and linked to global policy goals.	Not yet defined for biodiversity.
National Biodiversity Strategy and Action Plans (NBSAP)s and related biodiversity policies	National goal/company-led goal

As part of the CBD, under Article 6 of the Convention of General Measures for Conservation and Sustainable Use, each Party member creates a national strategy, plan, or program on: how, when, and where biodiversity and ecosystem services should be conserved, used sustainably, and the benefits of their use shared equitably. NBSAPs can serve as a policy driver to set a country on the right track to meet its biodiversity and environmental objectives, which are outlined within the country's own environment policy. **Subnational Biodiversity Strategies and Action Plans** (SBSAPs) and **Regional Biodiversity Strategies and Action Plans** (RBSAPs) have also been developed within the framework of the CBD. The CBD online database can be used to see whether a country has a NBSAP or a national target (CBD 2020b). As well as NBSAPs, SBSAPs, and RBSAPs, individual companies or countries can develop Biodiversity Action Plans (BAPs) to help protect and enhance biodiversity.

Click here to see how a property development business has adhered to global and national targets when creating an internal biodiversity strategy.

Benefits	Limitations
Contributing to global biodiversity targets which are set under the CBD through national-scale policies/targets. With the importance of businesses aligning with national priorities in countries of operation, adhering to NBSAPs provides direction for how this can be achieved.	Framework can be difficult for businesses to engage with as many NBSAPs lack clear targets and businesses often operate in multiple countries and therefore need to respond to multiple NBSAPs.



#### No net loss and net gain (mitigation hierarchy)

#### National goal/company-led goal

The target of no net loss or net gain of biodiversity depends on adherence to the mitigation hierarchy (BBOP 2012). Commitments to no net loss and net gain have gained interest in national policies such as those of the United Kingdom and Uganda (Department for Environment Food and Rural Affairs, 2019; National Environment Management Authority, 2019). More details can be found in the **Framing Guidance**.

Click here to see how a construction company has used no net loss to create biodiversity targets.

#### Benefit

# Methodology is well developed for certain applications making this easier for businesses to use (e.g., by the Business and Biodiversity Offsets Programme and the Cross Sector Biodiversity Initiative). Can achieve successful outcomes for activities which are highly localized, such as mining (IUCN 2020), infrastructure, and building development, but also activities which are not site-specific, such as supply chains (Aiama et al. 2015) and the banking sector (ASN Bank 2020).

#### Limitations

There is a need to ensure that these strategies benefit people as well as biodiversity and principles have been developed to support this (IUCN 2018). There are also a range of potential limitations related to the offsetting component of these strategies, since not all impacts can be compensated for (e.g., highly threatened species or those with extremely long recovery times such as coral reefs and ancient woodlands). A number of guidance materials are available to help address these limitations, including a framework to assess the achievability of offsetting within a given area (Gardner et al. 2013).

#### **Planetary boundaries**

#### Company-led goal

This concept includes nine processes which regulate the stability of the Earth's systems, to ensure the survival of humanity (Stockholm Resilience Centre 2020). Crossing boundaries "beyond zones of uncertainty" disrupts the balance between these processes, which may lead to increased risk of large-scale abrupt or irreversible environmental challenges. One of these boundaries explicitly addresses biodiversity loss - "Loss of biosphere integrity."

Click here to see how a food production company has used the planetary boundaries framework to assess their biodiversity footprint.

#### Benefit

# Can help businesses to understand how their specific biodiversity targets are contributing to global Earth systems. Can also be used to support implementation of Sustainable Development Goals related to nature (PBL NEAA 2018).

#### Limitations

As a rapidly evolving area, there are challenges in applying the planetary boundaries concept and framework in its current form into clear targets, actions, and operational tools for the business community (Cambridge Institute for Sustainability Leadership 2019). For example, the "tipping points" for biodiversity are undefined (Montoya et al. 2018) and the current data do not include global processes and/or rates of extinction (Montoya et al. 2018), leading to difficulty in assessing the global implications of a company's biodiversity target and quantifying a biodiversity target. Despite this, there have been some efforts by businesses to scale planetary boundaries at a landscape scale (Lammerant et al. 2016, Pictet Asset Management et al. 2020). A recent review of life-cycle-based methods for absolute environmental sustainability assessment and their applications has resulted in a new methodology, which provides detailed steps on when to choose, apply, and communicate the results of the planetary boundary framework (or other methods relating to other life cycle impact assessments (LCIA) (Bjørn et al. n.d.)).

#### b. How can you adhere to global and national biodiversity targets?

Global biodiversity targets, such as the Aichi Targets and Sustainable Development Goals, set out broad goals which can be used to create your own biodiversity targets. However, these are not designed for businesses and do not lend themselves to corporate needs. Ideally, you should aim to align company biodiversity targets with national targets and priorities, as these can support global biodiversity goals. Since these reflect the specific priorities of each country, multinational companies will need to adhere to the priorities of the countries in which they operate but would not create a corporate biodiversity goal related to a single national target. Due to the lack of clarity on what constitutes a "good" biodiversity goal you should consider expert input or stakeholder consultation particularly important (refer to the Protocol page 106), as well as industry benchmarking to ensure your targets are appropriately positioned against peers. Biodiversity targets being developed for the CBD's post-2020 global biodiversity framework have emphasized the need for **Specific, Measurable, Ambitious, Realistic, and Time-bound** (SMART) targets.



The results of a natural capital assessment can aid in setting targets for businesses by helping identify where your most significant impacts and dependencies on biodiversity are, how these can be addressed, and where opportunities lie for positive actions. Company-specific targets can be used to drive action and demonstrate alignment to global conservation goals. Global biodiversity commitments can be extrapolated to your business by addressing your impacts and dependencies on biodiversity across your value chain. Businesses should also aim to align activities to support other environmental targets too, such as goals related to nature-based solutions, nature's contribution to people, and climate change.

For examples of how international or national biodiversity goals can be translated into corporate goals see table 9.3 which has been adapted from the Joint Nature Conservation Committee (Smith et al. 2018). By identifying your business impact and dependencies on biodiversity, the results of your natural capital assessment can be used to inform your corporate biodiversity goal and business actions.

**Please note:** As international negotiations continue to set the new global agenda for biodiversity, the hypothetical international and national biodiversity goals provided below as an example might lose their relevance.

**Table 9.3**Hypothetical global biodiversity goals and their relevance to potential corporate biodiversity goals and actions

connectivity, and integrity of natural ecosystems (terrestrial, freshwater, and marine) by at least [X]%, whilst reducing the number of species which are threatened by [X]% and maintaining genetic diversity  biodiversity by:  - Increasing the area, connectivity, and integrity of natural ecosystems by at least [X]% within your company's area of influence Increasing the population of threatened species by [X]% to maintain and ophance a procise.	ample business actions
abundance within your company's area of influence.  pe column balance  - Est Ra area  (O) foc at I wh act prr  OE prr  Column balance within your company's pe column balance within your company's pre column balance within your company's pe column balance within your column balance with your column balance wi	avoid negative impacts on or eliver net gains to critical habitats nd threatened species. For xample, through protection or estoration of critical habitats and / r addressing other threats to reatened species by 2030. Iteduce pressures on natural cosystems by using sustainable gricultural practices such as erennial cropping systems for ommodity production, no use of anned agrochemicals, and soil onservation practices by 2030. Iteduce pressures or ommodity production, no use of anned agrochemicals, and soil onservation practices by 2030. Iteduce the stablish privately protected areas, stablish privately protected areas, tamsar sites, or other effective rea-based conservation measures DECMs) within your company or other into the site to be teast [X]% of the total area which you use for your site-based ctivity. Ensure at least [X]% of rotected areas, Ramsar sites, or DECM areas are to be under strict rotection, to maintain onnectivity for threatened peccies and reduce threats to peccies at risk of extinction by



Hypothetical international biodiversity goal	Possible corporate/financial institution biodiversity goals	Example business actions
Value, maintain, or enhance nature's contribution to people through conservation and sustainable use	Enhance nature's contribution to sustainable nutrition and food security, access to safe drinking water, and resilience to natural disasters within your company's area of influence.  Enhance nature's value through green investments and private sector financial disclosure within your customer's footprint.	- Increase the portion of responsibly-sourced paper (recycled or PEFC/FSC certified), where certified forest areas are managed sustainably, and the impacts on water quality are verified, within your operations and or/supply chain by at least [X]% by 2030.  - Mobilize [X million USD] for blended finance opportunities to fund conservation and sustainable use of biodiversity projects up to 2050.  - As a financial institution, by 2030, ensure that [X]% of your portfolio is certification through voluntary sustainability schemes or industry standards that effectively safeguard biodiversity.  Additionally, ensure that [X]% of your financial transactions are conducted with stakeholders who have publicly disclosed their dependency and impact on nature.  - Avoid and reduce pollution by [X]% from excess nutrients, biocides, plastic debris (compared to 2020 baseline amount) into freshwater sources by 2030 within your company footprint.  - Design freshwater infrastructure and/or nature-based solutions with beneficial environmental flows within [X]% of your company footprint and implement by 2030. For example, create fisheries downstream of a hydroelectric dam to improve water quality for freshwater biodiversity.

Setting and working towards biodiversity targets is not only important to preserve and enhance biodiversity in its own right, but also for the role these targets play in broader sustainability goals.

As illustrated in figure 1.1 of the **Framing Guidance**, biodiversity is the critical foundation for a healthy, resilient stock of natural capital. Figure 9.1 builds on this to illustrate how this natural resource base (underpinned by biodiversity) supports sustainable production and consumption and ultimately societal well-being for current and future generations. Goals to preserve and enhance biodiversity therefore also contribute to, and are interconnected with, broader sustainable development goals focusing on natural resources, the economy, and ultimately societal well-being

Figure 9.1 illustrates one way in which the Sustainable Development Goals (SDGs) can be allocated across these layers. Achieving biodiversity goals underpins many actions needed to meet the SDGs (e.g., preserving and enhancing biodiversity supports SDG 14 Life Below Water, which in turn supports SDG 2 Zero Hunger, and this underpins SDG 3 Good Health and Well-Being).

These relationships are more apparent when considering biodiversity target setting as one part of the application of a broader biodiversity-inclusive natural capital assessment, and broader still, social and human capital assessments.

Figure 9.1

The Sustainable Development Goals "wedding cake" which highlights the importance of the biosphere for society and the economy (Adapted from PBL 2017)



As well as adhering to global biodiversity goals, you can align your biodiversity targets with regional, national, and subnational biodiversity strategies, such as National Biodiversity Strategies and Action Plans, Subnational Biodiversity Strategies and Action Plans, and Regional Biodiversity Strategies and Action Plans.

To assess whether you want to adhere to regional, national, or subnational biodiversity frameworks, you should consider:

- The next CBD Conference of the Parties (COP) will agree a new post-2020 global biodiversity framework, resulting in countries revising their National Biodiversity Strategies and Action Plans (NBSAPs).
- Does your business have project sites and supply chains across multiple regions and/or countries or is your business within one country only? Note that specific policies and legal and regulatory requirements will be biodiversity- and country-specific.

Once you have decided whether a regional, national, or subnational biodiversity framework is suitable, you can develop your policy, strategy, or management plan to include corporate biodiversity targets based on the possible options in table 9.3 and actions in the subsequent section of this Guidance.



#### c. How do you create a biodiversity target?

As global biodiversity goals are being developed, companies have created biodiversity targets internally using no net loss or net gain (Rainey et al. 2015) in line with guidance developed to assist this process (BBOP 2018). These targets aim to match the negative biodiversity impacts which occur as a result of a project, portfolio, or supply chain, with biodiversity gains. Habitat- or threat-specific targets such as zero deforestation or zero net deforestation are also used by companies to address land conversion (IUCN 2015).

The following provides a **hypothetical example of a company** wanting to manage their impacts and dependencies on biodiversity by achieving no net loss in response to a natural capital assessment, and as a means to contribute to a global biodiversity goal:

- 1) The results of your natural capital assessment suggest that you have a high impact on a particular species due to habitat destruction as a result of your activities in one site and/or supply chain. The species has legal protection and impacting it has a reputational and operational risk associated with it. You want to reduce your impact on the species at the site to manage these risks.
- 2) You will need to select relevant frameworks to inform the setting of your biodiversity target, (table 9.2 provides a non-exhaustive list of examples, with further frameworks sign-posted in this Guidance). Assess whether you can work towards global or national/regional biodiversity goals and/or create internal biodiversity targets. Use table 9.3 to consider the business actions you can take in relation to the biodiversity framework you have selected. Since you want to reduce your impact, you may decide to use no net loss as a target. If you wish to deliver a positive impact, net gain would be more suitable. You identify that adopting no net loss or net gain will help you to contribute towards global biodiversity goals through supporting protection and restoration of critical habitats for threatened species.
- 3) Use the results of your natural capital assessment to identify business actions which could avoid or otherwise minimize impacts on biodiversity at the site. The results of your natural capital assessment or detailed species assessments can be used to establish a baseline against which no net loss or net gain of biodiversity can be measured.
- 4) Impacts that cannot be avoided or minimized can be mitigated using restoration. Any residual negative impacts on the species need to be balanced with conservation action. This requires restoring or averting loss of the same habitat that is negatively impacted elsewhere. Stakeholder consultation will be important at this stage. No net loss and net gain strategies can be supported using a Natural Capital Account (eftec 2015; CISL 2016) or a Biodiversity Natural Capital Account (Dickie et al. 2018) to track stocks, flows, and costs associated with actions. These frameworks are similar to financial and national accounting, making it easier for businesses to understand the benefits. The net changes to biodiversity, its value and the costs associated with actions can be tracked during multiple stages of the project, indicating whether your no net loss / net gain actions are on track. Using Natural Capital Accounts or Biodiversity Natural Capital Accounts, or a similar approach, and considering all limitations, you may decide to set your target for a 20-year period (i.e., no net loss or net gain of that species within your supply chain or at a particular site by 2040).

### Click here to see how a construction company has used this approach to develop no net loss biodiversity targets

5) You will then need to ensure you monitor and track progress towards your target by assessing population changes at appropriate intervals (intervals will depend on the species being monitored). Your contributions towards global biodiversity goals can be disclosed.

While the hypothetical case study above focuses on managing impact, a similar approach could be taken for dependency (e.g., recognizing the value of maintaining biodiversity through nature-based solutions). For example, an energy company operating the water supply of a hydroelectric dam could adopt a nature-based solution through funding restoration of wetlands high in the watershed with diverse native vegetation in order to increase water storage. This is expected to improve the reliability of downstream water flows throughout the year, despite climate uncertainty.

For business actions which involve supply chains, commitments towards zero deforestation and/or reducing negative land-use change impacts, for example, will require close collaboration with suppliers on targets to ensure that these can be successfully achieved. This can be done through commitments such as adopting voluntary certification standards that effectively address the threat of land conversion; reducing exposure to deforestation/land-use impacts; assessing company sourcing codes; supporting clients with improving their sustainability policies, reviewing clients' reporting and disclosure and monitoring frameworks. Collaboration can provide a platform for innovation in ways to produce products that have fewer impacts on biodiversity. Additionally, integrating suppliers as part of the development of a target contributes to the process of due diligence, and reduces reputational and operational risks of your organization (UNGC and IUCN 2012).

Steps for how to plan, implement, assess, and update a no net loss or biodiversity commitment to support the development of an internal biodiversity target can be found within the **Application Guidance** Annex.

#### 9.2.2 Communicate internally and externally

FOR THIS ACTION, REFER TO THE PROTOCOL PAGE 106 FOR GENERAL GUIDANCE.

# 9.2.3 Make [biodiversity-inclusive] natural capital assessments part of how you do business

Global reports have ranked biodiversity loss and ecosystem collapse as one of the top five threats humanity will face (WEF 2020) providing the opportunity and momentum for businesses to address the issue, not only for risk management but for market advantages (WEF and PwC 2020).

The Capitals Coalition believes biodiversity-inclusive natural capital assessments improve risk management leading to better decisions and a competitive advantage within your business and sector. To ensure the longevity of these benefits to business, the results of these assessments need to be continually incorporated in decision-making and the actions taken need to be responsive to the identified risks at that time, resulting in an adaptive and resilient working culture.

To optimize the value to your business from a biodiversity-inclusive natural capital assessment, you should consider:

#### 1) Embedding biodiversity within your business model

- Keep updated with global, regional, and national biodiversity policy and its implications for business activities (e.g., access to finance and license to operate). This can inform any internal policies you might develop or provide the basis for an update to internal goals and targets.
- Strengthen the business case for managing your relationship with natural capital and biodiversity within your organization, amongst corporate board members and senior staff of your business.
- Relate your natural capital assessment results to your business model and present results of your biodiversity-inclusive natural capital assessment to senior management. Increasing rates of natural resource consumption and climate change can lead to unexpected and unpredictable changes for your business.

#### 2) Updating your methodology on how to measure and value biodiversity

- Continually explore new methodologies on how to measure and value your biodiversity impacts and dependencies.
- Continually engage with project developers, suppliers, site managers, and other
  external stakeholders to better identify how your business is impacting and
  depending on biodiversity within existing projects and new projects.
- Maintain internal capacity to measure and value biodiversity impacts and dependencies.



#### 3) Exploring linkages with new and existing processes and or targets

- Ensure that information on biodiversity is integrated into other business management systems, including financial and management accounting through an existing process or a natural capital account. Consider existing environmental management systems (EMAS or ISO 1400) for implementation.
- Consider how biodiversity targets can be incorporated into societal goals which your business aims to achieve. This way multiple societal goals can be targeting with fewer business actions (UNGC and Duke University 2010).

#### 4) Building capacity and strengthening collaboration amongst stakeholders

- Ensure the team undertaking the natural capital assessment fully understands the company/project/product impacts and dependencies on biodiversity and includes consideration of the value of this in future biodiversity-inclusive natural capital assessments. Also, ensure these individuals have the necessary resources and skills, similar to how your company manages financial and business accounts.
- Develop a theory of change on the role that biodiversity-inclusive natural capital assessments can have in influencing decision-making within your business (Conservation International 2013).
- Continue to collaborate with stakeholders with whom you have engaged in the natural capital assessment to facilitate knowledge exchange on your impacts and dependencies and shifts in stakeholder concerns and priorities.
- Continue to develop relationships with internal stakeholders and professional organizations to help influence the global debate on biodiversity. Doing so will ensure businesses are included in policy developments (early mover advantage) and can demonstrate their contribution towards global biodiversity goals and targets.
- Continue to investigate the opportunities for collective action on biodiversity with other businesses and/or sectors.



#### **Case Studies**

#### Company example: Water company

A major water company in the United Kingdom has engaged with habitat restoration programs that support their business operations.

The company recognized their dependency on the ecosystem service of clean water provision, but found the quality of the water collected in their catchment areas to be deteriorating over time, increasing operational costs of water treatment. They conducted a natural capital assessment to assess their dependence on healthy peatland habitats in providing clean water. The water company realized that degraded peatlands increase soil erosion and therefore water sedimentation. This led to the need for peatland habitat restoration within catchment areas to potentially reduce operational costs.

In response, restoring these habitats was integrated into their Biodiversity Action Plan, and the company engaged with relevant stakeholders and regulatory bodies in a multipartner peatland restoration program. In doing so, they also fulfilled regulatory requirements for catchment management, reducing operational as well as legal and regulatory risk, whilst also demonstrating to external stakeholder their positive influence on biodiversity.

#### **Company example: Property developer**

A major property developer and owner, manager, and developer of retail destinations across Europe launched a Net Positive target in response to the United Kingdom's Biodiversity Action Plan which responds to the Convention on Biological Diversity.

The company aimed to improve new development and existing maintenance with regards to biodiversity across their land holdings to meet their target by 2030. The strategy aimed to deliver positive carbon, water, resource use, and socioeconomic impacts across all UK and international operations by 2030 and focused on biodiversity given its integral role in reducing carbon emissions through increasing the size and quality of carbon sinks.

The company's biodiversity action plan aimed to ensure that biodiversity targets were considered across supply chains. The property developer used the UK's Biodiversity Action Plan species and habitat list, and conservation targets, to identify individual species which were related to its own operations, to improve the quality and quantity of biodiversity at specific sites. As part of their Biodiversity Action Plan, ecological appraisals and impact assessments of all new developments were conducted to ensure appropriate mitigation steps were considered.

This delivered multiple benefits such as expedited regulatory processes, increased operator satisfaction, lower operational costs, and increased footfall for retail outlets.



#### **Company example: Construction company**

A construction company used a natural capital approach at the initial stages of a project to value community benefits derived from achieving biodiversity net gain.

The corporate natural capital accounting (CNCA) framework was adapted to measure wider environmental impacts to achieve biodiversity net gain, leading to the development of the Biodiversity Net Gain in Natural Capital Accounting framework. Using this framework, the initial impacts of a project and mitigation approaches including biodiversity offsets were highlighted. The output of this framework is a balance sheet which includes: i) net changes to biodiversity, ii) net changes to the value of natural capital assets, and iii) changes to cost at the sites (where the mitigation measures were implemented). For net changes to biodiversity, the Key Performance Indicator used was the official UK biodiversity metric, to quantify losses and gains of biodiversity following mitigation. The benefit of this approach is that these balance sheets can be produced before, during, and/or after implementation of a project, enabling the business to consistently track progress and adapt mitigation measures accordingly.

Before the construction project began, an assessment was conducted to identify the net natural capital value of the project to provide a baseline to compare the biodiversity loss against once the project was underway. The developer of the project invested in five biodiversity offsets which resulted in a small increase in biodiversity units, as well as increases in community benefits.

#### Company example: Food company

A food processing company used the planetary boundaries framework to examine their biodiversity impact in relation to the cultivation of two major crops: soya and almonds. The aim of the assessment was to better understand how cultivation of these specific commodities is linked to biodiversity loss and to develop a roadmap to reduce biodiversity loss and contribute to a resilient ecosystem.

The "biodiversity boundary" — known as biosphere integrity — is composed of functional diversity and genetic diversity. This boundary was downscaled to three specific site locations where the biodiversity footprint was assessed for one liter of soya and almond drink without packaging. The mean species abundance of original species (MSA) metric was used as an indicator to measure the biodiversity at baseline and future scenario levels where different management practices and intensities were implemented (refer to **Measuring and Valuing Guidance** action 6.2.5 for more information on this metric). The metric was used within a biodiversity footprint methodology based on the GLOBIO framework of the Netherlands Environmental Assessment Agency (PBL). This evaluates the impact on biodiversity from pressure factors: land-use intensity, climate change, nitrogen deposition, and fragmentation. As these impacts can be linked to specific companies and production chains, this methodology is useful to understand cultivation impacts on biodiversity.

Once methodologies were determined, the boundary and targets for loss of biodiversity could be set. Since it is not possible to attain zero loss of natural biodiversity with any agricultural production process, the company focused on identifying the main sources of impact on biodiversity and ways to reduce this impact.

Results demonstrated that higher productivity leads to a reduced biodiversity footprint, revealing a trade-off between extensive land management practices and the need to maintain a balance between agricultural output and loss of biodiversity at a local level.

As a result of the pilot, the company proposed 15 interventions to reduce biodiversity impacts for both soya and almond farming, as well as to stay within other planetary boundaries. These interventions included agroforestry, building corridors, cover cropping, crop rotation, and ecosystem management plans. The food processing company aims to use planetary boundaries and the GLOBIO methodology for a larger pilot, to further develop the methodology and to include farmers and affected stakeholders within interventions to mitigate negative impacts on biodiversity.



## Annex: Plan, implement, assess, and update your biodiversity commitment

Steps to plan, implement, assess, and update a no net loss (or biodiversity net gain) or biodiversity commitment to support the development of an internal biodiversity target (Ideas adapted from Business Planning for Biodiversity Net Gain: A Roadmap (BBOP 2018), United Nations Global Compact and KPMG 2015, and United Nations Global Compact and IUCN 2012).

Note that the Assess and Update steps should be completed iteratively to ensure actions are continually being improved and to build internal capacity (de Silva et al. 2019).

#### Plan

- Assess the results of your natural capital assessment on biodiversity. The results will
  provide you with an indication of the risks within your company, and whether there is a
  high dependency or impact on biodiversity.
- Commit to achieve no net loss (or biodiversity net gain) or another biodiversity
  commitment. Assess your current commitments, processes, and tools which could be
  related to committing to no net loss or net gain. These would be identified during the
  Scoping Stage. The activities or business units which are relevant to a no net loss
  commitment will be revealed during the natural capital assessment. Use this information
  to define the biodiversity features for which no net loss or biodiversity net gain is going
  to be achieved.
- The results of the natural capital assessment will indicate the drivers for high impact/ dependency on biodiversity. Depending on your business, the areas of impact/ dependency may be site-specific, across whole supply chains, or both.
- Assess whether no net loss or another biodiversity commitment can be integrated
  within existing policy, strategy, or management areas (e.g., commitments to water
  quality and sustainable development) or whether there is potential for business
  activities to contribute to more than one goal simultaneously (e.g., biodiversity and
  climate change goals). Additionally, assess whether the company has capacity to
  deliver no net loss or net gain, or whether additional tools and resources are needed.
- Identify team members to steer the planning process and map internal and external stakeholder groups. In particular, include vulnerable and local stakeholder groups within this process to ensure local knowledge is reflected. Integrate action early within processes, especially for high dependency/impact activities outlined from the assessment. Identify areas where achieving no net loss or a biodiversity commitment is easily achievable to build experience and confidence, and then address more complicated tasks. Ensure your targets are SMART.
- Ensure that senior executives and board directors are involved within the process. This
  increases internal communication within the organization, and can also aid external
  communication with senior executives in other organizations.

#### Implement

- Assign activities to individual staff members who are involved with key activities related
  to your impact and dependencies on biodiversity. Ensure the necessary resources and
  capacity to deliver are available.
- Ensure there is a budget to implement these changes within the organization at multiple levels.
- Review existing company procedures on how you do business and integrate no net loss, net gain, or biodiversity activities within these existing frameworks.
- Engage with internal and external stakeholders throughout the process to encourage adaptive management processes and build internal capacity.
- Establish partnerships with key stakeholders to help implement activities (e.g., conservation scientists for technical support, or local stakeholders such as farmers and NGOs).



#### Assess

- Review progress of activities internally with key divisions of the organization, senior staff, and board members.
- Compare progress to your baseline to assess whether implementation of activities is on track to meet no net loss targets and whether there are processes which can be improved/altered. Measuring your progess could be done through a framework developed by IPIECA for example (IPIECA 2016).
- Engage with internal and external stakeholders for feedback on whether activities are reaching targets.
- Assess whether the activities towards no net loss are clear to track and evaluate whether they are sufficient to meet your target. If not, then identify these activities specifically and work to improve them.
- Monitor progress with external and internal stakeholders at product, site, and/or supply-chain level and ensure feedback from these stakeholders is recorded.

#### Update

- Implement steps which have been identified during the assess phase as described in this annex.
- Review and track progress along an agreed timeline to develop continuous improvement.
- Report and disclose progress towards no net loss to build credibility with stakeholders.
  Report under the Global Reporting Initiative Standards and management systems such
  as the ISO 14001. If you are aligning with global goals within your biodiversity targets,
  you should include this as a reference within your corporate sustainability strategies or
  biodiversity action plans.



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