TECHNICAL GUIDANCE

STEP 2
INTERPRET & PRIORITIZE

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The five-step process for setting science-based targets for nature.

Additional resources

To accompany step 2

- Step 1 Toolbox

Other methods

- Step 1: Assess
- Step 3: Measure, Set, & Disclose—Freshwater
- Step 3: Measure, Set, & Disclose—Land

General resources

- Glossary
- SBTN FAQs
- SBTN Consolidated Data Needs Table (Steps 1–3)

Conventions used in this document

- Numbers in parentheses, for example (1), indicate citations that can be retrieved in the bibliography

Introduction to Step 2: Interpret & Prioritize

Within the process of setting science-based targets for nature, Step 2 enables companies to identify the locations where action is needed most urgently for nature and people and then prioritize locations based on factors such as business dependencies on nature and strategic importance and financial materiality.

There is a five-step process to set science-based targets for nature: Step 1: Assess; Step 2: Interpret & Prioritize Impacts; Step 3: Measure, Set, & Disclose; Step 4: Act; and Step 5: Track.

In Step 1, companies screen their portfolio of economic activities for materiality (Step 1a: Materiality Screening), and then estimate their contributions toward key environmental issues through an assessment of pressures and the states and impacts associated with each category of material economic activity (Step 1b: Value Chain Assessment).

In this next phase of target setting, Step 2: Interpret & Prioritize, companies use the information from Step 1 on all parts of the value chain and pressures identified as material to determine which locations and economic activities to include within their “boundaries” for each target, and where to act first to effectively mitigate their most significant negative impacts on nature and increase their potential for positive impacts. A high-level overview of the Step 2 method is provided in the next section.

Compliance with the Step 1 requirements for the materiality screening and value chain assessment will enable companies to apply the most of the Step 2 methods without collecting additional information. For the final part of this step (2c), companies will collect additional information reflecting additional social, financial and strategic considerations to inform their prioritization of locations before applying target-setting methods.

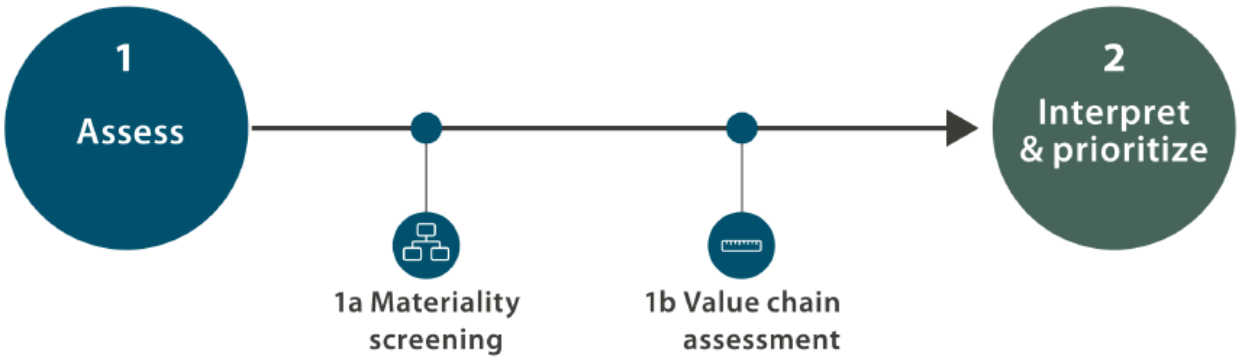

Figure 1: Overview of Step 2. This step comprises three methodological parts: the definition of the spatial extent of a companies’ pressure footprint categorized by the target boundaries (Step 2a); the interpretation of the value chain data to create an impact-based ranking (Step 2b); and a prioritization

process to identify co-benefits based on this ranking and complementary data on stakeholder engagement and human rights, business dependencies, and other financial and strategic considerations (Step 2c).

Target boundaries, as defined by SBTN, are the spatial extent of companies' pressure footprints managed through (science-based) targets. To make claims about setting science-based targets for nature, companies must define the target boundary for each pressure identified as environmentally material at the end of Step 1 (Step 2a: Determine Target Boundaries).

When determining the target boundaries for target setting in the upstream of a company's value chain, the pressure and state of nature data may be less precise. This can happen because of uncertainty or variability in sourcing information (e.g., only the commodity is known), purchasing through spot markets or aggregators, or sourced volumes of highly embedded or transformed commodities. In these cases, the SBTN methods will specify pathways for transparency and traceability as well as alternative pathways for action. However, targets cannot be set without spatial data at the scale required by the Step 3 methods for targets on freshwater and land. The method for determining target boundaries is covered in Task 1 of Step 2a.

Companies must also use a **standardized ranking** process to analyze the data on locations within each target boundary to assess the relative urgency of action for nature (Step 2b: Interpret & Rank). The standardized ranking process will enable companies to generate a ranking of their pressure data (combining each pressure, P, with the pressure-sensitive state of nature indicator, SoNP), a ranking of their biodiversity state of nature data (SoNB), and finally a ranking incorporating social considerations, dependencies, and financial materiality (Step 2c: Prioritize).

After defining their target boundaries and ranking locations based on impact and dependencies, companies will determine their first phase (i.e., cutoff) for target setting (Step 2c: Prioritize). The use of these additional prioritization methods (beyond the ranking) must be consistent with the requirements of the Step 3 methods. Companies who have only identified land use and land use change as material in Step 1 and are setting No Conversion of Natural Ecosystems or Land Footprint Reduction targets can move to Step 3, where they will incorporate the full scope of their target boundaries for direct operations and upstream for land use and natural ecosystem conversion (land use change) in their targets. Companies applying these targets should still incorporate the ranking from Step 2b.

As an outcome of Step 2: Interpret & Prioritize, companies will know the relative importance of different pressures and locations, and may also know where different types of action (e.g., avoidance, reduction, and restoration) are most needed. They will also know which target-setting approaches to the target boundary of a given pressure. This information can be critical for companies' overarching target-setting strategies and will enable companies to engage with the appropriate methods available for taking baseline measurements and setting targets in Step 3.

Table 2 provides an overview of the data outputs from Step 2 needed in order to engage with the Step 3 target-setting methods. Where needed, additional details on data requirements for each step and value chain category are provided within the methodology for each step.

Note that data needed for each step build on what is collected and used for the previous step, so companies must collect the data required for Step 1 before proceeding to Step 2. Most of the metrics and indicators referenced in this method were introduced in Step 1. A summary of these is provided for readers in Appendix 1.

Table 1: Overview of requirements and recommendations for Step 2.

Method Section	Description	SBTN guidance for companies
Step 2a: Determine target boundaries	Define target boundaries for each material pressure based on quality (precision and accuracy) of data available, for both upstream and direct operations.	● Required for all upstream and direct operations value chain segments and boundaries.
Step 2b: Interpret & Rank	Rank locations within target boundaries using environmental and societal materiality.	● Required for direct operations and all upstream activities falling in target boundary A*.
Step 2c: Prioritize	Evaluate dependencies, other aspects of financial materiality, stakeholder engagement, human rights and additional criteria for urgency of action (cutoffs) and co-benefits within each target boundary to prioritize among locations.	● Required for direct operations and all upstream activities falling in target boundary A.

*The different types of boundaries are defined in Task 1 of Step 2a.

**Companies setting No Conversion of Natural Ecosystems and Land Footprint Reduction targets must include their entire direct operations and upstream target boundary A in their targets. The Land Footprint Reduction target may be calculated using global statistical data and can therefore include both upstream target boundaries A and B in the initial submission.

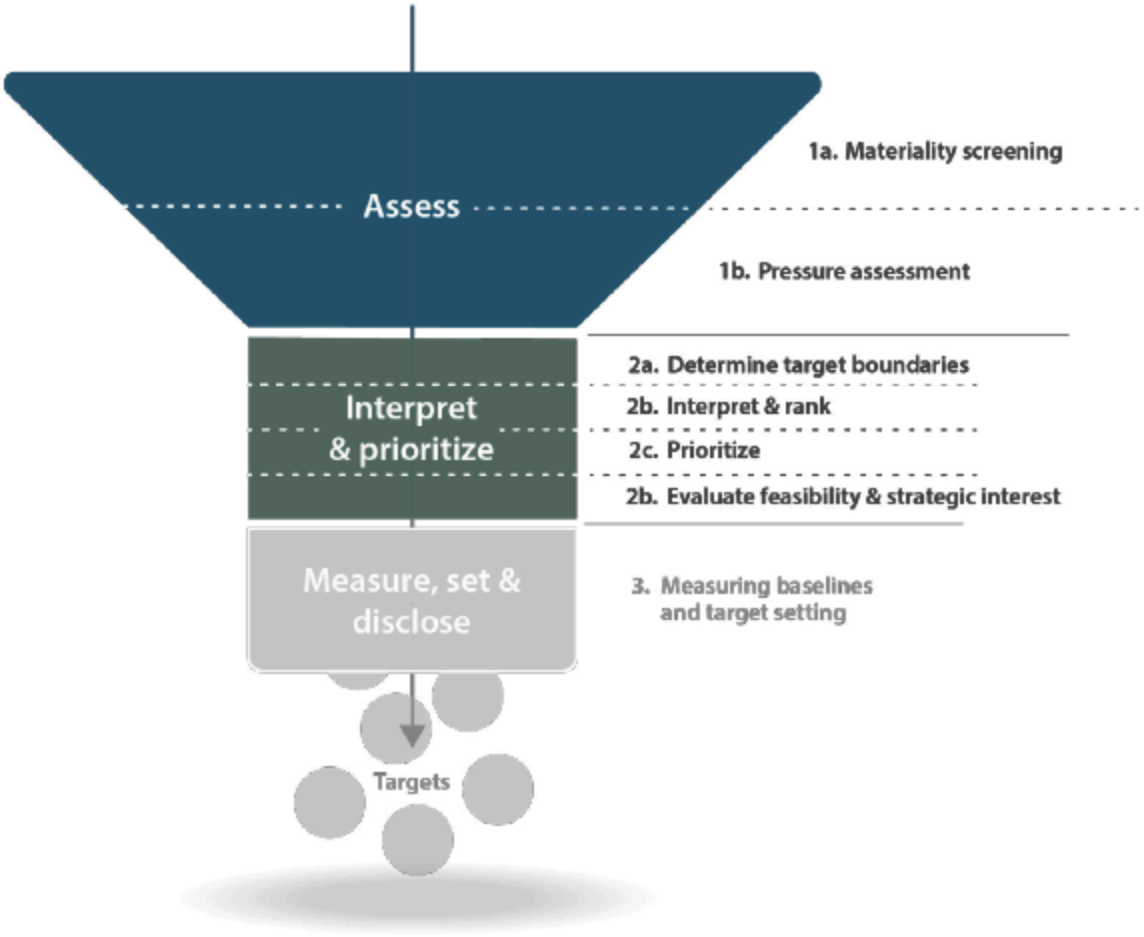

Figure 2: Narrowing scope during target setting. In Step 2, companies refine the scope of the target-setting process further as they define target boundaries for all material pressure categories. Ranking, prioritizing, and further evaluating the sites within each boundary will inform companies' strategies for target setting, and ensure they begin applying Step 3 methods where it is most needed for nature and where their company-specific pressures are greatest.

Data requirements

Table 2: Overview of data requirements for Step 2.

STEP 2: INTERPRET & PRIORITIZE				
		Step 2a: Determine Target Boundaries	**Step 2b: Interpret and Rank**	**Step 2c: Prioritize**
	Objective of the method for this step	Determine where to act first for nature, based on information about pressures and the state of nature.	Establish significance values for each location within target boundaries.	Complement the ranking with environmental, societal, financial, and strategic considerations to determine priorities based on urgency of action and co-benefits
Direct operations	Data needs	<u>Requirements</u> ● Data collected during Step 1: pressure data for all activities assessed, data on state of nature (pressure-sensitive and biodiversity), and the locations of all sites.	<u>Requirements</u> ● Data collected during Step 1: pressure data for all activities assessed, data on state of nature (pressure-sensitive and biodiversity), and the locations of all sites.	<u>Requirements</u> ● Data from Steps 2a–2b.. ● Information to support target setting strategy e.g. information about company dependencies and stakeholder engagement and human rights
	Associated with what parts of the company's data?	Building from Step 1, operational sites (paired with activities and commodities) and their geographic locations.		

	Inputs and outputs	<u>Input from companies:</u> Long list of pressure and state of nature estimates per operational site, output from Step 1. <u>Output from the method:</u> Prioritized list of operational site–location pairs.		
Upstream	Data needs	<u>Requirements</u> ● Data collected during Step 1: data on pressures, states of nature, and locations of highest-impact activities in production chain of high-impact commodities. ● Evidence to justify the inability to gather precise spatial data.	<u>Requirements</u> ● Data collected during Step 1: data on pressures, states of nature, and locations of highest-impact activities in production chain of high-impact commodities. ● Evidence to justify the inability to gather precise spatial data.	<u>Requirements</u> ● Data from Steps 2a–2b.. ● Information to support target setting strategy e.g. information about company dependencies and stakeholder engagement and human rights ○ Plan to increase transparency and traceability to enable place-based target setting in Step 3.
	Associated with what parts of the company's data?	Upstream activities and sourced commodities (paired with locations).		
	Inputs and outputs	<u>Input from companies:</u> Long list of pressure and state of nature estimates per procurement or activity, output from Step 1. <u>Output from the method:</u> List of prioritized locations for target setting.		

Table 3: Overview of spatial data requirements in V1.1 through Steps 1–3.

Target	Direct vs. Upstream Operations	Target Boundary	Step 1 Data Requirement	Step 2 Data Requirement	Step 3 Data Requirement
Freshwater Quantity	Direct operations and upstream operations	A	Subnational or finer spatial resolution.	Data Level 1: At spatial granularity necessary to set targets in Step 3. Data Level 2: Subnational or finer spatial resolution.	If companies choose to use local or global models, companies must demonstrate that targets protect thresholds at each of the Pfafstetter Level 5 hydrobasins.
Freshwater Quality					If companies choose to use local models, companies must demonstrate that targets protect thresholds at each of the Pfafstetter Level 5 hydrobasins. If companies cannot find an accurate local model, companies must use Level 4 basins for setting Freshwater Quality targets, consistent with the scale of data provided by the global nutrient modeling of McDowell et al. (2020).
No Conversion of Natural Ecosystems	Direct Operations				All production units and project sites are demarcated by georeferenced boundaries (i.e., polygons), with the exception of small sites (less than 10 ha), for which one point coordinate near the center of production is sufficient.
	Upstream Operations				National or finer spatial resolution.
Land Footprint Reduction	Direct Operations				For producing companies with an agricultural land footprint in direct operations: statistical (nonspatial) data on quantities of land-based products produced, and statistical or spatial data allowing for calculation of total surface area of working lands producing those products.
	Upstream Operations				For purchasing companies with an upstream agricultural land footprint: statistical (nonspatial) data on quantities of land-based products sourced, locations (e.g., countries and/or subnational jurisdictions) if known, and yield

					(output per hectare) of each product for each location.
Landscape Engagement	Direct operations and upstream operations				Operational sites at ecosystem level.
All targets	Direct operations and upstream operations	B	National or less granular.	Data Level 3: National or less granular.	Improve traceability and transparency. More guidance is in Step 2.

Step 2a: Determine Target Boundaries

Once companies have determined their target boundaries, they will know which targets need to be set where.

Overview

In the SBTN methodology, target boundaries are the set of company activities (direct operations activities and, in a separate target boundary, the activities in the upstream value chain) with the associated material pressures that are covered by a specific target (Step 3). To begin defining target boundaries companies must have all relevant pressure and state of nature values for all locations of direct operations and upstream activities.

Target boundaries will define the spatial extent of companies' targets, implementation, and monitoring efforts (Steps 3, 4, and 5). Thus, different target boundaries are expected for every pressure category assessed in Step 1b: land use and land use change, water use, soil pollution, and water pollution. In the case of water use, companies should only include the locations where water withdrawals are derived from surface water and groundwater (i.e., locations where all water is coming from rainwater should not be included). *Given the current scope of target-setting methods, companies should only incorporate locations in their freshwater quality target boundary where they have assessed the presence of nutrient pollution (nitrogen or phosphorus) and should not include locations where water pollution is only attributable to toxic chemicals and other sources of water pollution.*

This differs from but is in line with the SBTi interpretation of target boundary, which connects the concept to the scope of the company's greenhouse gas (GHG) inventory and the activities within this that are then deemed material for target setting.

Task 1. Define target boundaries for each pressure category

Companies must apply the Step 2 methods for the full value chain scope of each material pressure identified in Step 1 (note that this means the scope of application incorporates thresholds on upstream value chain inclusion). By the end of this step, companies will have defined as many target boundaries as they have pressures requiring assessment, for each value chain segment.

Pressures that will be covered in future releases of SBTN target-setting methods are recommended to be included in Step 2 but are not required. Information on target boundaries for these pressure categories will not be reviewed as part of the validation process.

To determine their target boundaries, companies must separate data on each pressure and value chain segment (direct operations and upstream). This is because the data differ based on the pressure category, which is reflected in the Step 1 analysis, and the spatial resolution, precision, and accuracy of the data is likely to be different between direct operations and upstream. Both factors impact the prioritization and eventual validation of target setting. This separation also allows companies to account for factors affecting their capacity to take action on a particular pressure or value chain stage. For example, some direct operations targets may be achieved through internal changes to production practices, while most upstream targets may require collaboration with value chain partners and other landscape actors.

For this reason, companies must list their data separately for each pressure and value chain stage before starting to use the Step 2 method (e.g., sort data grouped by pressure, upstream activities vs. direct operations, and data level). This data structure will support the use of the subsequent steps of the SBTN methodology, which use the same data structure.

Direct operations target boundary

Companies must define a target boundary within their direct operations for each pressure category required for assessment based on the outcome of Step 1: Assess. The direct operations target boundary for each pressure must include all material activities in the company's direct operations.

Companies must use the pressure and state of nature data collected in the Step 1b: Value Chain Assessment for direct operations, consistent with the requirements for subnational spatial resolution, when defining the direct operations target boundary.

In some cases, the spatial resolution of this target boundary is already at the spatial resolution necessary to ensure the applicability of target-setting methods at an appropriate scale for these activities in Step 3. However, in some cases companies may have data at the subnational level, consistent with the minimum requirements in Step 1, but may not yet have precise enough data to set targets in all cases without further refinement. The locations in the direct operations target boundary can belong to two different data levels, as described below:

- Direct operations target boundary includes locations at Data Levels 1 and 2:

    - Data Level 1: Locations at the precision necessary for setting targets in Step 3.
    - Data Level 2: Locations at subnational levels, but not at the precision necessary to set targets.

This information will have been collected as part of the Step 1 methods and in compliance with the Step 1 criteria for validation. See the SBTN Step 1 toolbox for information on the datasets appropriate for use for this step (2).

Upstream target boundary A

Upstream target boundaries are required for each pressure shown to be material in Step 1a. Later in Step 2, companies may introduce information to justify the removal of economic activities in a given location from the target boundary, if the company can show that no or negligible pressures are found. Target boundaries must be defined for each pressure category. As such, a company's target boundaries may contain different economic activities, depending on the activity's materiality rating for a given pressure.

A notable difference between the target boundary definition process for direct operations and that for upstream activities is the need to consider differences in information availability and the range of uncertainty in upstream data. Companies' upstream data on pressures are likely to be associated with broad categories of goods and activities, and will be estimated based on the best available data the company has for tracking these. Often this will mean that a coarser scale of analysis was used for assessing pressure and state of nature data on upstream activities than for direct operations (e.g., country rather than basin level).

For this reason, companies may need to define two different target boundaries for their upstream: a more precise target boundary A, which can more immediately enable science-based targets for nature; and a less precise target boundary B, which will require further action on traceability and transparency to enable science-based target setting (covered in the section below), and within this boundaries must complete the prioritization separately within the following data levels,

- Upstream target boundary A corresponds includes locations at Data Levels 1 and 2:
    - Data Level 1: Locations at the precision necessary for setting targets in Step 3.
    - Data Level 2: Locations at subnational levels, but not at the precision necessary to set targets. *Note that at this stage in the method, coarser subnational data may be estimated using modeled data such as those described in Step 1.
- Upstream target boundary B corresponds to Data Level 3:
    - Data Level 3: Locations at national or multinational/global resolution.

Upstream target boundary A must include all locations for which the company has sufficiently precise geographic information about the locations of origin associated with specific commodity volumes or upstream activities. Sufficient precision means that these data are known or estimated at least at the subnational level (i.e., data levels 1 and 2). Within target boundary A, there are two levels of data: those already precise enough to set targets in Step 3 (Data Level 1)

and those at subnational scales, but not currently at the level needed to set location-specific targets (Data Level 2).

Companies purchasing raw commodities are required to obtain or estimate data consistent with requirements for upstream target boundary A for some (>0%) of their upstream activities before proceeding with the Step 3 methods. For companies more than 1 tier from raw commodity sourcing, there will be no requirement for Target Boundary A coverage to proceed to Step 3. All companies are recommended to have at least 50% of their upstream volumes in target boundary A.

Companies must to submit data on both the upstream target boundaries A and B for validation in order to drive place-based action through science-based targets and to ensure a comprehensive and transparent approach to environmental impact management.

Over time, companies must increase the sourcing volumes found in upstream target boundary A through increasing their value chain transparency and traceability in order to enable setting science-based targets for nature and increase confidence that the company is acting to address environmental impacts in the correct locations. Guidance to grow upstream traceability can be found in the section below and in Appendix 3.

Companies using SBTN methods to set science-based targets for nature will be required to address their impacts across target boundaries over time in order to make a claim on the completion of a given science-based target.

Table 4: Explanation of fine and coarse data to clarify the use of this terminology used to describe spatial scale or resolution in the SBTN methods. Note that while some data can be quantified to a very fine scale, companies are encouraged to use the spatial resolution requirements in the Step 3 method (see Table 3 in this document) as the appropriate resolution for target setting.

Spatial Scale/Resolution	**Definition**	**Example**
Fine-scale data (i.e., high resolution data)	Data where small areas can be evaluated are said to have fine or high spatial resolution. For SBTN, this typically refers to site-level	Company A may have data on land use at the farm scale, meaning it knows its water use and land use change (habitat loss) for specific farms. It can also estimate its total water use at basin-level by adding up

	data.	the values for all farms within the basin.
Coarse-scale data (i.e., low resolution data)	Data where only large areas can be evaluated are said to have coarse or low spatial resolution. For SBTN, this typically refers to information at a country, multinational, or continent level. Note that even data at the subnational level can be too coarse for immediate target setting.	Company A may only have data on land conversion at a multinational level, meaning that while it knows the net deforestation for that region, it cannot assign it to a specific country or to sourcing areas or farms within the countries of that region. In this case, companies should use estimation approaches like those described in Appendix 3 of this document

Task 2. Place volumes with insufficient value chain traceability in Target Boundary B

The upstream Target Boundary B addresses instances when there is a lack of visibility into the point of origin for high impact commodities due to highly transformed ingredients or materials and/or complex value chains. With cultivation or extraction methods (e.g., growing of crops; the extraction or processing of metals) of high impact commodities resulting in significant pressures on nature, it is essential that companies work with their suppliers to map their supply chain to subnational locations of origin or is able to identify countries of origin and develop modeled estimates of subnational locations to advance with target setting.

Target boundary B must only include locations for which the company does not have sufficiently precise geographic information about the production units or sites of origin of specific commodity volumes or upstream activities, and where this location information cannot easily be refined to subnational level. Companies must use target boundary B when they currently do not have the information needed to set place-based targets for their upstream activities and cannot readily obtain that information.

For example, a company may utilize country-level information on its sourcing of a commodity (e.g., gold from Ghana) for Steps 1 and 2, but would include this activity in its upstream target boundary B. In doing so, the company must work with the relevant internal teams (e.g., procurement), third parties such as organizations offering supply chain data or certification, or with suppliers directly to obtain subnational information appropriate to Step 3 methods (e.g., the regions within the country where mines are located, or the specific location of the mine itself) before proceeding with Step 3 for this activity. However, *companies that can estimate locations using spatial allocation models and other approaches that distribute impact subnationally, should include those volumes in target boundary A and refine with more-precise and accurate data when setting targets.*

As an additional example, commodities that can only be traced to a set of countries rather than a singular country would be grouped within this boundary. Activities and commodities falling into target boundary B are also likely to be those associated with shifting sourcing locations, purchases from spot markets, collectives and aggregators (including those that are purchasing from smallholders, including those that practice wild harvesting), or for companies purchasing highly transformed or embedded volumes. In some cases, gathering more precise data for sourced volumes in these categories may be a longer term effort, conducted in parallel to target-setting and on the ground action where possible.

For companies placing volumes in target boundary B, a justification must be provided for validation that indicates the cause for the lack of current transparency and traceability and their inability to overcome this in the short term before moving forward with the SBTN target-setting methods.

Because companies cannot immediately proceed to set science-based targets for the impacts at the locations within this boundary (given the quality of data), there is a sequenced set of requirements and recommendations for companies to follow in order to increase the coverage of science-based targets for nature within companies' upstream value chain over time:

- Companies must advance their efforts toward transparency and traceability for commodities and activities in target boundary B. If a company is unsure which commodities to begin with, within SBTN's high-impact commodity list (HICL), the commodities are placed within traceability tiers. These tiers are associated with the likelihood of traceability and enabling conditions to do so (e.g., certification schemes associated with that commodity).
- For commodities and activities where this is not easily done, e.g., when the company has limited ability to improve traceability for ground-level information despite investment (referred to as traceability Tier 5 for commodities in the HICL), companies are recommended to make changes to the practices and processes they can control in these supply chains, as well as take complementary action to reduce environmental impacts in focal landscapes where high environmental impact production of a sourced commodity is known to occur.
- For commodities in the HICL in target boundary B, companies are recommended to:
    - Move 80% of the commodities in traceability Tiers 1 and 2 to target boundary A within 12 months of beginning the target-setting process; and
    - Move 50% of the commodities in traceability Tiers 3–5 to target boundary A within 18 months and progress to 80% within 24 months.

Companies are required to transition all upstream sourcing (within the required scope of the methods, defined in Step 1) from target boundary B to target boundary A by the target date for Land targets and within five years of target setting for Freshwater targets. This can still exclude some volumes that are not currently traceable, for which the SBTN method development community will build out alternative and complementary actions in future versions of technical guidance.

See Appendix 3 for more guidance on target boundary B.

Together, both of the upstream target boundaries (A and B) must cover the entirety of the Step 1 upstream value chain assessment scope (for each pressure). Companies must not combine information across these two target boundaries as they are not comparable in terms of scale, accuracy, and precision.

Task 3. Harmonize spatial units

At the end of Step 1: Assess, companies will have estimated spatially explicit data on their pressures and the associated states of nature (e.g., data on land use change for a given farm was associated with the level of landscape or ecological condition for that region). In Step 2, companies should preserve the data they have on activities and commodities in compatible units (e.g., indicator metrics) and spatial scales (also referred to as spatial resolution; see the definitions of coarse and fine data in Table 3).

This means that for each location within each pressure category, the spatial scale of pressure data per activity must be consistent with state of nature data for that activity in a given location before proceeding with Step 2. If they are not at compatible scales then, for example, the company may need to aggregate one value from basin scale to state/provincial level to match the other value. In this way, companies can use more-precise and accurate data to describe their activities where it is available but have the flexibility to prioritize at the subnational level when more-precise data are not available. This should be done specifically within pressure–state of nature pairs and data should not be rescaled across individual commodities, pressures, or activities.

Where possible, companies should use the spatial scale compatible with each Step 3 target-setting method. Once companies have harmonized the spatial scale of their data, they will have their final spatial data on pressures and states of nature per relevant economic activity needed to determine their target boundaries.

Note that even where less-spatially-resolved data are used for Step 1: Assess and Step 2: Interpret & Prioritize, more-precise data may be required for target setting in Step 3: Measure, Set, & Disclose. Specifically, target boundaries in Step 2 may be set with less precision than is required for target setting in Step 3. As a consequence of this refinement of data in Step 3, companies may find that they set targets within the full target boundary but not for the whole area (e.g. transitioning from a province prioritized in Step 2 to a specific basin or landscape in Step 3).

Approaches for scale harmonization

Harmonizing data means that the pressure–state of nature pair is at the same (or compatible) spatial scales. Data are not harmonized or scaled across an entire activity, commodity, pressure, or location. Instead, data that will be combined to calculate index values from multiple datasets should be harmonized. This means that for a given commodity or activity, a company could have data at different spatial scales for specific pressure–state of nature pairs.

When pressure data are of a finer scale than state of nature data (e.g pressures at site level vs. state of nature at coarser subnational level), the data for that pressure category must be added within the spatial unit of the state of nature data such that a single aggregated pressure value would be associated with one state of nature value. For example, a company would calculate the sum of all water use (P) associated with different activities within a given country and

associate this with the water availability or water stress (SoNP) known at the country scale. If appropriate, companies should compute an area-weighted or volume-weighted sum of the pressure(s).

In the opposite case, when the spatial resolution of state of nature data is finer than that of pressure data, an appropriate aggregating statistic must be used to upscale the state of nature data (i.e., to mean or median values). An example of this would be a company that has sourcing area or municipal-level data on agricultural land use (P) but finer data on ecosystem conditions (SoNP) (e.g., raster data in 1 km pixels). The company would then calculate the median ecosystem intactness for the province in order to continue the Step 2 analysis.

Where the smaller spatial units (e.g., basins) are of different sizes (in contrast to an equal-area pixel), companies should compute an area-weighted statistic (e.g., area-weighted average) for either state of nature indicator (SoNP or SoNB).

Finally, when there is high uncertainty regarding the location of sourcing or upstream activities (i.e., for target boundary B), companies should only aggregate their data to the national scale. For example, if a company does not know whether its purchased soy was grown in the United States or Brazil, it should keep the estimated at national level for each relevant country. This can include using more conservative aggregation approaches (such as the maximum potential state of nature value) and estimating net sourcing volumes by potential countries of origin. This can facilitate prioritization of company actions toward greater traceability by recognizing distinct environmental impacts and importance for biodiversity between locations.

REQUIREMENTS AND RECOMMENDATIONS—TARGET BOUNDARIES

- **Requirement 1. Materiality in Step 1 determines scope of target boundary exercise.**
    - Companies must set target boundaries for each pressure category defined as material in Step 1 for both their direct operations and, separately, for their upstream activities.
- **Requirement 2. Processing and evaluation of data by pressure category.**
    - When applying SBTN methods, companies must not combine different pressure categories, as the data (values, units) are not compatible.
- **Requirement 3. Separate target boundaries for upstream and direct operations.**
    - To determine target boundaries (Step 2a), companies must separate data on upstream from direct operations.
- **Requirement 4. Separation of upstream data by spatial resolution and data : target boundaries A and B.**
    - When applying Step 2 methods for their upstream value chain, companies must separate their data based on spatial resolution. Data at subnational or finer resolution must be separated into target boundary A for upstream, while location data at the national, multinational, or global level (i.e., limited certainty about the actual activity location) must be separated into target boundary B for upstream.
    - Within these target boundaries, companies must apply the Step 2 prioritization

by data levels shown in Table 3.

- **Requirement 5. Adequate justification for boundary selection.**
    - For locations that companies include within target boundary B, adequate documentation is required to justify that the company cannot gather more accurate and precise data for these goods/commodities within a reasonable timeframe. Companies may use evidence of procurement practices as well documented quantities of embedded and highly transformed volumes of commodities.
- **Requirement 6. Transparency and traceability for unknown locations.**
    - Companies must move volumes from target boundary B to A, consistent with the requirements of each target setting method. Companies must have or be able to obtain sufficiently accurate and spatially resolved information by target date for Land targets and within five years of target setting for Freshwater targets. This may still exclude some volumes that are not currently traceable within that time frame.
- **Requirement 7. More than 0% of upstream activities must be included within target boundary A for companies sourcing raw commodities.**
    - Companies purchasing raw commodities are required to obtain data consistent with requirements for upstream target boundary A, in order to enable the application of all Step 3 methods. Companies must include >0% of their upstream activities/commodities before proceeding with the Step 2 method.
    - This functionally means that these companies purchasing raw commodities must be able to at least estimate subnational locations in Steps 1 and 2 for some portion of their upstream, using modeling approaches or direct observation, and then refine and identify their sourcing at the subnational resolution for target setting in Step 3. Companies do not need to have plot level data in Steps 1 and 2 to proceed with target setting.
    - Companies more than 1 tier from raw commodity do not have a requirement for Target Boundary A coverage to proceed to Step 3
- **Recommendation 1. At least 50% of upstream activities should be included within target boundary A.**
    - Where possible, companies are recommended to obtain data consistent with requirements for upstream target boundary A, in order to enable the application of all Step 3 methods. Companies should aim to include at least 50% of their upstream activities/commodities before proceeding with the Step 2 method.

Step 2b: Interpret and Rank

Overview

Though companies must eventually set place-based targets throughout their target boundaries, they might not be able to act on all material pressures, in all locations, at the same time. For this reason, the Step 2 methodology provides a ranking approach to inform companies' target-setting strategy.

Companies must follow the same ranking process for the direct operations target boundary and upstream target boundary A. Throughout the prioritization process, companies must maintain the separation between pressures, value chain segments, and categories of certainty for location data.

This ranking will allow companies to act where it is most needed for nature and where their company-specific pressures (and opportunities to reduce and minimize harm to nature and biodiversity) are greatest. Companies are required to rank upstream activities and direct operations separately. Additionally, companies must rank locations that are at the spatial resolution required in Step 3 separately from those locations at coarser subnational scales (Table 3). This enables companies to more efficiently move through the SBTN process where data quality allows.

A separate ranking process for locations in upstream target boundary B is available in Appendix 3 and is recommended for companies wishing to prioritize their efforts on value chain traceability.

Note that existing relationships with local stakeholders, and information on their needs, are also incorporated into the prioritization approach.

Task 4. Create index values for all pressure categories

This part of the method details how to calculate an index value for locations using estimated pressure values (P) and pressure-sensitive state of nature scores (SoNP). The index value must be calculated independently for each material pressure at each location, meaning that companies must repeat this exercise for every material pressure and for both upstream activities and direct operations. Calculation of index values must correspond to the material pressures identified in the value chain assessment.

To calculate the index value, companies must use the datasets they used to gather pressure and state of nature data in Step 1. The links between pressures and SoNP variables is covered in Task 9 of the Step 1 method. The number of index values needed for a given location will correspond to the number of pressure indicators used/assessed for that location.

As a reminder, before calculating index values, companies must review the interpretation guidance from the tool and dataset developers for a given pressure and state of nature dataset (often found in the ReadMe or other metadata files). Please note that the use of an inappropriate indicator could impact the ranking and prioritization. For example, if low values indicate greater value or urgency for action, address this within the state of nature metric (e.g., take the inverse) before combining state of nature and pressure scores in the index and altering the prioritization.

Companies that used multiple state of nature metrics for a given pressure category (SoNP) in their value chain assessment (Step 1b) must harmonize the spatial scale between datasets for each location and normalize the data (i.e., transform the data to fit within a consistent range). For clarity, harmonizing is the process of ensuring the pressure and the associated state of nature metric (SoNP) are at the same scale to allow for multiplication. This is done for each pressure–state of nature pair. The suggested approach for normalization is a rescaling process known as min-max normalization, typically from 0–1. It is not binning or categorizing such continuous data. While there are other valid statistical approaches to normalization, this recommended approach was chosen because of its simplicity and ability to address scale differences while maximizing variability in the data for prioritization.

Normalizing data should occur across a specific metric (i.e., across an SoNP for a specific pressure). More details on how to normalize data are below. Following the normalization of data, companies must take the highest value for that category of SoNP data within a given spatial unit of analysis (e.g., water basin or ecoregion). Companies are also recommended to record the specific metric that the highest value corresponds to if the underlying data are measuring different metrics falling in the same overall category.

To create the index value (IP), companies combine pressure and state of nature data (from a single or composite metric as above) for each location relevant to that pressure (e.g., each direct operation activity known to have water pollution impacts) using the equation

IP = P × SoNP. This means that the pressure-sensitive index is the product of the normalized pressure (P) multiplied by the relevant normalized pressure-sensitive state of nature value (SoNP) that are both at the harmonized spatial scale. Companies must normalize both the pressure and state of nature datasets before multiplying to ensure that both values are weighted equally. Pressure data should be normalized by pressure category based on company data (i.e., the maximum value is the maximum company pressure within the target boundary), and all state of nature data should be normalized based on the full range of each dataset (i.e., the maximum value is the maximum global value of the state of nature dataset). See the Ursus illustrative example in the SBTN Resource library for more detail on how this can be done.

The index value must be calculated for each site for each material pressure, and as such, must use data for each variable associated with compatible spatial scales (see Task 3 of Step 2a).

Task 5. Rank locations by their environmental urgency to act

For the pressure and the SoNP datasets used in the index value, higher values are interpreted as requiring more urgent action (e.g., higher pressure is interpreted as indicating more damage potential from a given economic activity, and a higher state of nature value is interpreted as greater damage already felt by the ecosystem). Based on this interpretation rule, after calculating the pressure-specific index value, companies can then rank sites connected to a given pressure from high to low, taking higher values to mean higher priority for action. Companies should go through ranking processes for upstream activities and direct operations by each target boundary for each material pressure separately (e.g., one ranking process for sites in upstream operations in target boundary A for those sites where water quality is material). This is in addition to ranking those with data quality fit for Step 3 separately from other locations that fall within target boundary A.

Exclusions from ranking and further inclusions in SBTN target-setting process

For Freshwater targets (i.e., water use and water pollution), companies may exclude sites that fall within direct operations and upstream target boundary A with negligible pressures (e.g., local water quantity models indicate no reduction is necessary; the company is using less water than allowed by local regulations). Companies may only do so when

1) they have Level 1 data (i.e., data at spatial granularity to set targets in Step 3);
2) the pressure accounts for less than 1% of the total pressure for that specific pressure category; and
3) the state of nature in the location is healthy, indicating little to no need for change.

For example, if using the McDowell (2020) dataset for Freshwater Quality targets, a ranking of “acceptable periphyton growth and N-limitation” or “acceptable periphyton growth and P-limitation” would be justification for a expecting little to no need for change in the location; therefore, the location could be excluded if the given pressure is below the 1% threshold.

In these instances, when and where all three requirements above are met, companies may exclude that location for the specific pressure in the prioritization process. The total exclusions for a specific pressure, however, cannot account for more than 10% of a company’s total pressure.

Users should note that the ideal definition of low pressure would be one that is in the context of the basin, but these data are not currently globally available for both water quantity and quality. For this reason, the current version relies on the proxy of relative company pressures (<1% of total pressure) across sites. This will be updated in subsequent versions of the Step 2 methods as new science becomes available.

The rationale and evidence of a low pressure, low state of nature need, and spatial resolution of the site must be submitted for validation.

Prepare state of nature biodiversity values

As outlined in Step 1: Assess, pressure-linked state of nature (SoNP) datasets do not reflect all aspects of biodiversity necessary for companies to fully understand how their actions may contribute to positive and negative impacts on nature. For that reason, companies must also evaluate the significance of different locations using biodiversity state of nature (SoNB) variables to capture aspects of biodiversity at the species and ecosystem level.

Because companies used multiple metrics of biodiversity at the species and ecosystem level in their value chain assessment in Step 1b, they must harmonize the spatial scale between datasets and normalize the data (i.e., transform the data to fit within a consistent range). Following the normalization of data, companies should take the highest value for biodiversity in a given spatial unit of analysis (e.g., water basin or ecoregion). Companies are also recommended to record the specific biodiversity metric to which the highest value corresponds (e.g., rarity-weighted richness index or an ecosystem integrity metric if using both).

In the value chain assessment and the Step 2 prioritization, the choice of SoNB should fit the pressure being evaluated and the proposed action to address these impacts. For example, SBTN recognizes the ability of the Species Threat Abatement and Restoration (STAR) data to inform companies of how their actions may contribute to mitigating species extinction risk by reducing threats at a given location particularly for terrestrial ecosystems and pressures related to these such as land use and land use change. Guidance on required dimensions of biodiversity and recommended metrics for each pressure category and relevant for each target-setting method can be found in the Step 1b guidance (1).

After companies have calculated biodiversity scores for all locations relevant to a given pressure (target boundary), they must rank locations based on these biodiversity scores within the target boundary. This location ranking is independent of the location ranking based on pressure-specific index values.

Combine SoNP and SoNB rankings

Once companies have ranked locations within their target boundaries based on pressure-specific index values (composed of pressure and SoNP) and biodiversity (SoNB) values, the rankings must be combined into a final ranking to inform companies' strategy for action and target setting within each pressure-specific target boundary. This ranking is required for all companies before proceeding with the target-setting methods in Step 3: Measure, Set, & Disclose.

As noted throughout this methodology, companies must maintain the separation between pressures, value chain segments, and categories of certainty for location data while carrying out their interpretation and ranking of information within their target boundaries. This ranking approach must only be applied in cases where the company has sufficient certainty of location data to inform place-based target setting, such as in their direct operations and in their target

boundary A for upstream. This ranking informs an impact-based prioritization of target setting and action, consistent with an emphasis on nature and biodiversity needs.

Companies' actions have environmental impacts in all locations within a pressure-specific target boundary, based on the analysis in the Step 1b: Value Chain Assessment. This means that companies are assumed to have a lever for action in each of these locations, regardless of their ranking. Locations that emerge as the top priority based on the pressure-state index value are ones in which companies are expected to have the greatest levers for change, since this index value is determined both by corporate pressures and the need for action based on the linked state of nature. Locations that emerge as top priorities using the biodiversity (SoNB) indicator represent the underlying biodiversity values that influence the severity of impacts. In areas of high biodiversity, companies' pressures may disproportionately impact biodiversity, compared with other locations where the SoNB is lower even if their quantified pressures are greater in those locations. For these reasons, the ranking approach in this step emphasizes action in both types of locations.

Once all sites are ranked by their pressure-specific index value and separately by biodiversity, the company can begin prioritizing sites for target setting. Using this method, locations that are first priority based on either the pressure-specific index values or on biodiversity must be ranked first for the combined prioritization process for target setting and subsequent actions. The second-highest ranked site(s), would be the location(s) that is ranked highest based on the other calculated metric (i.e., biodiversity if the first site was based on the pressure-specific index ranking, or the pressure-specific index ranking if the first site was based on the biodiversity ranking). The company then moves down the list, numbering the next priority location by alternating between the two separately ranked lists, until all sites are labeled in one cohesive prioritized list.

Figure 3 provides an example of how companies can rank and present their highest-priority locations based on both indexed pressure and biodiversity data for every site within a target boundary.

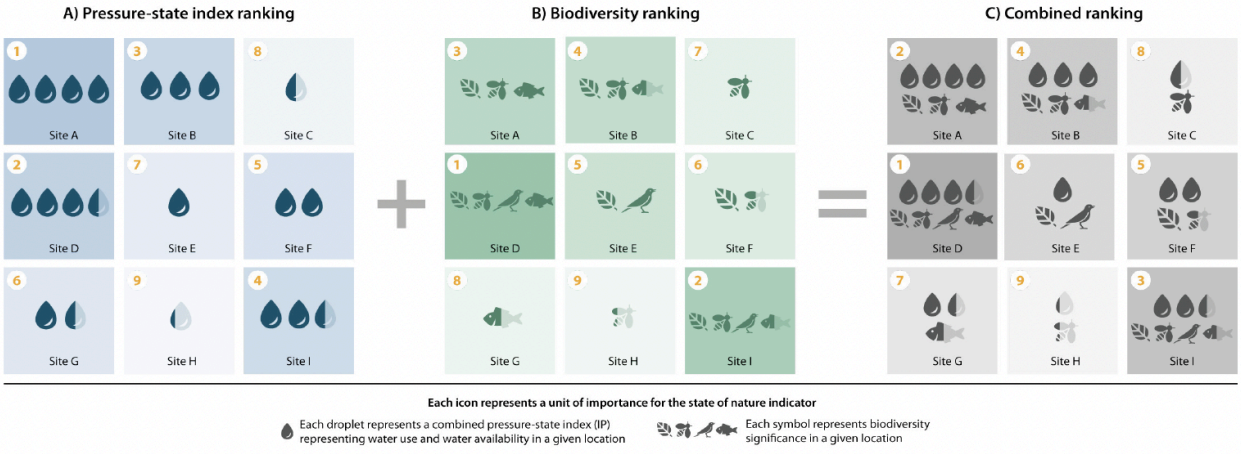

Figure 3: Combining location rankings using pressure-specific values and biodiversity values. The three figures show the calculation and introduction of new information, moving from the pressure ranking to the biodiversity ranking, and then to the combined ranking. Each of the nine boxes within each figure are meant to represent a different site. Each site is associated with both a value for that variable (the icons) and the ranking (the yellow number). Each icon is meant to indicate importance for that variable, with four icons representing sites with highest importance and no icons representing sites of least importance.

Box 1: Reflecting the importance of biodiversity in the combined rankings.

In some cases, setting a science-based target for nature in a location that is ranked very highly for biodiversity, even if it is ranked lower based on the pressure index, may seem non-intuitive for companies. However, all locations within the target boundary are ones where companies have meaningful pressures contributing to environmental impacts (note that at this stage locations with negligible freshwater pressures are eliminated from the target boundary)

Thus, actions consistent with the mitigation hierarchy (avoiding and reducing impacts as well as engaging in regeneration or restoration) and ongoing monitoring of impacts are substantive contributions that companies can make toward global goals of bending the curve of biodiversity loss, by focusing on regions of high value for biodiversity. In these locations, ongoing monitoring is also key to ensuring that companies do not increase their pressures over time.

For example, in a location such as the Atlantic Forest, with high species richness and endemism that has undergone intensive land conversion, even smaller impacts of land conversion can have a disproportionate impact on biodiversity loss and must be urgently addressed with a No Conversion of Natural Ecosystems target.

REQUIREMENTS AND RECOMMENDATIONS—INTERPRETATION AND RANKING

- **Requirement 8. Two types of state variables for each target boundary.**
    - Interpretation and ranking within the boundary will require use of both pressure and state of nature information. For each target boundary, companies must use the pressure-sensitive state of nature variable (SoNP), as well as at least two (a species-level and an ecosystem-level variables) or more additional biodiversity variables (SoNB) relevant to the pressure assessed.

Summary of the index value calculation process

- **Requirement 9. Pressure index values for each pressure boundary.**
    - The index value must be calculated independently for each material pressure for each location.
- **Requirement 10. Restrictions on use of index calculation method.**
    - This calculation process must only be applied in the following cases:
        - Direct operations—To locations within any pressure target boundary, 1) assuming the company has data consistent with the spatial resolution

requirements for Step 3 and separately for 2) assuming the company has subnational data coarser than the Step 3 requirements but consistent with Step 1b requirements.
        - Upstream—To locations within any pressure target boundary, 1) assuming the company has data consistent with the spatial resolution requirements for Step 3 and separately for 2) assuming the company has subnational data coarser than the Step 3 requirements but consistent with Step 1b requirements.
- **Requirement 11. Index values are required for each location.**
    - The index value must be calculated for each site for each material pressure, and as such, must use data for each variable associated with compatible (i.e., harmonized) spatial scales (see Task 3 of Step 2a).
- **Requirement 12. Datasets for use of index calculation methods.**
    - To calculate this index value, companies must use the datasets indicated in the Step 1 method (see Appendix 2 of this method for ease of reference). Companies must document their selected datasets with references when reporting the results of their ranking, and ensure that the choice is consistent with the metrics suggested and SBTN's tool and data criteria (3).
- **Requirement 13. Understand the interpretation guidance for each dataset used.**
    - Before calculating index values, companies are required to review the interpretation guidance for each pressure and state of nature dataset. This is typically provided by developers in supporting documentation (e.g., ReadMe file). If companies cannot obtain this information for a selected dataset, they should first contact the tool or dataset developers and, if that is not successful, please contact the SBTN team.
- **Requirement 14. Harmonize and normalize Step 1 pressure and state of nature data before calculating index.**
    - Companies must normalize (i.e., scale the data to fit within a consistent range, typically from 0 to 1) both the pressure and state of nature datasets before multiplying to ensure that both values are weighted equally within the index. Companies that used multiple state of nature metrics for a given pressure category in their value chain assessment (Step 1b) must harmonize the spatial scale between datasets and normalize the data before combining into a single state of nature dataset to calculating the index value before ranking.
- **Requirement 15. Apply a precautionary approach when interpreting state of nature data.**
    - After normalizing data to ensure a consistent range, companies must take the highest estimated state of nature value within a given spatial unit of analysis (e.g., water basin or ecoregion).
- **Recommendation 2. Record metric of highest value.**
    - When using multiple state of nature datasets as described above, companies should record which dataset the highest value in a given location corresponds to for best interpretation of the ranked index values.

Summary of the SoNB calculation process

- **Requirement 16. Harmonize and normalize Step 1 state of nature biodiversity data before using them in Step 2.**
    - Companies must use multiple metrics of biodiversity in their value chain assessment (Step 1b) for each pressure category (representing both species and ecosystem dimensions of biodiversity). Before proceeding to the Step 2

prioritization, companies must harmonize the spatial scale between datasets and normalize the data (i.e., transform the data to fit within a consistent range) before combining into a single state of nature biodiversity (SoNB) dataset for use in the ranking process.

- **Recommendation 3. Specify which biodiversity indicator is driving prioritization at each location.**
    - Companies are recommended to record the specific biodiversity metric to which the highest value corresponds (e.g., rarity-weighted richness or an ecosystem condition metric) to better understand the dimension of biodiversity that is being prioritized for a given location.

Summary of the combining values process

- **Requirement 17. Apply method only where there is sufficient location certainty.**
    - This ranking approach must only be applied in cases where the company has sufficient certainty of location data to inform place-based target setting, such as in their direct operations and in their target boundary A for upstream. An alternative prioritization approach for upstream target boundary B is described in Appendix 3.
- **Requirement 18. Combine pressure index and biodiversity values using the prescriptive approach.**
    - Companies must combine their rankings based on pressure-specific index values (composed of pressure and SoNP) and their rankings based on biodiversity (SoNB) values for all locations within a given boundary by following the provided methodology.
- **Requirement 19. Maintain separation in data between pressures, value chain segments, and locations based on certainty.**
    - Companies must maintain the separation among pressures, value chain segments (including upstream boundaries A and B), and data levels for location data while carrying out their interpretation and ranking of information within their target boundaries.

Box 2: Note on potential for reranking, triggered by Step 3.

When moving from Step 2 to Step 3, companies will gather more-precise information about their pressures and states of nature per target-specific guidance in Step 3 and continue to evaluate additional factors related to the just and equitable implementation of targets. In some cases, companies collecting more precise baseline data in Step 3 may find that their revised data differ significantly from the estimates used for Step 1 and Step 2, enough to influence the prioritization of location for target setting. If so, they may recalculate their ranking (Tasks 4 and 5 of Step 2b) and priorities (Tasks 6 to 9 of Step 2c), and revise their target-setting strategy accordingly. In these cases, companies must provide SBTN with both the original data used for ranking and prioritization and the revised data, ranking, and prioritization, including data sources with appropriate citations and justification.

Step 2c: Prioritize

As they develop their target-setting strategies, companies may want to select locations where they can accomplish multiple objectives at once.

Overview

Companies setting science-based targets for nature using the SBTN's initial methods are required to complete the ranking process of Step 2b within their direct operations target boundaries and their upstream target boundary A. Following this ranking, companies may use additional prioritization approaches to inform their first round of target-setting.

The priorities identified using these approaches will be informed first by the impact-based ranking (from Step 2b), and then may also incorporate factors beyond environmental and societal materiality, such as stakeholder engagement, human rights, business dependencies on nature, and financial or strategic interests. In Step 2c, these additional considerations inform a holistic corporate target setting strategy that integrates the environmental and social materiality lens used in a majority of the SBTN target setting methodology, with a deeper consideration of localized social dimensions and financial materiality.

The approach outlined in Step 2c: Prioritize is required for companies to complement, but not replace, the analysis that companies complete in the earlier parts of Step 2. This stage of the prioritization asks companies to introduce additional data addressing three complementary but distinct considerations: stakeholder engagement, company dependencies on nature, and other considerations such as feasibility and strategic interest.

The use of both impact- and risk-based prioritization approaches should increase the likelihood of timely action for environmental and societal benefits while reducing barriers to entry for companies beginning their science-based target-setting journey. This approach is intended to not only facilitate companies' success in setting and validating science-based targets for nature, but also to enable consideration of critical local and company stakeholders who are both affected by target implementation, and are key partners in the target-setting process. The considerations for stakeholder engagement are grounded in a human rights perspective and underlying principles of justice, equity, diversity, and inclusion (JEDI). This approach emphasizes the need for science-based targets to be implemented in an equitable, just and inclusive manner consistent with rights-based approaches. This topic is covered in greater detail within the complementary SBTN Stakeholder Engagement Guidance document.

Other considerations within Step 2c include dependencies, the importance of the contribution an ecosystem service makes to the company's business operations, and other internal factors

influencing feasibility including strategic significance, leadership buy-in, and data availability. Companies may use any combination of these factors to inform their identification of highest-opportunity and lowest-barrier locations and business aspects for target-setting. It is not mandatory for companies to use data from all factors to inform their evaluation.

This section of the methodology recognizes that companies should use a double materiality perspective to guide their target-setting strategy as they influence the equitability of science-based targets, the feasibility of setting and validating science-based targets, and the relative feasibility of achieving those same targets.

This section of the Step 2 methodology is necessarily less prescriptive than the preceding sections because it incorporates distinct categories of data, flexibility in data selection, and both qualitative and quantitative data. In this section, companies will find criteria for appropriate data selection as well as suggested datasets and sources. Companies will also be provided with guidance to rank each category of data and provide appropriate justification of their revised ranking for validation.

Before proceeding with the methods for Step 3: Freshwater and Step 3: Land, companies may apply a cutoff that affects the application of these methods for calculating science-based targets. Companies can apply this approach boundary by boundary, or look across pressure-specific boundaries for synergies (co-benefits) to inform their first round of target setting.

The use of a cutoff (after completing the prioritization) must be consistent with the requirements of the Step 3 methods.

- Companies setting No Conversion of Natural Ecosystems or Land Footprint Reduction targets must include all locations in their target boundary for land use and land use change for both direct operations and upstream boundary A in their first round of target-setting. Therefore, they cannot exclude any locations by using a prioritization approach that allows for postponing target-setting until a later date.
- Companies using these methods should still use the outcome of the ranking from steps 2b and 2c to prioritize actions toward target achievement. Companies setting Landscape Engagement, Freshwater Quantity, and Freshwater Quality targets may use a prioritization approach to inform the first round of target-setting for locations within direct operations and upstream target boundary A.

In cases where a prioritization approach is applied, companies will be required to specify a time-bound plan for increasing coverage of the material activities within the target boundaries. If companies choose not to use a prioritization approach, as prescribed by SBTN, to inform a cutoff following the location ranking for their targets, they will be required to address 100% of their target boundaries for those pressures, using the strictest interpretation of the target-setting guidance.

Unlike the ranking process described in Task 5 of Step 2b, companies must prioritize actions on transparency and traceability for upstream commodities and activities within companies' upstream (target boundary B).

Task 6. Understand social and justice priorities through stakeholder engagement

Task 6 is one of three complementary prioritization approaches that companies can use in Step 2c. Companies may choose to implement Task 6, Task 7, and/or Task 8 (any combination of them) but must use at least one before proceeding to Task 9. The information gathered in these tasks must sit alongside their impact-based ranking (produced in Task 5) to inform Task 9. Companies must provide a written explanation supporting any rankings coming from these complementary approaches so that validators can interpret and approve the reasoning for reranking the most materially relevant sites from an impact perspective. Validators may ask for additional justification before approving the company's prioritization based on financial, strategic, or social considerations.

Considerations of social and rights-based perspectives are critical to ensuring that science-based targets contribute to global goals such as those captured within the Global Biodiversity Framework and the United Nations SDGs. This includes bringing perspectives on poverty reduction and financial security (SDG 1, 8), food security (SDG 2), human health and well-being (SDG 3), clean water and sanitation (SDG 6), and governance and societal relationships (SDG 8, 16). At the same time, broader narratives around societal goals or corporate sustainability may mask underlying impacts on the human rights of marginalized groups.

Local stakeholders, including Indigenous Peoples and other local communities, as well as government and civil society, are critical partners to work with to set and achieve science-based targets, as in other types of environmental management. To set equitable and effective science-based targets, companies are recommended to give special consideration to the rights, perspectives, values, and goals of local stakeholders, including by incorporating other ways of knowing and traditional knowledge.

These efforts should have a particular emphasis on Indigenous Peoples, local communities, and other affected communities, defined as people who have been affected by company activities or value chain relationships. Engaging these stakeholders in target setting and evaluation also allows companies to meet their responsibilities as laid out by (a) the UN Guiding Principles on Business and Human Rights (7), and (b) the Organisation for Economic Co-operation and Development (OECD) Guidelines for Responsible Business Conduct (9), being the global, authoritative standards of responsible business conduct with regards to impacts on people and planet. This in turn enables companies to align their practice with the growing number of due diligence regulations and reporting requirements based on these international standards.

Box 3: SBTN- and Taskforce on Nature-related Financial Disclosures (TNFD)-aligned stakeholder engagement guidance.

Stakeholder engagement and human rights

In addition to the guidance found within this section of the Step 2 method, companies should refer to the SBTN Stakeholder Engagement Guidance, which is complementary to the target-setting methods and offers deeper resources on stakeholder engagement and evaluation. The Stakeholder Engagement Guidance is consistent with international standards of business conduct and core principles of human rights and environmental due diligence as well as underlying JEDI considerations. As new versions of the Stakeholder Engagement Guidance are released, this section of the Step 2 method will be updated accordingly.

SBTN's Stakeholder Engagement Guidance has been developed in collaboration with the Taskforce on Nature-related Financial Disclosures (TNFD) to develop a consistent framework through which companies can apply science-based targets and disclose impacts and risks within a rights-based perspective. SBTN will continue to advance stakeholder engagement in subsequent versions to embed this perspective within the application of its target-setting methods.

While completing the Step 2 methods, companies should lay the foundations for collaboration with local stakeholders by conducting an initial stakeholder mapping exercise within the company's top-ranked locations based on the combined pressure-specific index value and SoNB ranking. This focuses on two main dimensions: local stakeholder needs and existing stakeholder relationships. As the company deepens its knowledge of each location relevant to its target-setting journey, it will iterate on this exercise and continue to engage with local stakeholders to set and achieve its science-based targets for nature.

Companies are encouraged to develop internal foundational practices in the following areas prior to starting their actual engagement efforts: Preparedness for Engagement; Designing and Conducting Engagement; and Enabling Participation (see the SBTN stakeholder engagement section on Foundational Practices for more information).

Identifying local stakeholder needs

Companies must identify the local stakeholders that are particularly critical to engage within each location in the target boundary, rights of Indigenous Peoples and other marginalized communities, and existing stakeholder relationships, with particular emphasis on the locations within the first round of target setting. As noted above, this may miss communities critical to engage with during the target-setting process, so companies are encouraged to return to this exercise to fill gaps or update their knowledge as they progress through the target-setting process.

Robust stakeholder mapping enables companies to more effectively distinguish sub-groups clearly, identify potentially highly impacted groups, and seek to understand the distinct ways in which these groups may need to be engaged. In practice, such mapping can provide companies with a more complete understanding of stakeholders who:

- may be Indigenous to a place where companies undertake operations or source materials, even if they have been displaced and/or dispossessed;
- may identify with an race or ethnicity, socio-economic class, sexual orientation or gender identity that increases the likelihood of underrepresentation and marginalization;
- may have shared dependencies on nature alongside the company's dependencies, in particular in areas with low integrity ecosystems, important ecosystems or areas of water stress, and may face potential impacts of nature loss and degradation on their basic rights and welfare;
- may be affected positively or negatively by the company's responses to nature loss and degradation, including mitigation and adaptation strategies and any related innovations or changes in business model; and
- may be important to new opportunities for addressing nature loss and degradation and bring added value to the realization of such opportunities.

To gain an initial understanding of these stakeholders, companies may draw on internal company or supplier knowledge of the areas in which they work, particularly to identify affected communities of workers and local communities. They should also consult resources that identify areas traditionally owned, occupied, or otherwise used by Indigenous Peoples and local communities, such as the ICCA Registry, Global Land Governance Index, and LandMark, and data on Other Effective Area-Based Conservation Measures. Please note that these datasets represent some of the best available resources at the global level but do not replace more accurate regional and local sources of information. Companies should respect localized definitions of Indigeneity and pre-existing measures that have not historically been recognised for their conservation values, such as sacred natural sites.

Where Indigenous communities are identified to live in and around operational sites or sourcing areas, companies must uphold Free, Prior, and Informed Consent (FPIC), a specific right granted to Indigenous Peoples recognised in the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), before activities affecting their lands and other protected natural resources may proceed. It may also be appropriate for organizations to apply these rights to other affected stakeholders and communities.

Companies may also include other aspects of stakeholder connections to and reliance on nature when considering the potential benefits of setting targets. When doing so, companies may use datasets like the Critical Natural Assets dataset referenced in Appendix 1 of Step 1 in addition to those identifying areas of cultural importance or Indigenous Peoples, local communities or other affected stakeholders. As in all o

Companies that choose to do Task 6, must note in their validation submission forms the locations where they, their suppliers, or their nonprofit partners are familiar with key local stakeholders and may be able to work in partnership with to set science-based targets that will satisfy mutual needs and to achieve those targets.

As a result of this initial stakeholder mapping exercise, companies should provide documentation of stakeholder needs and relationships in their target boundaries, to the extent that they are known. Where companies do not have existing relationships or knowledge of local stakeholders, they may work with local civil society organizations to build on existing partnerships and trust-based relationships between organizations and local communities. Where possible, existing relationships, capacity, and competencies within civil sector organizations and local governance bodies should be leveraged rather than relying on only internal company resourcing.

SBTN encourages collaboration with multi stakeholder efforts at a landscape, watershed, or seascape level using jurisdictional or scape approaches.

Task 7. Assess business dependencies on nature

Task 7 is one of three complementary prioritization approaches that companies can use in Step 2c. Companies may choose to implement Task 6, Task 7, and/or Task 8 (any combination of them) but must use at least one before proceeding to Task 9. The information gathered in these tasks must sit alongside their impact-based ranking (produced in Task 5) to inform Task 9. Companies must provide a written explanation supporting any rankings coming from these complementary approaches so that validators can interpret and approve the reasoning for reranking the most materially relevant sites from an impact perspective. Validators may ask for additional justification before approving the company's prioritization based on financial, strategic, or social considerations.

Many companies depend or rely on nature and its resulting ecosystem services for their business operations. These are called dependencies. For example, companies engaged in agricultural production or sourcing depend on pollination, freshwater provisioning, and flood and erosion control among other ecosystem services. Still others depend on carbon sequestration and other climate regulating services that depend on intact and biodiverse ecosystems. The evaluation of business dependencies can help companies understand their risk of financial loss with the loss or degradation of these ecosystem services, and the opportunities to increase their positive impacts on nature.

Companies may use a variety of datasets to evaluate their dependencies on nature. Some recommended datasets include the dependency screening data in ENCORE, which is also used in SBTN's Materiality Screening tool on impacts. These data provide an overview of the materiality of potential dependencies based on global sector average data in two dimensions: the loss of functionality in the business operation if the ecosystem service is lost or disrupted, and the significance of the financial loss due to this loss of functionality. Companies may also refer to the Nature Risk Profile methodology for more information on calculating dependencies at the location of operations or sourcing using spatial data. This allows companies to adjust the relevance of an ecosystem service based on the potential benefit in a location relevant to target setting. For example, flood regulation is especially critical in flood-prone regions but not in areas without flood prevalence, despite sector-level scores indicating materiality for that ecosystem service.

Companies may also wish to use resources such as the Natural Capital Protocol (10), Exploring Natural Capital Opportunities (11), the UNEP-WCMC Natural Capital Hotspots Map (12), the Integrated Valuation of Ecosystem Services and Tradeoffs (InVEST) models (13), or the Swiss Re Institute Biodiversity and Ecosystem Services (BES) Index (14) to understand their dependencies. While forecasts are not yet included in the SBTN methods, companies may also wish to consider scenarios such as those used by the Intergovernmental Panel on Climate Change (IPCC) to evaluate which locations are likely to experience significant environmental stress under different time periods to better understand risk of loss for critical ecosystem services.

Companies that choose to do Task 7 assess their dependencies either descriptively, describing the importance of relevant ecosystem services (focusing on those relevant to Freshwater and Land targets) to their business operations in a given location, or through dependency scoring approaches, such as those outlined in the Nature Risk Profile methodology. This information must be included in their validation submissions. Companies may have locations within the target boundaries without data to inform this evaluation. This is acceptable for this stage in the SBTN methodology.

Task 8. Consider strategic priorities, risks, and capacity for action

Task 8 is one of three complementary prioritization approaches that companies can use in Step 2c. Companies may choose to implement Task 6, Task 7, and/or Task 8 (any combination of them) but must use at least one before proceeding to Task 9. The information gathered in these tasks must sit alongside their impact-based ranking (produced in Task 5) to inform Task 9. Companies must provide a written explanation supporting any rankings coming from these complementary approaches so that validators can interpret and approve the reasoning for reranking the most materially relevant sites from an impact perspective. Validators may ask for additional justification before approving the company's prioritization based on financial, strategic, or social considerations.

Companies may wish to consider factors that influence their ability to take effective action. The factors that can be used to inform this strategic and feasibility evaluation are described below.

Data availability and target-setting readiness

Companies may wish to start with target setting on sites with better data quality (i.e., where, in Step 1b, pressures have been quantified through measurements as opposed to estimations) or where they are confident in their ability to access the information needed to set targets—meaning data availability may play into the prioritization of locations and the target-setting process. This approach is reflected in the tiered prioritization approach.

Companies that have made investments in traceability or voluntary certification schemes, or that use reporting (e.g., CDP, GHGP, and GRI) and assessment (e.g., NCP) frameworks will be better positioned to re-assess their pressure indicators using measurements, instead of estimations, once they move to Step 3.

For many companies, the largest impacts and greatest opportunities for action can also be found in their value chains, and thus relationships with suppliers and other value chain partners are a key consideration. Similarly, for conglomerates, it will not be possible to achieve positive outcomes for nature without the cooperation and support of their subsidiaries. Just as companies may wish to act first where key value chain relationships can be leveraged, conglomerates may wish to act first where subsidiaries are ready and willing to engage in the process of setting science-based targets.

Regulatory and reputational risks

Regulatory risk

Companies may also wish to consider current and changing policies in different locations where their value chains extend when determining where to act first. For example, expected changes in regulations within the European Union regarding the disclosure of impacts would signal that companies need to invest in increasing supply chain transparency and impact monitoring capacity in these locations. These regulatory pressures may also differ by pressure category.

For example, increased regulation on pollution by corporate actors in China, may influence a company to prioritize freshwater quality targets in the region.

Reputational risk
Companies have for decades been aware of the risks associated with attacks on their brands or loss of face due to events and disasters. If companies seek to prioritize based on reputational risk, they may ask the following questions:

- Are there certain locations in their target boundaries where the company is more likely to be scrutinized?
- Are there certain commodities or types of activities in their target boundaries for which the company is more likely to be thrust into the spotlight?
- Are there locations or activities in their target boundaries with opportunities for business leadership that could lead to reputational gain?

Strategic significance

Beyond the risks above, companies may wish to consider other factors that affect the strategic significance of action in a location or on a particular commodity or business line that are not otherwise prioritized. These can be key to making the case for target setting to corporate leadership, and ensuring buy-in from all critical internal stakeholders.

In addition to local stakeholders (covered in Task 6), the preferences and demands of company-level stakeholders, such as shareholders and investors, for action in certain locations or in certain areas of the business may be relevant to choosing where to act first. For many companies, these preferences may be reflected in their internal strategy documents or in reports on materiality compiled according to the Global Reporting Initiative (GRI) (8) or another framework. Prioritizing in this manner can help the company ensure buy-in around its chosen targets, thereby potentially increasing the resources available to set, meet, and monitor these, as well as support from these internal stakeholders throughout the learning process involved in setting targets.

The list below is drawn from the core tenets of corporate strategy frameworks, and is intended to be illustrative rather than exhaustive.

Mission and goals

- How will decisions to set targets and act resonate with the company's vision and mission? How will these affect where the company wants to be in the future?
- How much of a change does the company want to make to the way it does business, and over what time period?
- What impact does the company want to have on the world?

Financial materiality

- How much of the company's total revenue or profit (value creation) is generated by a given activity location, commodity, or business line?

- How much of the company's purchases (spend) is going toward a given supply chain or location where the company is investing in science-based targets for nature?
- How much of the company's overall budget will be needed in order to start setting targets at the highest-ranked locations, for each target boundary?

Company growth strategy

- What are the markets and sectors the company wants to expand into?
- What economic activities in the company's portfolio are key to growth?
- How do target-setting choices affect the balance of risks and opportunities across the company's portfolio?

Levers for change

- What systems does the company already have in place, e.g., environmental management systems and other data collection infrastructure, that can be leveraged for setting science-based targets for nature (and save upfront costs)?
- What is the degree of influence the company expects to have over upstream actors that can help ensure effectiveness of targets?
- What additional initiatives (e.g., sector-wide coalitions) can the company leverage for learning?

Opportunities for scaling and learning

- Are there ways to cluster sites, locations, or business lines/activities to increase opportunities for exchange between the professionals who are setting, implementing, and tracking targets?

As they implement this portion of the methodology, companies are also encouraged to reference complementary guidance from the TNFD on incorporating nature-related risks and opportunities into strategic planning (15).

Companies that choose to complete Task 8 must present the assessment related to prioritizing different locations (or activities) in their target boundary for strategic reasons, including any supporting information and rationale, as part of their validation submissions.

Task 9. Prioritize within target boundaries

Before proceeding with the methods for Step 3: Freshwater and Step 3: Land, companies may apply a cutoff that affects the application of these methods for calculating science-based targets. Companies can apply this approach boundary by boundary, or look across pressure-specific boundaries for synergies (co-benefits).

Their ranked evaluations must sit alongside their impact-based ranking to inform cutoffs for the first round of target setting(as mentioned below). This means that companies must use both the information in their environmental (from Task 5) and complementary rankings (from Tasks 6, 7, and 8) to inform their first round of freshwater and landscape engagement targets. Companies must provide a written explanation supporting this ranking so that validators can interpret and approve the reasoning for reranking the most materially relevant sites from an impact perspective on account of social and justice factors, dependencies on nature, or strategic factors. Validators may ask for additional justification before approving the company's prioritization based on financial, strategic, or societal considerations.

Cutoff within the freshwater target boundaries
For targets on freshwater use and freshwater pollution (addressed in Step 3: Freshwater), companies are recommended to select the highest 10% of basins, or 10 basins if there are more than 100 basins in each target boundary, as top-priority basins for the first round of science-based targets. Companies should be aware that the ranking of basins may be different for water quantity than for water quality, depending on the company's pressures and the state of nature at each site.

The target-setting guidance for Step 3: Freshwater requires a higher level of resource investment for use of local hydrological models in top priority basins. Companies are recommended to use the cutoff described above so that they can focus their resources in the most important basins. Companies setting targets in basins that do not fall within this top-priority category will be allowed to use pre-defined global hydrological models (greatly reducing resource investment for model selection). Companies that decide not to follow this prioritization approach will be required to treat all basins as if they were in the top-priority category and will be required to seek local hydrological models for each of these basins.

Cutoff within the land target boundaries
As noted above, the prioritization approach is not applicable to the methods for the No Conversion of Natural Ecosystems and Land Footprint Reduction targets (within the direct operations or upstream target boundary A).

Companies setting a No Conversion of Natural Ecosystems target within the Step 3: Land methods must include all upstream activities within upstream target boundary A ahead of the specified target date associated with their position in the supply chain. This will be required to enable science-based target setting and, by target date, to provide evidence of deforestation

and conversion-free status of sourced commodities. SBTN may provide additional thresholds and guidance applicable to embedded or highly transformed volumes in future releases.

Please note that companies may use global statistical approaches to set the Land Footprint Reduction target and, therefore, can include both upstream target boundaries A and B in their initial target submission.

For the Landscape Engagement target (Step 3: Land) companies are recommended to use the outcome of their land use and land use change and soil pollution target boundary rankings (combined with biodiversity) to identify either the top 10% of areas within the union of the target boundaries for land use, land use change, and soil pollution to engage in landscape initiatives OR to use the ranking to identify two landscape initiatives, regardless of their size, within these target boundaries. If using the top 10%, companies should include sites that cover at least 10% of the total direct operations and upstream target boundaries (respectively). In each of these sites, companies will be expected to engage in landscape initiatives, following V1.0 Step 3: Land methods.

When there are no existing landscape initiatives in the top ranked locations, companies should either use the further target boundary ranking to inform the next priority areas for coverage with this target or develop new landscape initiatives in the top location, following the principles outlined by ISEAL.

However, companies applying the Land Footprint Reduction target in addition to Landscape Engagement are should utilize additional approaches for prioritization when applying the Step 3 methods because the choice of landscapes for Landscape Engagement should incorporate requirements on restoration of lands taken out of active agricultural production. For example, if a company applies the Land Footprint Reduction target and decreases the area associated with intensive corn production in the Argentinean Pampas, a region of temperate grasslands, that target is recommended to be accompanied by the application of an appropriate Landscape Engagement target. A Landscape Engagement target in this setting could be one focused on restoration in the same landscape. This landscape may not have been the highest priority for Landscape Engagement based on the Step 2 methodology, but this can be superseded by holistic considerations associated with the application of the target-setting methodologies in Step 3.

Cross-boundary cutoff through the co-benefits approach

Companies are recommended to apply a co-benefit perspective to the prioritization of target setting when possible. This perspective can allow companies to focus on the added benefits for nature that can be achieved when companies address multiple pressures in a single location simultaneously with science-based targets (4). When this approach is applied, companies should identify locations that emerge as high priorities for multiple pressure categories as those in which to act first (e.g., companies may use this approach to prioritize within the target boundaries for water use and water pollution). Companies skipping any high-ranked locations within a given target boundary to focus on these co-benefits must advance multiple

science-based targets in these locations, in accordance with this co-benefits approach, and provide sufficient evidence for their reprioritization.

Addressing locations with higher potential for co-benefits within the first round of targets potentially creates a larger net local benefit for nature (see the Jurisdictional Approaches Resource Hub) and may also have additional benefits for local stakeholders and the companies applying the targets. This may be difficult in some cases to assess, but could be approximated through information on SDGs (e.g., access of local populations to clean water) or the Social Progress Index, or through primary data collected through social or environmental impact assessments for specific sites/projects. Companies may be able to take coordinated action to more thoughtfully engage local stakeholders, reducing burden and providing more transparency into the company's overall actions. This approach may also allow companies to build efficiencies in resourcing and to more rapidly advance progress in target setting across multiple pressure categories.

REQUIREMENTS AND RECOMMENDATIONS—PRIORITIZATION

- **Requirement 20. Ranking before prioritization.**
  - Before using the prioritization approach for direct operations and upstream target boundary A must first have defined their target boundary and ranked locations for each material pressure (see Tasks 1-8 of Steps 2a, 2b and 2c).
- **Requirement 21. Justify and explain exclusion of high-priority locations from first target-setting efforts.**
  - Companies must submit additional information (e.g.,stakeholder relationships, dependencies, or strategic interest) to validators to explain why any highly ranked locations (according to the impact-based prioritization in Step 2b) are not able to be addressed by companies in their first round of target setting. Examples of sites that companies would need to cover include those where the company has a high footprint and the state of nature indicators show the greatest needs for nature. Example justification may include documentation supporting local stakeholder benefits from setting and achieving a science-based target for nature in that location.
- **Requirement 22. Justify conclusions based on at least one of the three criteria in this analysis.**
  - Companies must record the evidence for their revised ranking based on which factors were considered, with at least one required (stakeholder engagement, company dependencies on nature, and other considerations such as feasibility and strategic interest), e.g., why these are most relevant for their company, which information sources were used, and why these were selected.
- **Requirement 23. Feasibility information is additional to rankings and priorities established earlier in the Step 2 method.**
  - Companies must retain the full ranked list of locations and activities identified as priority in Step 2b. They can then provide this with the results of their evaluation, e.g., as a column of additional information in a table of ranked locations.
- **Requirement 24. Documentation to support prioritization plans.**

    - Companies must submit adequate information to support their prioritization efforts for target boundaries compatible with science-based targets in line with Step 3 methods. Prioritizations for direct operations and upstream target boundary A should be conducted in accordance with the Step 3 Freshwater and Land methods.
- **Requirement 25. Provide details on plans for overcoming hurdles to target setting for high-impact locations.**
    - If deprioritizing locations (e.g. the company started with a lower-ranked location from an impact perspective because of high dependencies), the company must also create a plan for addressing these sites (e.g. high-impact, low-dependency locations).
- **Recommendation 4. Apply the same complementary evaluation approach to all target boundaries.**
    - Once an approach is determined for a given target boundary, we recommend that the same approach should be used for each pressure category and target boundary.
- **Recommendation 5. Prioritization of upstream target boundary B.**
    - Companies may submit a prioritization for upstream target boundary B to describe how the company will gain adequate traceability to move volumes from target boundary B to A. Recommendations for this prioritization are included in accordance with the guidance in Appendix 3.

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Supplementary Material

Appendix 1. Pressure and state of nature variables covered in the Step 1 & Step 2 methods

Table A1: Pressures managed with science-based targets for nature.

IPBES Pressure Category	SBTN Pressure Category	Description	Coverage in v1.1 of the SBTN methods			
			1a	1b	2	3
Ecosystem use and use change	Land use and use change	Examples include: area of agriculture by type; area of forest plantation by type; area of open cast mine by type; etc.	Req	Req	Req	No conversion. Footprint reduction. Landscape engagement.
	Freshwater ecosystem use and use change	Examples include: area of wetland, ponds, lakes, streams, rivers or peatland necessary to provide ecosystem services such as water purification, and fish spawning; areas of infrastructure such as bridges, dams, flood barriers, etc.	Req	N/A	N/A	N/A
	Marine ecosystem use and use change	Examples include: area of aquaculture by type; area of seabed mining by type; etc.	Req	N/A	N/A	N/A
Resource exploitation	Water use	Examples include: volume of groundwater consumed; volume of surface water consumed; etc.	Req	Req	Req	Freshwater quantity
	Other resource use	Examples include: volume of wild-caught fish by species; number of wild-caught mammals by species; etc.	Req	Req	N/A	N/A
Climate change	GHG emissions	Examples include: volume of carbon dioxide (CO_2),	Req	Climate targets through SBTi		

		methane (CH4), nitrous oxide (N2O), sulphur hexafluoride (SF6), hydrofluorocarbons, (HFCs), perfluorocarbons (PFCs), etc.				
Pollution	Non-GHG air pollutants	Examples include: volume of fine (PM2.5), and coarse (PM10) particulate matter; volatile organic compounds (VOCs); mono-nitrogen oxides (NO and NO2, commonly referred to as NOx); sulphur dioxide (SO2); carbon monoxide (CO); etc.	Opt	N/A	N/A	N/A
	Water pollutants	Examples include: volume of nutrients (e.g., nitrates and phosphates) or other substances (e.g., heavy metals and chemicals) discharged to water bodies.	Req	Req	Req	Freshwater quality
	Soil pollutants	Examples include: volume of waste matter discharged and retained in soil over a given period.	Req	Req	Req	Landscape engagement
	Solid waste	Examples include: volume of waste by classification (i.e., nonhazardous, hazardous, and radioactive); by specific material constituents (e.g., lead, plastic); or by disposal method (e.g., landfill, incineration, recycling, specialist processing).	Opt	N/A	N/A	N/A
Invasives and other	Other ecological disturbances	Examples include: decibels and duration of noise; lumens and duration of light; at the impacted site.	Opt	N/A	N/A	N/A
	Biological alterations and interferences	Examples include: the introduction and spread of invasive species and diseases.	Opt	N/A	N/A	N/A

Table A2: State of nature (SoN) indicators relevant for the SBTN methodology. The variables in this list are illustrative of SoN variables used in SBTN Version 1.1 methods. Guidance on the use of specific indicators is provided in Step 1b: Value Chain Assessment and Step 3: Measure, Set & Disclose. This list is not comprehensive but highlights those SoN variables that best relate to SBTN's current coverage of pressures. This list omits those SoN datasets that may only be relevant to pressures currently outside of SBTN's current scope for target-setting methods, like biotic and abiotic components of soil and water quality outside the nutrients listed below. Please reference SBTi methods for SoN datasets linked to GHG emissions.

SBTN SoN Variables
Ecosystem extent, structure, composition, and function
Species biodiversity (e.g., population dynamics, richness, extinction risk, and loss)
Nature's contributions to people (i.e., ecosystem services)
Soil quality (nitrogen and phosphorus)
Water quality (nitrogen and phosphorus)
Water availability

Appendix 2. Pressure and state metrics

Table A3: Environmental pressure indicators used in the value chain pressure assessment (from SBTN Step 1).

Pressure category material in Step 1a	Pressure indicator(s) required in Step 1b
Land use & land use change	**Land use:** Area (km2 or ha) of land use, including known land management practices (e.g., crop rotation, tillage practices, or fire regimes). Companies are recommended to include a description or quantification of additional intensity of use indicators such as pollution, resource exploitation, and invasive species. **and also:** **Land use change:** Area (km2 or ha) converted since 2020 (or earlier cutoff dates),* by pre- and post-conversion ecosystem type and category of land use. The seven land use categories recognized by SBTN are: plantation, forest land, cropland, grassland, wetlands, settlements, and other land (including infrastructure and human settlements). Companies must refer to AFI (2020) for additional guidance on the definition of plantation and to IPCC (2003) for the remaining six categories. * See Step 3: Land for details on the appropriate cutoff date to use, depending on the area associated with sourcing or direct operations. Companies must use both indicators (land use and land use change) for every location with activities material in this category.
Water use	**Water withdrawals:** Monthly or annual volume (m3/month or km3/year), per source (surface water, groundwater, municipal grid, etc.). The use of monthly values is recommended whenever possible, especially for direct operations, as it allows more flexibility and precision in Step 3. The use of annual data is allowed in all cases although companies may be required to re-assess these values in Step 3 in some cases. **or, alternatively:** **Water consumption:** Monthly or annual volume (m3/month or km3/year), per source (surface water, groundwater, municipal grid, etc.). Water consumption must be calculated as withdrawals minus returns but returns are only allowed in cases where the water returns occur in the same location, in the same time period (month or year), and with the same quality (e.g., temperature, oxygen concentration, nutrient and pollutant concentration) as the water that was withdrawn. Companies may use a combination of water withdrawals and water consumption values for their locations with activities material for this category, depending on data availability and only where water returns match the quality of water withdrawals, noting for each location which of the two indicators was used. Note that monthly estimates should be used where possible for freshwater science-based targets, but companies may use an annual sum or a maximum monthly value when prioritizing for target setting in Steps 1 and 2.

Pressure category material in Step 1a	Pressure indicator(s) required in Step 1b
Soil pollution	**Nutrient application to soils:** Nutrient (nitrogen and phosphorus) volume applied to soil per area (kg N/ha, kg P/ha, or kg NPK/ha). Where companies use the same indicator, they may leverage freshwater nutrient pollution data to fulfill this requirement. **Companies are required to assess this indicator** for all locations with activities material for soil pollution. In some cases, however, it is expected that there may be no instance of nutrient loading to soil, or that the values are insignificant. Companies are still required to indicate the assessed values, noting and explaining the cases where these values are zero or near zero. Companies should note that this indicator and the *nutrient loading to freshwater via soil* indicator for water pollution are closely related and can be calculated using the same data. **and, optionally:** **Nutrient loading to soil via solid waste:** Estimated nutrient volume (kg N or kg P) in solid waste generated by the company, including its disposal mechanism and treatment (if known). **Nutrient loading to soil via solid waste** is not required, but **recommended** for companies generating significant amounts of organic solid waste discharged directly to the environment. Companies whose waste is treated through a waste treatment facility should not assess this indicator. **and, optionally:** **Other pollution loading to soil:** Estimated ecotoxic potential volume discharged to soil or total acidification potential volume discharged to soil, or other metrics of soil pollution. **Other pollution loading to soil is** not required, but **recommended** for companies in sectors where nutrients are not significant pollutants. Companies whose waste is treated through a waste treatment facility should not assess this indicator.
Water pollution	**Nutrient loading to freshwater via soil:** Rate of nutrient (nitrogen or phosphorus) application in soil (kg N, kg P, or kg NPK per month or year) or, where possible, fertilizer discharge to freshwater systems. Companies are strongly recommended to estimate nitrogen and phosphorus loads separately for each location with material activities for freshwater pollution, as this will allow a better implementation of the Step 3 methods. A combined metric estimating total fertilizer application (e.g., NPK) or other similar metrics are also allowed but may require re-assessing the two nutrients separately to proceed with target-setting in Step 3. The use of monthly data is recommended whenever possible, as it will allow more precise target-setting and actions in Steps 3 and 4, but annual data is allowed in all cases. **Companies are required to assess this indicator** for all locations with activities material for freshwater pollution. In some cases, however, it is expected that there may be no instance of nutrient loading to soil, or that the values are insignificant. Companies are still required to indicate the assessed values, noting and explaining the cases where these

Pressure category material in Step 1a	Pressure indicator(s) required in Step 1b
	values are zero or near zero. **and also:** **Nutrient loading to freshwater via wastewater:** Rate of nutrient (nitrogen and phosphorus) loading in wastewater streams (kg N/month and kg P/month, or kg N/year and kg P/year), indicating whether these are discharged directly to the environment or sent to waste-water treatment by a third party. Companies may estimate this indicator by measuring or estimating the nutrient concentration (kg N/lt or kg P/lt) in their wastewater streams and multiplying it by their discharge water volumes (m3/month or km3/year). Companies are strongly recommended to assess nitrogen and phosphorus loads separately for each location with material activities for freshwater pollution. A combined metric (total nutrient load or NPK load) is allowed but companies are recommended to use statistical data or available conversion factors for their specific practices to estimate the specific proportions of N and P in each location. This will allow a better implementation of the Step 3 freshwater methods which are specific to nitrogen and phosphorus levels in each basin. The use of monthly data is recommended whenever possible, as it will allow more precise target-setting and actions in Steps 3 and 4, but annual data is allowed in all cases. **Companies are required to assess this indicator** for all locations with material activities for freshwater pollution. In some cases, however, it is expected that there may be no instance of nutrient loading in wastewater, or that the values are insignificant. Companies are still required to indicate the assessed values, noting and explaining the cases where these values are zero or near zero. Note that monthly estimates should be used where possible for freshwater science-based targets, but companies may use an annual aggregation or a maximum monthly value when prioritizing for target setting in Steps 1 and 2.
GHG emissions	**GHG emissions:** Companies are required to complete (or have completed) an assessment of their GHG emissions in line with SBTi guidance.

Table A4: Further detail on biodiversity indicators. This table shows the biodiversity and NCPs indicators that companies may evaluate as part of this assessment.
The SoNB indicators recommended for SBTN are shown alongside the alignment with ecologically sensitive locations used for location prioritization in TNFD and the GRI Biodiversity Standard. Companies may use this mapping to better leverage their analyses across different corporate sustainability frameworks.

Biodiversity dimensions and NCPs	**Recommended Biodiversity state of nature (SoNB) indicators for Step 1b**	**Alignment with TNFD and GRI criteria for ecologically sensitive locations**
Species	Richness of threatened species	Biodiversity importance: Areas important for species (included threatened, congregatory, migratory, range-restricted or endemic species)
	Rarity-weighted richness	
Ecosystems	Protected areas including other effective area-based conservation measures' (OECMs)	Biodiversity importance: Areas protected through legal or other effective means
	Areas scientifically recognized for importance for biodiversity	Biodiversity importance: Areas scientifically recognized for importance for biodiversity
	Critically Endangered or Endangered ecosystems on land	Biodiversity importance: Areas containing ecosystems that are rare, very localized or highly threatened
	Species-rich marine or coastal habitats	
	Ecological corridors	Biodiversity importance: Areas important for ecological connectivity
	Migratory corridors	
	Ecosystem integrity	Ecosystem integrity: High integrity locations and areas of rapid decline in ecosystem integrity
NCPs	Areas critical to NCPs	Areas important for the delivery of ecosystem service benefits, including to Indigenous Peoples and local communities
	Areas critical for NCPs to Indigenous Peoples and Local Communities	Areas that have been traditionally owned, occupied or otherwise used by Indigenous Peoples and local communities

Appendix 3. Actions for upstream target boundary B

Disclaimer for internal release: *As of the internal release of v1.1 (June 2024), Task 6 is still undergoing additional revisions in the lead up to the public release (July 2024). The current guidance is provided for informative purposes for companies preparing to implement the methods. Please confirm once v1.1 is released whether significant changes have been made to this task.*

Some companies will have to determine a second upstream target boundary, i.e., target boundary B, because they do not currently have the information needed to set place-based targets and cannot readily do so. In these instances, companies will be required to increase their traceability to remain compliant with the method requirements and keep their targets valid over time.

This appendix presents recommendations for companies to utilize a prioritization approach for commodities or activities and locations in this boundary to guide their efforts toward alternative measures for impact reduction. These include, for example, gaining the traceability necessary for place-based targets, including engaging suppliers in those efforts, changes to company or supplier practice or product design, and contributions to addressing systemic impacts in focal landscapes.

When commodity origins are only known at multinational or continent-scale, companies should use information about potential impacts of the commodity in those locations to prioritize further traceability, as well as supplier and landscape engagement. In the absence of any information about commodity origins, companies should prioritize efforts across commodity supply chains and suppliers based on impacts, risks, and opportunities associated with other characteristics of those segments of their supply chains.

Companies are encouraged to obtain data that is spatially resolved enough to enable setting, validating, and taking action on science-based targets for nature as soon as possible. This enables progress toward global goals for 2030, such as those set out in the Kunming-Montreal Global Biodiversity Framework. However, companies should not wait to build transparency and traceability in their upstream supply chain. The need for action on environmental impacts is urgent, and where possible, companies should begin to set science-based targets for nature today with the best information they have available (direct operations and upstream target boundary A).

To aid companies in their traceability efforts, high-impact commodities on SBTN's HICL have been categorized into traceability tiers as shown in Table A5. These tiers were developed by an expert panel and represent the likely levels of traceability and enabling conditions to trace such commodities. When increasing traceability and transparency in supply chains to move activities

and commodities from target boundary B to target boundary A, it is recommended that companies start with those commodities listed in the HICL as Tier 1 traceability. For more information, see the HICL (5).

Table A5: High impact commodity traceability tiers:
High impact commodities have been classified in five different traceability tiers depending on the existing conditions to facilitate their traceability to points of origin. Companies should prioritize their efforts on the highest tiers (i.e., first tier 1, then tier 2; and so on, with tier 5 at last). These are the tiers used:

1. High Impact with Higher Traceability, high enabling conditions
2. High Impact with Higher Traceability, high enabling conditions
3. High Impact with Limited Traceability, minor enabling conditions
4. Varied traceability and enabling conditions, needs more industry support
5. Derivative & embedded commodities

Commodity	**Tier**
Coffee (bean)	1
Farmed Seafood / Aquaculture	1
Timber / Roundwood	1
Soybean	1
Avocado	1
Cocoa	2
Banana	2
Cotton	2
Rubber (Natural)	2
Wild capture seafood (saltwater)	2
Oil Palm	2
Gold	2
Wild capture seafood (freshwater)	2
Rice	2
Cattle	3
Sugarcane	3
Tobacco	3
Pulp, cellulosics, paper, paperboard, cardboard, tissue	3
Copper	3
Nickel	3
Platinum	3
Silver	3
Zinc	3

Bauxite / Aluminum	3
Steel	3
Coal	4
Tree nuts (Almonds, walnuts)	4
Poultry	4
Cassava	4
Cement	4
Goats	4
Iron	4
Lead	4
Liquefied natural gas (LNG)	4
Lithium	4
Maize/corn	4
Pigs/Swine	4
Potash	4
Rapeseed oil (canola)	4
Phosphorus fertilizer (from phosphate rock)	4
Nitrogen fertilizer	4
Oil (crude) / Petroleum	5
Sand (Construction-grade)	5
Gasoline	5
Dairy (derived from Cattle)	5
Beef	5
Leather	5
Embedded Soy	5
Embedded Corn	5
Palm Oil Derivatives	5
Animal Derivatives	5
Fishmeal, Fishoil	5

Companies must reference Requirement 6 in Step 2 for timelines on moving upstream volumes from upstream target boundary B to A for each target setting method. SBTN may provide additional thresholds and guidance applicable to embedded or highly transformed volumes in future releases.

Because data availability will change between now and 2030, companies must reevaluate their ability to achieve supply chain transparency and traceability as new data and technologies enable and facilitate this knowledge, while continuing to act toward directly mitigating their impacts using current knowledge.

Companies using the SBTN target setting methods are recommended to follow these steps in order to apply the prioritization approach and improve their supply chain data for target setting:

1. **Prepare data.** Companies should organize their pressure data within their upstream target boundary B into commodity/goods or activity categories with associated information on spend or volume, likely locations, pressures, and states of nature.
2. **Understand exposure to supply chain impacts.** Companies should take stock of the commodities/goods or activities in their supply chain, and their significance in terms of volume or spend.
3. **Apply an impact-based perspective.** Companies should use available data associated with potential sourcing locations and qualitative data from the HICL (5) to determine the urgency of action to mitigate nature and biodiversity loss for each commodity and upstream activity within their target boundary B.
    - If a commodity has the potential to be sourced from countries where its production is greatly contributing to pressures or change in the state of nature, for example deforestation associated with the production and expansion of oil palm plantations (6), then it should be considered a high priority for greater transparency and traceability.
4. **Apply a risk- and opportunity-based perspective.** Companies should use criteria such as commodity dependency or financial materiality associated with a given commodity as well as the stability of the supplier relationship, existing engagement with sustainability certifications or standards, and sourcing practices.
    - Commodities or activities for which companies have a greater dependency or greater income/revenue associated may be prioritized for traceability given their strategic value as well as the potential for environmental impact (indicated by the magnitude of spend or volume used by the company).
    - Companies that are a major purchaser for a given commodity or economic activity from a country or region will also likely have additional levers to obtain information through work with suppliers (e.g., Company A is the primary purchaser of palm oil from Producer B).
    - Supply chains in which companies have stronger and more stable relationships with suppliers (e.g., a five-year relationship between Company A and Producer B) can be prioritized due to the company's greater leverage over the supplier and greater ability to obtain information through business-to-business channels.
    - Supply chains through which the company sources certified products (through certification mechanisms consistent with the aims of science-based targets) can be prioritized due to the greater potential for understanding impacts and obtaining location information.

A co-benefits perspective allows companies to focus on the added benefits for nature that can be achieved when they address multiple pressures in a single location simultaneously with science-based targets.

- For supply chains in which companies are often shifting sourcing, purchasing from spot markets, purchasing from aggregators that are sourcing from a constantly changing range of locations, or when they are purchasing highly transformed or embedded volumes, both traceability and influence over suppliers can be considerably more difficult to achieve, and companies may initially choose to deprioritize these components of their supply chains.

As with the other prioritization methods, bringing together these perspectives can reveal which issues have double materiality and inform a company's strategy toward transparency and traceability across all its target boundaries. Unlike the ranking method (Task 5, Step 2b), the data informing this prioritization may be qualitative and, therefore, the ranking can be more subjective.

Companies should not wait to gather the data needed for spatially explicit targets. The need for action on environmental impacts is urgent and companies should begin today with the best information they have available.

As an outcome of this prioritization, in the first year of target setting, companies should make efforts to progress their transparency and traceability for the highest-ranked commodities/goods (within target boundary B) in parallel with setting science-based targets where they have adequate information (in their direct operations and upstream target boundary A).

As part of their investment in transparency and traceability, companies are strongly recommended to engage with suppliers (e.g., in data collection through questionnaires and reporting systems, and timely communications, support, and training). This can mean working more closely with priority suppliers to set a robust strategy of sourcing transparency and high expectations for other suppliers working with the company. By engaging with suppliers, the whole supply chain can benefit from a company starting its SBTN journey. In some cases companies may be able to produce evidence of certified volumes compliant with SBTN requirements (e.g. in the case of the No Conversion of Natural Ecosystems Target) in lieu of finer spatial resolution sourcing information.

Companies must continue to advance traceability to remain in compliance with the target requirements. When companies have traceability for commodities or activities at the subnational scale or finer, (consistent with the standard specified for upstream target boundary A), they must

submit this progress for validation and incorporate new volumes into their science-based targets for nature.

In some cases, companies may not be able to attain adequate traceability to determine compliance with science-based target requirements, because of current business or purchasing practices, as well as structural/system-wide barriers to traceability. This can change over time as companies transform their business models.

However, recognizing that focusing companies' resources on impact traceability may not be fruitful for addressing environmental impacts in the short term, SBTN recommends that companies:

- source commodities and rely on upstream activities that are less impactful;
- improve efficiency of material use through changes to product design;
- encourage suppliers to set their own science-based targets for nature for material pressures and support changes in their practices on the ground; and/or
- engage in focal landscapes where upstream activities may have the greatest impacts on nature and biodiversity through landscape initiatives that align with the Step 3: Land criteria for the Landscape Engagement target.

In some cases, the actions or response options that companies take prior to achieving sufficient transparency and traceability in line with the AR3T framework can be directly transferred toward the accomplishment of science-based targets. For this reason, SBTN recommends that companies engaging in these actions, in addition to setting other science-based targets, draw on key performance indicators compatible with the Step 3 target-setting methods.

Finally, to restate, companies cannot currently make claims on these actions as they are not science-based targets. In forthcoming guidance, SBTN will provide additional detail on actions companies can take to advance traceability and address impacts associated with their upstream target boundary B. This may be accompanied by revisions to validation and claims guidance.

Until further guidance is available, companies can refer to the following list as a resource to advance impact management for locations within their upstream target boundary B, to prevent impact on value chains where exact locations may be unknowable. Please note this list of actions is indicative and not comprehensive.

OPERATIONAL CHANGES AND INVESTMENTS TO CREATE EFFICIENCIES

- Invest in personnel and data management and infrastructure to ensure the ability to acquire and manage larger volumes of data accompanying high spatial resolution information.
- Make decisions about new procurement relationships based on certifications and standards associated with lower environmental impacts as well as higher transparency and traceability.
- Uptake new technologies and practices.
- Make transformational changes and allocate budget to:

    - Enable impact monitoring as part of the company's core competencies, or through a dedicated resource (external).
    - Create efficiencies in resource use (in direct operations and upstream) and reduce impacts.
    - Increase sustainability and circularity of the core business model and parts of the value chain the company can control.
    - Enable equitable transitions that address the needs of affected communities (see SBTN's Stakeholder Engagement Guidance).

CORPORATE GOVERNANCE AND MANAGEMENT OF TRACEABILITY

- Create a specific internal board/committee on transparency and supply chain data.
- Incentivize the board to act on and increase traceability across key value chains.

SUPPLIER AND INDUSTRY ENGAGEMENT

- Invest in and work with suppliers to build capacity for data gathering, sharing, and monitoring over time.
- Provide incentives or financial support to encourage suppliers to implement certifications and standards, and transition their practices.
- Provide training to suppliers.
- Leverage supplier and industry relationships to gather additional information, understand hurdles, and improve ability to locate activities.
- Work with peer companies and/or cross-sectorial to advance new technologies and solutions, both to lower environmental impacts and implement landscape-based approaches in similar sourcing regions.
- Enable pre-competitive data sharing and insights on barriers to traceability and strategies for overcoming these.

ENGAGEMENT AT LANDSCAPE LEVEL

- For focal landscapes, those in which the companies' commodity sourcing could be associated with the greatest environmental and societal impacts, work with civil society partners to support conservation and restoration in focal landscapes.
- Utilize guidance within the Step 3: Land methodology to identify landscape initiatives with broadly recognized approaches to measuring impacts and consideration for societal impacts, particularly for Indigenous communities.

Appendix 4. Connections between SBTN and other sustainability frameworks and initiatives

The SBTN methods have been developed in collaboration with other organizations leading corporate sustainability action. The methods are aligned with existing frameworks, regulations, and standards to facilitate adoption and reduce duplicative effort for companies following these initiatives. These links between the SBTN methods and core principles and guidance of other established sustainability initiatives are detailed in this crosswalk.

Connections to other frameworks	**Step 1a**		**Step 1b**				**Step 2c**	
	Organizational boundary	Screening approaches and definitions of materiality	Activity scope for value chain assessment	Pressure scope for value chain assessment	Approaches for pressure estimation	State of nature assessment	Social and societal considerations	Financial materiality and risk
Accountability Framework initiative (AFi)								
Core Principles and Definitions (see specifically, “corporate group”) (16)	✓							
Core principles, 3: Specification of commitments (17)			✓					
Respecting the Rights of Indigenous Peoples and Local Communities (18)							✓	
Doing Business with Respect for Human Rights (UN Global Compact, Oxfam, and Shift) (19)							✓	
Align (Aligning accounting approaches for nature) Project								

Recommendations for a standard on biodiversity measurement and valuation (2022), Section 4.1.2: Universal recommendations (20)				✓				
Recommendations for a standard on biodiversity measurement and valuation (2022), Section 4.2: Methodologies to measure business impacts on biodiversity (23)						✓		
Capitals coalition								
Natural Capital Protocol (2016): Step 03: Scope the assessment (10)	✓		✓					
Natural Capital Protocol (2016): Step 04: Determine impacts and/or dependencies (10)		✓		✓				
Natural Capital Protocol (2016): Step 05: Measure impact drivers (10)					✓			
Natural Capital Protocol (2016): Step 06: Measure changes in the state of natural capital (10)						✓		
Principles of Integrated Capitals Assessments (10)								✓
CDP								
Climate Questionnaire (2023) (20)		✓	✓	✓				
Forests Questionnaire (2023) (21)		✓	✓	✓				

Water Security Questionnaire (2023) (22)		✓	✓	✓				
European Union								
Directive 2014/95/EU [on Non-Financial Risk Disclosure/NFRD] (24)		✓	✓	✓				
Regulation 2020/852 [on the establishment of a framework to facilitate sustainable investment/EU Taxonomy] (25)		✓	✓	✓				
Directive 2022/2464 [on corporate sustainability reporting/CSRD] (26)		✓	✓	✓				
European Financial Reporting Advisory Group (EFRAG)								
European Sustainability Reporting Standards (ESRS) E1: General requirements (27)		✓	✓	✓				
European Sustainability Reporting Standards (ESRS) E2: Pollution (27)		✓						
European Sustainability Reporting Standards (ESRS) E3: Water and marine resources (27)		✓						
European Sustainability Reporting Standards (ESRS) E4: Biodiversity and ecosystems (27)		✓				✓		
Greenhouse Gas Protocol (GHGP)								

Corporate Standard (2004), Chapter 3: Setting Organizational Boundaries (28)	✓							
Corporate Standard (2004), Chapter 4: Setting Operational Boundaries (28)			✓					
Scope 3 Standard (29)			✓					
Global Reporting Initiative (GRI)								
GRI 1: Foundation 2021 (31)	✓	✓	✓	✓				
GRI 3: Material Topics 2021 (30)	✓	✓	✓	✓				✓
GRI 101: Foundation (2016) (31)	✓							
GRI 103: Management approach (2016) (32)	✓							
GRI 303: Water and Effluents 2018 (33)			✓	✓	✓			
GRI 304: Biodiversity (2016) (34)			✓	✓	✓	✓		
GRI 305: Emissions 2016 (35)			✓	✓	✓			
GRI 413: Local communities (2016) (8)							✓	
GRI 308: Supplier environmental impact assessment (2016) (36)			✓					
International Financial Corporation (IFC)								

Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets (2007) (37)							✓	
International Financial Reporting Standards (IFRS) & International Sustainability Standards Board (ISSB)								
Exposure Draft ED/2022/S1 General Requirements for Disclosure of Sustainability-related Financial Information (38)		✓						
International Organization for Standardization (ISO)								
ISO 14001:2015 Environmental management systems: Requirements with guidance for use (39)		✓						
ISO 14001:2015 Environmental management systems, Chapter 4.1: Understanding the organization and its context (39)								✓
ISO 14001:2015 Environmental management systems, Chapter 4.3: Determining the scope of the environmental management systems (39)	✓		✓					
ISO 14044:2006 Environmental management: Life cycle assessment — Requirements and guidelines (42)					✓			

ISO 14044:2006 Environmental management, Chapter 4.2: Goal and scope definition (42)	✓							
ISO 14046-1:2018 Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals, Chapter 5: GHG inventory boundaries (41)	✓							
ISO 14046:2014 Environmental management – Water footprint – Principles, requirements and guidelines, Annex A: Additional requirements and guidelines for organizations (41)	✓							
ISO/TS 14072: Environmental management — Life cycle assessment — Requirements and guidelines for Organizational Life Cycle Assessment (43)	✓							
ISO 31000, Risk management (44)								✓
International Union for Conservation of Nature (IUCN)								
IUCN Global Standard for Nature-based Solutions (2020) (45)							✓	
Life Cycle Initiative (Hosted by UNEP)								

Guidance on Organizational Life Cycle Assessment (2015), Chapter 3.2 Definition of goal and scope (46)	✓				✓			
ENCORE Partnership and SUSTAIN Project								
ENCORE tool (11)		✓						
Organisation for Economic Co-operation and Development (OECD)								
Due Diligence Guidance for Responsible Business Conduct (9)		✓					✓	
Taskforce on Nature-related Financial Disclosures (TNFD)								
The TNFD Nature-related Risk and Opportunity Management and Disclosure Framework Final Draft – Beta v0.4; Evaluate (E3, E4) and disclosure recommendations for Strategy A, Risk & Impact Management A, Metrics & Targets B (15)				✓	✓			
The TNFD Nature-related Risk and Opportunity Management and Disclosure Framework Final Draft – Beta v0.4; Locate (L1, L2, L4) and Evaluate (E1, E2, E4), and Disclosure Recommendations on Strategy, Risk & Impact Management, and Metrics & Targets (15)						✓		

The TNFD Nature-related Risk and Opportunity Management and Disclosure Framework Final Draft – Beta v0.4; see content on Evaluate and Assess (15)								✓
Transparent Project								
Standardized Natural Capital Accounting (2021), Section 1.2: Scope (47)	✓		✓	✓				
A methodology promoting standardized natural capital accounting for business (2021), Section 2: Measure and value (47)						✓		
Standardized Natural Capital Accounting (2021), Annex II (47)					✓			
World Wide Fund for Nature (WWF)								
Risk Filter Suite: Biodiversity Risk Filter and Water Risk Filter (48)		✓						