SCIENCE BASED TARGETS NETWORK
GLOBAL COMMONS ALLIANCE

Updates to Technical Guidance for:
Step 1 Assess
Step 2 Interpret & Prioritize

Version 1.2 Updates

Version 1.2 – September 2025

Version History

Version	Update description	Release Date	Effective Dates
1.2	Updates to Steps 1 & 2 Technical Guidance	23 September 2025	23 September 2025

Contents

Introduction

This document presents the revisions of the SBTN Technical Guidance for Step 1 (Assess) and Step 2 (Prioritize). Together with the published v1.1 guidance, these revisions constitute v1.2.

This document must always be read in conjunction with Step 1 and 2 v1.1, published in July 2024. References for the V1.1 document tasks and validation requirements are included with every revision. Unless explicitly revised in this update, all elements of the v1.1 guidance remain unchanged. Companies should note that both versions (v1.1 and v1.2) will be accepted for validation for the 6 months following the publication of this update; thereafter only v1.2 will remain valid until a new version is released.

The revisions in v1.2 focus on three priorities:

- **Feasibility:** This update has streamlined requirements that help companies get through Step 1 and 2 faster, offering practical approaches to focus on the most relevant areas to proceed to target-setting while maintaining the overall ambition of SBTs for nature and providing the context needed for target-setting. In particular, the accelerated pathways present options to focus the assessment into specific business units, realms (land, freshwater, or ocean), and value chain segments (direct operations or upstream) based on environmental impact and ability to implement targets. Companies can validate their Step 1 assessment for this reduced scope of activities, instead of covering all material activities as required under the existing comprehensive pathway. The comprehensive pathway remains valid and can be used to obtain a more holistic view of a company's pressures on nature and to identify opportunities for synergies or trade-offs across issue areas.
- **Updated science and data:** Version 1.2 integrates the latest datasets and recommends updated models and tools to assess environmental pressures and the State of Nature for land and freshwater, as well as the option to use the updated ENCORE (Exploring Natural Capital Opportunities, Risks, and Exposure) [2024] dataset to screen for materiality.
- **Clarity and usability:** This guidance provides additional clarity on how to interpret certain tasks of v1.1, related, in particular, to the interpretation and ranking process, as well as guidance on a minimal approach to completing the Step 2c prioritization.

These revisions enhance the usability of the methods and reflect SBTN's ongoing collaboration with NGO and corporate partners, balancing scientific robustness with practical feasibility to accelerate ambitious corporate action for nature. The revisions contained within this document address most of the feedback received for Step 1 and 2 through the validation process, found in the Validation Insights Dashboard.

Step 1a: Materiality Screening

Task 1: Define your organizational boundary

APPROACHES TO DEFINE THE ORGANIZATIONAL BOUNDARY

Affecting requirement 1 and recommendation 1

Companies that have not previously defined an organizational boundary for climate targets using SBTi methods or disclosures following the GHGP approach are *recommended* to follow the financial or the operational control approaches to define their boundary for SBTN. Companies are *recommended* to consider the current availability of SBTN target-setting methods and to choose, out of the three approaches, the one that provides the broadest coverage of activities for which SBTN target-setting methods are applicable.

Companies that have already defined an organizational boundary for SBTi targets based on the GHGP are *recommended* to use the same approach they have used there to facilitate reporting consistency as long as this includes economic activities for which SBTN target-setting methods are applicable. If organizational boundaries used for previous target-setting are not appropriate for SBTN, companies are *recommended* to re-define their organizational boundary using one of the indicated approaches.

Companies should note that Step 1b includes several mechanisms to reduce the scope of the assessment and target-setting process, including a focus on business units, realms (e.g. land, freshwater, ocean), and value chain segments, and the possibility to deprioritize untraceable upstream volumes. This means that companies are not required to work on their entire organizational boundary at once.

INTERPRETATION FOR COMPANIES WITH PROJECT-BASED ACTIVITIES

Affecting requirement 1 and recommendation 1

Most of the SBTN Step 3 target-setting methods were designed to address activities with a consistent presence in the landscape, reflecting the fact that SBTs for nature are inherently place-based because environmental impacts and dependencies—such as those involving freshwater, ocean, land, and biodiversity—are tied to specific geographic locations. Effective action requires understanding and addressing these impacts within the particular basins, ecosystems, or landscapes/seascapes where a company consistently operates or sources from, ensuring that targets are locally relevant and meaningful.

Companies in industries dominated by project-based activities (e.g. building and infrastructure), where they do not have or retain ownership of the completed assets or where operational involvement ends upon project completion may not be able to set targets for those activities. However, they may be able to set targets for a subset of their activities and sourcing at locations that they impact for at least 5 years.

For project-based activities or where sourcing continuously changes, companies will still be able to use Steps 1 and 2 and could set enterprise-wide land targets like No Conversion and Land Footprint Reduction. They likely will not be able to set other location-specific targets for these activities, given low traceability and continuously shifting supply shed locations

(however they may do so for more stable portions of their operations or sourcing).

Such activities or materials should be placed in Boundary B. SBTN will be providing additional guidance on actions to be taken for untraceable volumes in Target Boundary B to complement science-based targets in 2026, in v2.0 of this guidance. Companies are also *recommended* to consult the additional explanatory guidance and technical FAQs available on this topic on SBTN's website.

Task 4: Screen for materiality

UPSTREAM MATERIALITY SCREENING

Affecting Requirement 4

To complete their *upstream* screening, companies are *recommended* to use the direct operations database of the Materiality Screening Tool (MST); the "Full Direct Operations Dataset" tab in the shiny tool linked on the SBTN resources page) and apply it to their list of activities related to production inputs.

This alternative process is being suggested instead of the one described in pages 34 and 35 of the v1.1 methods becasue it will provide a more focused list of results for the materiality screening. The current upstream tool is designed to be inclusive of a large percentage of all the potentially related upstream activities for their sector, which requires companies to then narrow down the results to those relevant for their procurement.

Note that the automation built into the upstream portion of the tool may be useful for some companies, particularly those with a large number of upstream activities and may still be used for validation.

Companies are then *required* to identify which of these production inputs are, or are derived from, High Impact Commodities, and which are the material pressure categories for these commodities, referencing the High Impact Commodity List (HIC) (derived from literature review and ENCORE/MST).

For all production inputs not based on HICs, companies are required to provide a list of all the economic activities associated with production inputs procured in the last 5 years prior to submission in their organizational boundary. This list would consist of the names of the production inputs without the quantities. Companies must refer to Box 2, in page 47 of the Step 1, v1.1 methods, for a definition of what constitutes a production input in this context.

For procurement of materials not containing HICs, companies may instead identify the sector or production process categories of the *most recent production and transformation stage* associated with that input's value chain. *Production and transformation stages* exclude activities related to distribution, storage, and logistics. For example, *production and transformation stages* include primary production for raw commodities and processing and manufacturing activities for processed goods. Companies must then use the direct operations tab of the MST to screen the materiality of these activities.

MATERIALITY OF INFRASTRUCTURE HOLDINGS PROCESSES

Affecting requirement 5

The current MST [July 2024] indicates that infrastructure holding processes are material for water pollution and soil pollution. However, current SBTN methods are mainly applicable for freshwater nutrient loading (as opposed to other toxic elements) and landscape engagement targets are only relevant where there are meaningful soil pollution impacts, which may not be relevant for infrastructure holdings. Companies following the methods will see that, even though their screening results indicate materiality, the target-setting methods are not applicable for their activities.

Hence, despite the rating in the MST, companies may consider infrastructure holdings to be "not material" for the pressure categories of water pollution in all cases, and for soil pollution where there is not a measurable impact on soil that can be addressed via landscape engagement. As a result, companies will not have to assess the nutrient loading to water and soil associated with these activities in Step 1b.

USE OF ENCORE AS AN ALTERNATIVE TO THE MST

Affecting requirements 3, 4, and 5

The current MST [July 2024] is built using the ENCORE (Exploring Natural Capital Opportunities, Risks, and Exposure) [2018-2023] database. Since then, a new version of ENCORE [2024] has been released with updated materiality results and a reorganization of the pressure categories.

Companies are *recommended* to use the existing MST to screen their materiality. This will provide consistent results and an automatic process to complete Step 1a. However, companies *may* instead use the updated ENCORE [2024] database for their screening. Companies must use either the MST or the Encore [2024] database across all pressure categories, without combining the tools or their results. Companies who have previously conducted screenings with the ENCORE [2024] database or who feel the impact of their activities are better represented in the new version of the database may benefit from this option.

To screen for materiality using ENCORE [2024], companies need to identify the group-level standardized economic activities that best capture each of their direct operations or upstream activities and consult ENCORE's materiality ratings for the activity. The ratings range from very low to very high. Activities with medium or higher ratings are considered material for the SBTN methodology and should be reported as such in Task 4 of Step 1a.

ENCORE [2024] has separate pressure categories for nutrient pollution and ecotoxic pollution, but does not differentiate between pollution to soil and pollution to water (for either category). The 2018-2023 version, instead, has separate categories for soil and water pollution, but does not differentiate between the types of pollutants (nutrients or others).

When companies that use the 2024 version proceed to Step 1b, any activity identified as material for nutrient pollution must be assessed for the water pollution and soil pollution pressure indicators defined in Table 6 (pages 54-55) of Step 1b. Activities that are only identified as material for ecotoxic pollution do not have to be included in the Step 1b freshwater assessment (given that the Step 3 freshwater methods will not be applicable).

Companies should note they have an opportunity to interpret and modify these results using the guidance of Task 5.

Step 1b: Value Chain Assessment

Accelerated and comprehensive pathways

V1.2 introduces ***accelerated pathways*** as new options for companies to complete the Step 1b value chain assessment, which allows companies to narrow the value chain assessment scope by focusing on business units, realms (land, freshwater, or ocean), and/or value chain segments (direct operations or upstream). The accelerated pathways are particularly useful for large, complex companies with operations and sourcing across many geographic regions. The accelerated pathways are also useful to high impact commodity users whose main impacts are in their direct operations. Using the accelerated pathways are intended to enable faster target-setting where nature impacts matter most. The associated guidance and requirements are explained in the following sections.

Companies may choose to conduct a full value chain assessment, following what is now defined as the ***comprehensive pathway***, covering their entire organization, all realms, and both value chain segments, or apply only one or more of the accelerated pathway filters to narrow their focus.

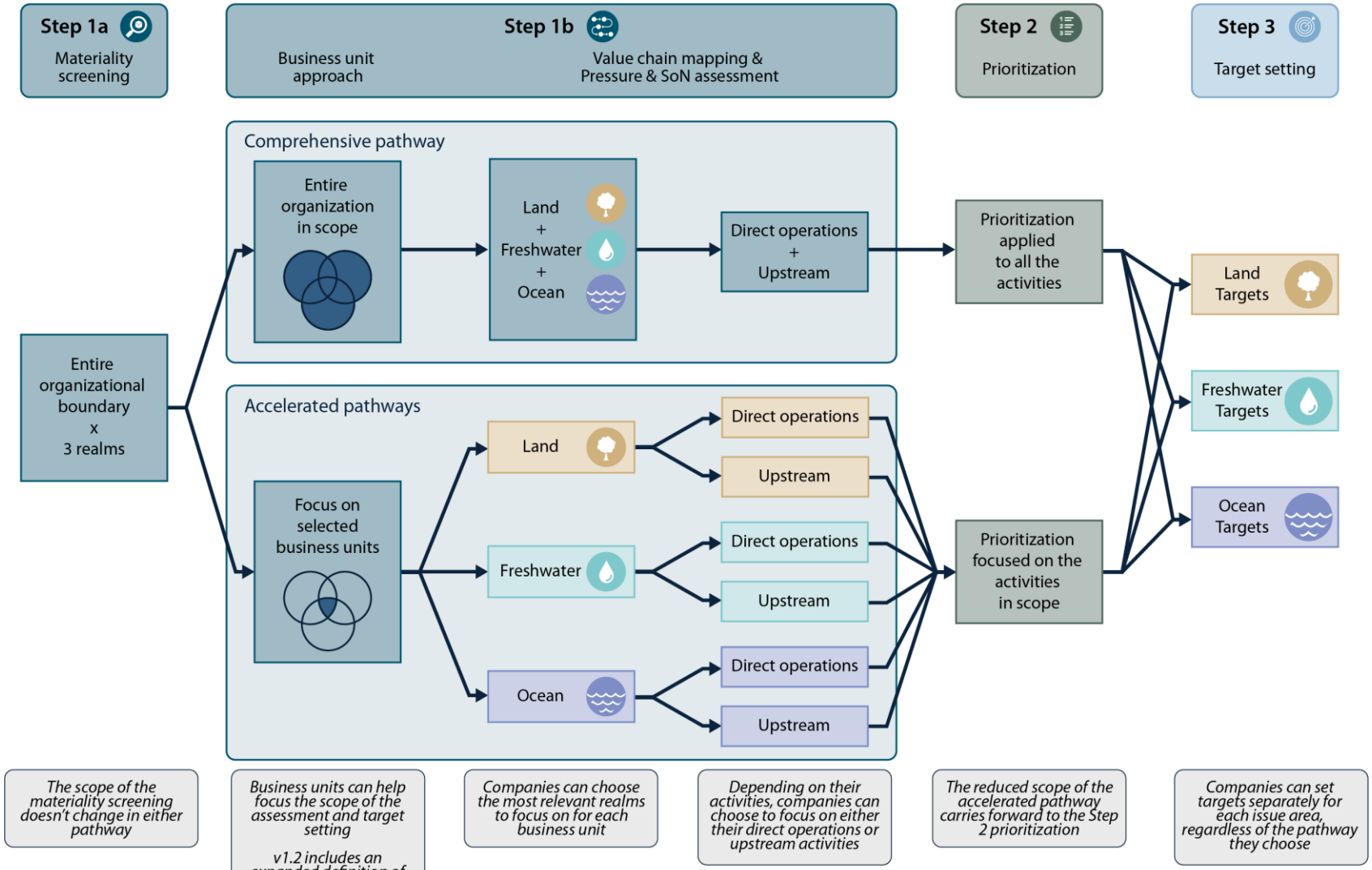
The accelerated pathways enable validation of Step 1 and progression to Step 2 and 3 with the same reduced scope. This reduced scope will be reflected in Step 1 and 2 claims, as specified in the v1.2 claims guidance.

Where feasible, companies are encouraged to use the comprehensive pathway, which covers all realms and value chain segments (in addition to the optional business unit selection), to complete the value chain assessment. This pathway is most suitable when the additional data collection efforts will not delay target-setting and when a holistic view of impacts on nature is valuable, for example to support voluntary or regulatory disclosures.

The comprehensive pathway offers greater opportunities to identify synergies and trade offs in prioritization, and to define more robust response options in Step 4. Companies should choose the pathway that best balances feasibility and comprehensiveness according to their own needs and capacities.

The graphic below shows both approaches in parallel:

The Comprehensive & Accelerated Pathways of Step 1b in v1.2



Task 6: Select business units for target-setting

DEFINITION AND SELECTION OF THE BUSINESS UNITS

Affecting requirement 9 and recommendation 4

Companies opting to use the business unit approach can use an expanded definition of business units within SBTN methodology to better focus the scope of their value chain assessment. The choice of business unit carries forward to subsequent tasks and steps of the methodology and this focused scope will be reflected in the claims.

Companies opting to use this approach are able to define and select multiple business units to work on and to set different targets for each (as explained in the next sections of the methodology) as long as they demonstrate that the resulting business unit contains pressures relevant for SBTs for nature.

DEFINING BUSINESS UNITS

It is not possible for SBTN to define every possible business unit use case, as that depends on the scope of activities of the company and its internal organization. Companies are required to justify that the business units they define meet two fundamental criteria:

- Its scope of activities must be clearly delimitated and easily understood by the general public, such that any third party organization can hold companies accountable for any claims made on the SBTN targets.
- It must correspond to an internal operational or external reporting structure of the company. For example, how the company organizes teams within its organizational structure, how it defines operational practices and budgets, its voluntary or regulatory disclosures, and financial reporting.

Companies may consider the following ***dimensions*** to divide their organizational boundary into business units. Companies may use these dimensions separately or in any combination, so long as the two fundamental criteria mentioned above are maintained:

- **Legal entities** within conglomerates or corporate groups:
    - For conglomerates or corporate groups implementing the methods (where the organizational boundary matches the entire group), legal entities that are part of the group can be considered business units. Corporate groups are recommended to use this dimension in defining their business units. Note that legal entities such as subsidiaries may also apply the SBTN methods without the parent company starting from Step 1A. In this case, as outlined in v1.1 (pg 30), the subsidiary may conduct their screening at the subsidiary level instead of the parent company level.
- **Geographic areas,** at a level that is relevant for the company's geographical scope:
    - For companies operating in multiple countries, countries or multi-national regions can be used as business units .
    - For companies operating in a single country, subnational regions (or combinations of those) can be used as business units .
- **Markets** (defined by activities, as described below), at a level relevant to the company's scope of activities:

    - For vertically integrated companies, especially those having activities in primary production and in secondary production, business units may be defined to separate primary activities from secondary ones. For example, a company may place its own farms in one business unit and its food manufacturing sites in another one. Similarly, a company may place its quarries in one business unit and its processing and construction materials production sites in another one.
    - For conglomerates, corporate groups, or single companies with multiple types of activities, business units may be defined according to market, industry or customer type. This delineation may follow an industry classification such as ISIC. For example, a hypothetical retailer may separate food and beverages, durable goods (e.g. apparel and electronics), and logistics into three different business units.
- **Product lines or brands:**
    - For companies operating in specific sectors but with a large span and diversity of products or offerings, product categories may be used to define business units. The categorization must be aligned with ISIC group-level divisions or other standardized economic classification systems (e.g., NAICS or GICS). For example, a food and beverages manufacturer may define the following business units: specialty foods, non-alcoholic beverages, pet foods, and other foods.
    - **Brands** may be considered to be equivalent to a product line so long as companies can demonstrate that the brand is a functional operational and/or reporting unit within the company (e.g., with separate supply chains and financial statements) as well as an externally recognizable market identity.

To use the business unit approach, companies must present a rationale of how their definition is consistent with these guidelines. Companies may use any of the following internal or external documentation to support their rationale:

- Organizational charts
- Internal reporting from financial statements or management reporting structures
- Reports on voluntary (e.g., TNFD, GRI, ISSB) or regulatory (e.g., EU CSRD) disclosures

The remaining guidelines described in page 45 to delineate the business units, especially that the business units must have sufficient operational autonomy and that they must not have been defined solely for the purposes of target-setting, should still be applied in the delineation. As indicated in the v1.1 guidance, companies using the BUA are required to submit data to disclose the size of the chosen business unit(s) relative to the overall business (e.g., % revenue).

SELECTING BUSINESS UNITS

Having *defined* their business unit(s) (BUs), companies may have multiple BUs in their structure to focus on for target-setting. Companies are *recommended* to consider aspects such as value chain traceability, existing sustainability commitments, disclosure requirements, and existing expenditures and operational risks in selecting which business unit(s) to focus on. Science-based target-setting supports fulfillment of sustainability commitments, increases rigor and efficiency with regulatory requirements, and reduces

risks to operational continuity and supply chain resilience.

Companies may select multiple business units to proceed to the rest of the value chain assessment. As noted earlier (and explained in detail in the following sections), each business unit may focus on different realms and set different targets, providing flexibility to act on different environmental issues as relevant for each unit.

Task 7: Map your value chain activities and locations

ACCELERATED PATHWAY BY REALM FOCUS

Affecting requirements 10, 11, and 12

Following the (optional) selection of business units, companies may further reduce the scope of their Step 1b value chain assessment by focusing only on one or two realms (Land, Freshwater, or Ocean) where they have material impacts to address with SBTs, instead of all three. Companies may choose the realm(s) of focus that they consider most relevant in each case; there are no validation requirements or other guardrails associated with the choice.

In Task 7, companies choosing this reduced scope by realm will only have to map the activities and locations that are material for any of the associated pressure categories in these realms:

- For a focus on Land: activities that are material for land use and land use change or for soil pollution.
- For a focus on Freshwater: activities that are material for water use or for water pollution.
- For a focus on Ocean: activities that are material for marine ecosystem use and change or for biological resource extraction.

Companies that have chosen multiple business units may choose different realms, or realm combinations, for each business unit. The existing minimum scope requirements for the value chain assessment (i.e., 100% of direct operations and 67% of upstream, including 90% of HICs, and 100% of EUDR-commodities), are still applicable for each business unit and realm combination selected. Associated claims will reflect this reduced scope relative to overall impacts assessed in Step 1a.

ACCELERATED PATHWAY BY VALUE CHAIN SEGMENT FOCUS

Affecting requirements 10, 11, and 12

Following their (optional) selection of realms, companies *may* further reduce the scope of their value chain assessment by focusing only on the direct operations or the upstream value chain segment. This choice is applied independently for every realm and business unit combination that the company is working on.

Unlike with the realm selection option, the selection of value chain segments is limited to certain cases, depending on the economic activities within the **company's direct operations and upstream sourcing**:

- Companies (or business units) mainly engaged in primary production activities are *required* to include their direct operations in their assessment but may exclude their upstream. These activities include those in agriculture (farming, animal husbandry), forestry, fisheries (wild capture and aquaculture), hunting and harvesting of species, and extractives (mining and quarrying).
    - However, companies sourcing HICs as animal feed (e.g., **for animal husbandry** or **aquaculture**) may include either value chain segment for their assessment, subject to justification (see below). For the associated upstream sourcing, companies are only required to cover inputs used as animal feed, excluding inputs like veterinary medicines that have lower correspondance to current science-based targets for nature.

Companies (or business units) mainly engaged in **construction** and **infrastructure development** may include either value chain segment in their assessment subject to justification (see below), given the high potential for impacts, especially land conversion, associated with infrastructure development as well as with the extraction of construction materials (such as sand and timber).

Companies (or business units) mainly engaged in **logistics** and **distribution** (including, e.g., commodity traders and aggregators) and/**or wholesale and retail** are required to include their upstream value chain segment in their assessment but may exclude their direct operations.

Companies (or business units) mainly engaged in **manufacturing** activities (including, e.g., materials and commodities processing and producing of consumer packaged goods) may include either their direct operations or upstream segments subject to justification (see below), as the impact of these activities can vary based on both the type of economic activities and the pressures being evaluated.

JUSTIFICATION FOR EXCLUSIONS:

Additionally, companies in any sector (including **primary production** and **wholesale and retail**) may present evidence to justify proceeding with assessing a different value chain segment than the ones indicated above for their sector. In these cases, companies must demonstrate that the chosen segment will enable them to set meaningful targets.

Companies are required to demonstrate that the segment retained has a meaningful proportion of the whole life cycle's (e.g., cradle to grave) environmental pressures, for their land, water, or ocean pressures (depending on the realm in question) such that when they progress to Step 3 target-setting they can address activities with impacts on the environment.

In these cases, adequate documentation to support the choice is required as part of the validation submission. This evidence may include previous life cycle or other environmental assessments of the company's specific value chains; industry, academic, or scientific reports and papers assessing their sector's typical distribution of impacts across value chain stages; or assessments conducted using approaches such as environmental footprinting, or input output models such as Exiobase. Companies may also use narrative justifications detailing their operating and sourcing practices or policies (as relevant) that could explain why focusing on either segment would enable them to set meaningful targets.

Companies wishing to proceed with direct operations should note that only environmental

criteria is allowed to support this decision. Companies can only proceed if they have evidence of environmental impacts in their direct operations; feasibility-related factors including traceability and supplier relationships cannot be used to justify this choice.

As before, companies that have chosen different business units (and potentially different realms for each business unit) can proceed with different value chain segments for each business unit, following the criteria listed above. The existing minimum scope requirements for the value chain assessment, i.e., 100% of direct operations and 67% of upstream, including 90% of HICs, and 100% of EUDR-commodities, are still applicable for each business unit, realm, and value chain segment combination selected.

MINIMUM SCOPE OF THE UPSTREAM VALUE CHAIN MAPPING

Affecting requirement 11

Companies are required to identify 100% of the sourcing areas of any upstream volumes that are subject to the EUDR regulation. The intention of this requirement is to align SBTN assessments with regulatory requirements, hence companies should refer to the EUDR regulation to understand whether they are subject to the regulation and whether each of their procurement volumes is subject to the regulation (products listed in Annex I and made of or containing a commodity listed in Annex I). Companies may consider products not listed in Annex I (e.g., products made 100% from recycled materials, some packaging materials, or specific products such as soap are excluded from the regulation) to be outside this requirement even if they contain Annex 1 commodities.

All companies should note that the EUDR-relevant commodities (cacao, cattle, coffee, palm oil, rubber, soy, and timber) are all considered High Impact Commodities in the SBTN methods. Procurement volumes containing these commodities and not subject to the regulation are still subject to the requirement of mapping 90% of HIC.

This is a clarification of the existing guidance rather than an additional requirement.

ASSESSMENT OF WASTE AND RECYCLED MATERIALS AS PRODUCTION INPUTS

Affecting requirement 11

Companies sourcing production inputs that are recycled, waste or byproduct materials should include these in the value chain assessment if there is a market value associated with the volumes. Companies may account for these volumes using economic allocation approaches that estimate their responsibility as a proportion of the raw material/commodity.

For example, companies sourcing corn husks to produce biofuel should account for the impact of the sourced corn husk volumes by calculating the economic value of the husks relative to total corn products and multiplying that by the impact of the corn as a whole (e.g. the calculated water use for volume of corn associated with the husk byproduct).

This approach will account for any reduction in the overall pressure estimates associated with the waste or byproduct and incorporate it within the target. In some cases, there is a tradeoff between the gains from using recycled materials versus the environmental impact of processing or treating materials for use in production. In cases where this processing or treatment is conducted in the direct operations, the impact of these activities must be included in the value chain assessment.

Due to challenges associated with tracing recycled and waste materials to their locations of origin as raw materials, companies sourcing such materials are encouraged to evaluate production impacts at any feasible stage of the life cycle where meaningful impacts are thought to occur (or, by default, to the most recent production and transformation stage in the life cycle). For recycled and waste materials containing HICs, the requirement to assess pressures at the most impactful value chain stage is waived, thought this is encouraged where possible. Where companies lack traceability to any meaningful production or processing stage, they should place these volumes in Target Boundary B.

Companies using circular economy strategies to achieve their science-based targets, including material reuse and recycling, should account for this when tracking progress against their SBTs in the MRV process.

UPSTREAM ASSESSMENT OF HICS: OIL, GAS, COAL, AND FERTILIZERS

Affecting requirement 11

The requirement to assess **Nitrogen and Phosphorus fertilizer** and **potash** procurement is only applicable to companies that produce fertilizers (e.g., agrochemical producers) and hence source the associated mineral ores. Similarly, the assessment of coal sourcing is only applicable to companies that source this commodity directly from primary producers. For these commodities only the LULUC pressure and SoN indicators are required (not the water use, water pollution, or soil pollution) given that only the Step 3 Land methods are applicable (through the MICE pathways for Mining, Infrastructure, Construction, and Extractives) and in acknowledgement of the significant traceability challenges in these sectors.

Companies that source Nitrogen, Phosphorus, and Potash in their form as fertilizer (e.g., agriculture or forestry companies) are not required (nor recommended) to include these commodities in their upstream assessment and, instead, are recommended to focus their efforts in their direct operations where the impacts associated with the use of these fertilizers are covered and where environmental impacts are significant and they have direct influence to address them.

Companies that source **petroleum** and **natural gas derivatives**, including **gasoline** and other fuel, as well as base and specialty chemicals, and plastics, are not required to assess their procurement volumes given the significant traceability challenges for these value chains and the lack of complementary methods for climate science-based targets, the primary environmental impact of these commodities.

TRACEABILITY PRIORITIES AND USE OF ESTIMATED LOCATIONS IN THE VALUE CHAIN MAPPING

Affecting requirement 13

As a clarification of the existing guidance, companies are allowed to use estimated locations to complete their upstream value chain mapping. These estimations can include "unknown" locations of origin (i.e., locations that are unknown and still untraceable at the moment of submission are estimated only based on the distribution of a given commodity) or "national" locations of origin (i.e., volumes whose locations of origin are only known at the country level). Justifications for this choice can include a simple explanation on the status of traceability for a given commodity/activity.

In Step 2, national and "unknown origin" locations (also referred to as Data Level 3 in the methods) will be placed in Target Boundary B. Companies can proceed to target-setting as long as they have subnational traceability for at least some volumes, but will not be able to set targets for materials placed in Target Boundary B (note the exception is that companies may statistically estimate impacts of these materials for the Land Footprint Reduction target).

For materials in Boundary B, companies are recommended to prioritize their traceability efforts for those materials suspected of containing High Impact Commodities and may reference guidance on prioritizing commodities within Target Boundary B in Appendix 3 of the Step 2 V1.1 document.

Task 8: Quantify the environmental pressures of your activities

& Task 9: Assess the state of nature in each geographical location

ASSESSMENT OF TARGET BOUNDARY B LOCATIONS

Affecting requirement 16

As a change to the existing requirements, companies *may* forgo the State of Nature (pressure-specific and biodiversity) assessment of any upstream volumes known only at national level or with "unknown origin" (also referred to as Data Level 3 in the methods) - these are the locations that will be placed in Target Boundary B in Step 2.

PRESSURE AND STATE OF NATURE INDICATORS FOR LAND USE CHANGE

Affecting requirement 18 and 22

Companies with material activities for the land use and land use change pressure category must assess both pressure indicators separately i.e., land use (area used) and land use change (area converted since 2020) for each activity.

Companies with higher traceability (associated with sourcing area or finer data) are *recommended* to use spatial datasets derived from remote sensing for assessing conversion from 2020, consistent with baselining approaches for Land No Conversion of Natural Ecosystems target. To conduct this analysis companies should use the Natural Lands Map for 2020 combined with present land use land cover data.

Companies that are unable to assess land use change using spatial datasets due to traceability may use LCA-based indicators that estimate the land impacts of a given product or process. LCA analyses may estimate land use change as area of change by land use type

but may be aggregated to estimate conversion from natural to non-natural lands for SBTN Step 1 and 2 analysis. Companies using this approach should be aware that some LCA models contain land impact outputs that are not proxies for land use change. If using different LCA sources for different commodities, companies should be aware that land use change might be measured and/or reported differently. In this case, the model would not be appropriate to fulfill SBTN requirements.

Companies can use a variety of approaches to fulfill requirements in Steps 1 and 2 but these may not be sufficient in all cases to set land targets using the Step 3 guidance.

PRESSURE INDICATORS FOR SOIL POLLUTION

Affecting requirement 18

Companies engaged in production or manufacturing processes with potential for soil pollution impacts should assess this pressure category using the following hierarchy of indicators:

1. Excess nutrient application to soils (kg N/ha, kg P/ha, or kg NPK/ha) where direct data is available.
2. Soil eutrophication or soil acidification (commonly used in LCA as an indicator of nutrient enrichment), or another adequate proxy. When evaluating modeled estimates of soil acidification, companies should assess the causes of these values as they may be driven by activities or processes that are not addressed by land targets.
3. Indicators of freshwater nutrient pollution already used to assess freshwater pollution in the Step 1b analysis (applicable if estimates of soil pollution are not available or disaggregated from those of water pollution) or combined net pollutant indicators.

If the above indicators are not relevant to the economic activity in question, or if the company has already assessed land use and land use change associated with the activity, they may conclude the assessment for this indicator by reporting the pressure value as "not applicable" for that activity.

4. Optionally, for landscapes where the company believes there is potential for other soil pollution impacts other than nutrient pollution, they may utilize chemical or biological indicators of ecotoxicity to highlight landscapes for the prioritization of landscape initiatives.

Exemption: If the company can demonstrate that the economic activity carries no risk of soil pollution impacts for the activity, they may provide that evidence as stated in Step 1: Task 5.

STATE OF NATURE INDICATORS FOR WATER USE AND WATER POLLUTION

Affecting requirement 22

Companies completing the state of nature assessment for water use and water pollution in Step 1 v1.2 should use the following updated datasets and models.

For water use, companies should estimate surface water flows using Hogeboom's water

quantity global model when locations are known to Data Level 1 (i.e., Pfafstetter basin level 5 for water use). This model has been updated to incorporate an additional decade of time series data (the prior global dataset contained data from 1971-2010 and the latest contains data from 1971-2019). These data will be used both to complete Step 1 and 2 and in Step 3 if using the global model approach. Companies will have the option to use the current version of the tool for up to six months before being required to use the updated version. This provision is being put in place for companies who have already completed analyses or are in the middle of the validation process. Companies just beginning their Step 1 and 2 analysis are encouraged to use the updated version of the model.

Companies that already have validated water use targets using the previous version of the global model may keep them until the target date or update them according to the updated version of the tool.

For water pollution, companies should use the model developed by McDowell (2020) to assess instream N and P concentrations when locations are known to Data Level 1 (i.e., Pfafstetter level 6 rather than 4, as stated incorrectly in v1.1). Companies should use the model output for instream concentration values for the basin-specific limiting nutrient in their prioritization.

Companies with traceability to Data Level 2 for either water use or water pollution (subnational but coarser than basin level 5 for water use and basin level 6 for water pollution - note that v1.1 had the same requirements for Data Level 3 which have now been removed per changes to requirement 16) must use the updated unified water layers for water use and water pollution (termed v1.1 in the linked zenodo archive) available at the following address. These tools provide an indication of whether water availability and quality are acceptable from an environmental standpoint.

- https://zenodo.org/records/12702055

Step 2a: Target Boundary Delineation

Task 1: Determine target boundaries for each pressure category

ACCELERATED PATHWAY TO TARGET-SETTING IN STEP 2

Relevant for all Step 2 requirements

Companies that have decided to apply accelerated pathways to reduce the scope of their value chain assessment by focusing on business units, realms and/or value chain segments will apply that same reduced scope to their Step 2 prioritization and subsequent target-setting, reducing the effort needed to complete the prioritization step before proceeding to target-setting.

Companies that have already completed Step 1 in full may also choose any realm and value chain segment combination (for any business unit) to apply Step 2, and proceed to Step 3 with that reduced scope.

Companies using this option should note that their Step 1 and 2 claims will reflect their reduced scope of their prioritization.

Task 3: Harmonize spatial units

THE HARMONIZED SPATIAL UNITS ARE THE UNIT OF ANALYSIS FOR THE PRIORITIZATION PROCESS

Affecting mainly requirements 14 and 17 but relevant for all Step 2 requirements

Companies should note that, once their direct operations and upstream activities, respectively, have been harmonized into spatial units, the harmonized spatial unit (with all the activities happening in it) will become the unit of analysis for all subsequent tasks of Step 2 (and further into Step 3).

For additional clarity, the Task 3 harmonization asks companies to group all activities happening in a given location (i.e., multiple direct operations sites and facilities; or multiple locations of suppliers for the case of upstream). The environmental pressures of these activities will be aggregated. This means, for example, that when proceeding to the interpretation and ranking (Step 2b), a location with more activities is likely to be ranked as more important to act on than one with fewer activities (assuming all activities in that location have similar pressures, for the sake of the explanation).

Step 2b: Interpretation & Ranking

Task 4: Create index values for all pressure categories

& 5: Rank locations by their environmental urgency to act

INDEX VALUE FOR LAND USE CHANGE

Affecting requirement 12

Companies that have completed the Step 1b value chain assessment with a combined indicator that includes both pressure and SoN data do not have to create a new Index value for this indicator. Instead, they should use the indicator directly in Task 4.

Examples of this include companies who calculate estimates of water use impact using approaches like the Product Environmental Footprint (PEF) methodology which include a water scarcity impact category measured in "$m3$ deprived", representing both water demand for a given product as well as incorporating estimates of local water scarcity. While this an acceptable indicator for Step 1 and 2, the analysis may misalign with models for target-setting in Step 3.

PREPARATION OF THE COMBINED IP (P X SONP) AND SONB RANKING

Affecting requirement 19

As a clarification of the existing guidance, the combined ranking produced in Task 5 must be created by starting with (ranking first) the location of highest value for the combined pressure state index (Ip) then selecting the next location as that with the highest state of nature biodiversity value (SoNB) and then proceeding by alternating the highest value location for each of the two rankings (based on Ip and SoNB). As companies place locations in the combined ranking they are “crossed out” or skipped in the individual rankings, to continue the ranking process.

In other words,

1. The first place will always go to the highest ranked Ip location (which will now be crossed out in both rankings);
2. The second place will go to the highest (not crossed out) ranked SoNb location (which will now also be crossed out in both rankings);
3. The third place will go to the highest ranked (and not yet crossed out) Ip location, proceeding then to the SoNB ranking for the fourth location, and so on.

Step 2c: Prioritization

MINIMUM USE OF THE STEP 2C COMPLEMENTARY PRIORITIZATION APPROACHES

Affecting requirements 22 and 23

Companies working on Step 2 should note that the application of Step 2c is required as per the existing guidance. However, Step 2c has been designed to allow a flexible approach and is not designed to require extensive additional research and data collection to be completed. Note that for all three approaches outlined below, companies may find that data are unavailable for some locations within the target boundary. That is acceptable for validation at this stage, as long as the omission is noted. Companies with gaps in their 2C analysis (either missing dimensions or locations) should note that they may either need to or choose to address these gaps as they progress toward target setting and implementation.

At this early stage of the methods, companies may fulfill the requirements of "Task 6: Understand social and justice priorities" using an initial stakeholder mapping exercise, reflecting current knowledge of the company and its internal staffing in locations within the target boundary. This exercise also provides important information and resources for (Step 3) target-setting and (Step 4) target implementation actions.

Companies seeking to comply with the Step 2c requirements by incorporating dependencies into their prioritization may do so with a simple screening utilizing ENCORE with using only the standardized (ISIC) names of each economic activity represented in the target boundary. This data can be used to complete "Task 7: Assess business dependencies on nature", and proceed directly to "Task 9: Prioritize within target boundaries."

Finally, as an alternative, companies may utilize "Task 8: Consider strategic priorities, risks, and capacity for action" before moving to Task 9. Many companies looking to comply with this approach may find that the required data and documentation already exists as part of internal traceability assessments and corporate sustainability strategy. Companies who have previously completed or are currently working toward voluntary (e.g. TNFD) or regulatory disclosures may find that these data are available in a form that can be directly utilized for SBTN prioritization.

SCIENCE BASED TARGETS NETWORK

GLOBAL COMMONS ALLIANCE