SCIENCE BASED TARGETS NETWORK
GLOBAL COMMONS ALLIANCE

OCEAN

Step 3

Measure, Set & Disclose

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STEP
3
MEASURE, SET
& DISCLOSE

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DRAFT

Contents

Glossary Of Terms

Avoid

Prevent impact happening in the first place, eliminate impact entirely.

AR3T

SBTN's Action Framework is named AR3T because it covers actions to avoid future impacts, reduce current impacts, regenerate, and restore ecosystems, and transform the systems in which companies are embedded.

Baseline

Value of impacts (on nature) or state (of nature) against which an actor's targets are assessed, in a particular previous year.

Critically Endangered Species

Any species that has been categorized by the International Union for Conservation of Nature as "critically endangered" - facing an extremely high risk of extinction in the wild - as well as species listed by other international and national rankings of similar or greater risk status, including CITES Appendix I listed species.

Fishery

A fishery is "a unit determined by an authority or other entity that is engaged in raising and/or harvesting fish. Typically, the unit is defined in terms of some or all the following: people involved, species or type of fish, area of water or seabed, method of fishing, class of boats and purpose of the activities."[1]

Highly Damaging Practices

Operations or practices in wild capture and aquaculture that significantly alter or destroy nearby or down current marine and transitional water habitats. This includes but is not limited to cyanide and dynamite fishing, mobile bottom contact gear particularly in sensitive and pristine habitats, excess nutrient output leading to harmful algal blooms (Nitrogen & Phosphorous), infrastructure development, abandoning gear or contributing to ghost gear.[2] Ranching and husbandry practices, as well as setting fishing gear on marine mammals are also considered highly damaging and harmful practices.

Jurisdiction

The territory or sphere of activity over which the legal authority of a court or other institution extends.

Jurisdictional Initiative

A seafood-specific jurisdictional initiative formerly known as a seascape approach. It aims to promote the health of the oceans and the safeguarding of people in seafood production by integrating marine conservation practices into fisheries and aquaculture and considering social welfare within a jurisdictional boundary. This can be at a national, regional or international level.

Jurisdictional Stakeholders

Jurisdictional stakeholders are people and/or organizations who can affect or be affected by the organization's projects or activities and have knowledge and/or influence at the relevant jurisdictional scale (e.g. national, regional, seascape, etc.) within the boundary of a science-

[1] UN FAO, Terminology Portal
[2] McCarthy et al., "Destructive Fishing."

based target. This guidance requires companies to work with stakeholders, at appropriate jurisdictional levels, when developing their targets.

Key Biodiversity Area

Areas worldwide that contribute significantly to the planet's biodiversity and overall health due to their outstanding ecological integrity, globally important ecosystems or significant populations of animals, fungi and plants. [3]

Marine Environment

All connected saline ocean waters characterized by waves, tides, and currents. [4]

Maximum Sustainable Yield

"Maximum sustainable yield (MSY) is a theoretical concept used extensively in fisheries science and management. In fisheries, MSY is defined as the maximum catch (in numbers or mass) that can be removed from a population over an indefinite period. The concept of MSY relies on the surplus production generated by a population that is depleted below its environmental carrying capacity. Despite many concerns about MSY, MSY remains a key paradigm in fisheries management. However, MSY has evolved from a fisheries management target to a limit on fishing mortality and biomass depletion. The concepts involved in determining MSY for fisheries are similar to concepts in forest and wildlife management."[5]

Pristine Habitats

Habitats that have not previously been altered or impacted by human activities.

Protected Area

A clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values.[6]

Reduce

Minimize impacts, from a previous baseline value, without eliminating them entirely.

Science-based targets

Measurable, actionable, and time-bound objectives, based on the best available science, that allow actors to align with Earth's limits and societal sustainability goals.

Seafood Stock

Seafood stocks are groups of fish or invertebrates of the same species that live in the same geographic area and mix enough to breed with each other when mature.[7]

Sensitive Habitats

Habitats unable to recover to at least 80% of their unimpacted structure or function within 20 years if activity and pressures were to cease entirely.[8]

State of Nature Indicators

State of nature indicators describe the general conditions of nature in physical, chemical, or biological terms. These state of nature indicators change in response to pressures. This interaction between human activities and the environment can be understood with reference to the DPSIR (Driver, Pressure, State, Impact, Response) causal framework, which SBTN utilizes throughout the target-setting methodology. Important state indicators in the SBTN methods

[3] https://iucn.org/resources/conservation-tool/key-biodiversity-areas
[4] Keith et al., *IUCN Global Ecosystem Typology 2.0*.
[5] Maunder, 2008 "Maximum Sustainable Yield"
[6] https://iucn.org/our-work/topic/effective-protected-areas
[7] NOAA, 2012 "**Fish Stock Assessment 101 Series**"
[8] Lyons, "MSC Fisheries Standard v3.0."

include water availability, terrestrial ecosystem intactness, net primary productivity, soil organic carbon content, water quality, and ecosystem extent or connectivity.[9]

Structural Habitats

Habitats in marine and transitional environments that provide shelter, food, or attract a variety of species at various life stages by providing physical relief in the environment. Currently, this target is focused on structural habitats for data and measurability purposes and does not include other marine and transitional habitats such as upwelling zones.

Target boundary

The corporate scope of the target, specific to each issue area. The target boundary may be defined in terms of the value chain aspect covered, as well as the specific locations, products, brands, etc., that will be in focus in a given time period.

Target dates

Target dates are the time by which companies must achieve their Ocean targets.

Transitional Environments

Semi-confined transitional waters where freshwater or terrestrial realms meet the marine realm. Examples include but are not limited to deep water coastal inlets, permanently open riverine estuaries and bays, intermittently closed and open lakes and lagoons, and brackish tidal systems.[10]

Upstream

This covers all activities associated with suppliers, e.g., production or cultivation, sourcing of commodities of goods, as well as transportation of commodities to manufacturing facilities.

Validation

An independent process involving expert review to ensure the target meets required criteria and methods of science-based targets.

Value chain

Production of 'economic value' along a series of activities, sites, and entities. The value chain can be divided into three 'segments' upstream, direct operations and downstream. Each of these segments involve places where economic activities managed or relied upon by the company occur. Most value chain frameworks cover a suite of activities starting with the raw materials and extending through end-of-life management, that (a) supply or add value to raw materials and intermediate products to produce final products for the marketplace and (b) are involved in the use and end-of-life management of these products.

Wild-capture Seafood

For this method, commercial seafood refers to marine or freshwater fish or invertebrates that are legally harvested from the wild (e.g. not farmed) for the purposes of entering commerce. This includes seafood intended for human food consumption, pet food, as well as other uses such as pharmaceuticals and nutraceuticals. Companies should consult the High Impact Commodity List[11] in Step 1 of SBTNs guidance to determine the material products in their supply chains. (In this guidance seafood may be referred to generally as 'fish.')

[9] Terminology note: While SBTN uses the term "state" in alignment with the DPSIR framework, other initiatives, such as TNFD and the Capitals Coalition, use the term "changes in natural capital" to describe these same factors within the causal chain of environmental change.
[10] Keith et al., *IUCN Global Ecosystem Typology 2.0*.
[11] SBTN High Impact Commodity List

Introduction – Step 3: Ocean

1.1 General Approach to Setting Science-Based Targets for Nature in the Ocean

This document focuses on technical guidance for Step 3: Measure, Set & Disclose for companies to measure baselines for specific indicators and set ocean SBTs. These are the first ocean-related methods released by the SBTN for Step 3 and are not expected to be usable by all companies for managing their impacts on ocean. These methods focus on seafood systems, covering pressures related to commercial fishing and aquaculture.

The aim of SBTN is to develop a methodology for science-based targets that will enable the corporate sector to align their own commitments to nature with the necessary speed and scale of action as determined by science. This document explains the methodology to set science-based targets for the ocean, with specific emphasis on the seafood sector, covering value chains for wild capture and aquaculture seafood. Throughout this document, the terms "ocean SBTs," "ocean targets", and "seafood targets" are also used to refer to the methodology.

The approach to setting science-based targets (SBTs) for nature is based on the underlying DPSIR (Drivers, Pressures, States, Impacts, Responses) framework, which can be used to understand the relationship between anthropogenic **pressures**, including those driven by company actions, and the **state of nature.**

For example, the pressure of commercial fishing may negatively impact the state of nature corresponding to the fish or invertebrate populations. Similarly, externalities from aquaculture may put direct pressure on nature and biodiversity in surrounding habitats. The broader set of actions that these methods incentivize include the reduction and avoidance of overexploitation of wild fish stocks, reduced degradation to marine habitats through destructive fishing and aquaculture techniques, including reduced antibiotic use, increased efficiency in feed, and more.

While firmly rooted in directing companies to assess, avoid, or mitigate their impacts on nature, ocean targets will go further by incentivizing companies to deliver on regenerative, restorative, and transformative actions in collaboration with multiple stakeholders at the seascape scale. From the outset and throughout this approach, recognizing and acting on social sustainability in seafood is essential, including through incorporation of critical components of stakeholder engagement[12], indigenous and local knowledge (ILK) and human and labor rights into the development of ocean targets. Companies will be required to demonstrate a prerequisite in social responsibility at the time of submitting ocean targets for validation, and this guidance includes recommendations for more thorough action in the Annex.

[12] Companies are strongly recommended to consult the SBTN Stakeholder Engagement Guidance throughout implementation of the Step 3 guidance.

1.2 Social Responsibility for Companies Setting Ocean Hub Targets

1.2.1 SOCIAL RESPONSIBILITY PREREQUISITE

All companies setting science-based targets under the Ocean Hub must have a public social responsibility commitment to upholding the rights of workers (including undocumented migrant workers and other subcontracted workers), small-scale fishers, smallholder farmers, and people involved in pre-and post-harvest processes throughout their business operations and supply chain(s). This **must** include a focus on gender equality and gender-responsive representation, including participation in decision-making. Companies that do not yet have a public commitment **must** develop one prior to setting science-based targets under the Ocean Hub. If there is a company-wide commitment, it must show that the existing scope is inclusive of seafood.

Companies **must** submit their social responsibility commitment as part of the SBTN validation process. Commitments must be set using specific, measurable, achievable, relevant, and time-bound goals, consistent with the SBTN process and the Stakeholder Engagement Guidance. Further information on the importance of social responsibility in the seafood industry as well as resources for the development of these commitments and examples are available in the Annex.

1.2.2 SOCIAL RESPONSIBILITY RECOMMENDATION

Due to the complex nature of global supply chains and the need to ensure safe and decent working conditions, equity, secure livelihoods, gender equality, and the rights of Indigenous peoples, companies are strongly encouraged to demonstrate they are undertaking robust, worker-centric human rights due diligence (HRDD) to identify, prevent, mitigate, and account for efforts to address human and labor rights risks and impacts and support remediation of adverse impacts. Efforts to conduct HRDD, support and enable freedom of association and worker-led approaches to social responsibility where they exist (e.g. Worker-Driven Social Responsibility Network[13]), and mitigate/remediate human and labor rights risks should be communicated publicly on an annual basis.

To increase transparency and accountability, companies can demonstrate their efforts in two ways:

1. Publish a self-assessment or voluntary third-party assessment of HRDD efforts every five years at a minimum, in line with other SBT validation processes.
2. Publish report findings of an internal or external audit or alternative form of worker assessment as part of a more comprehensive HRDD framework.

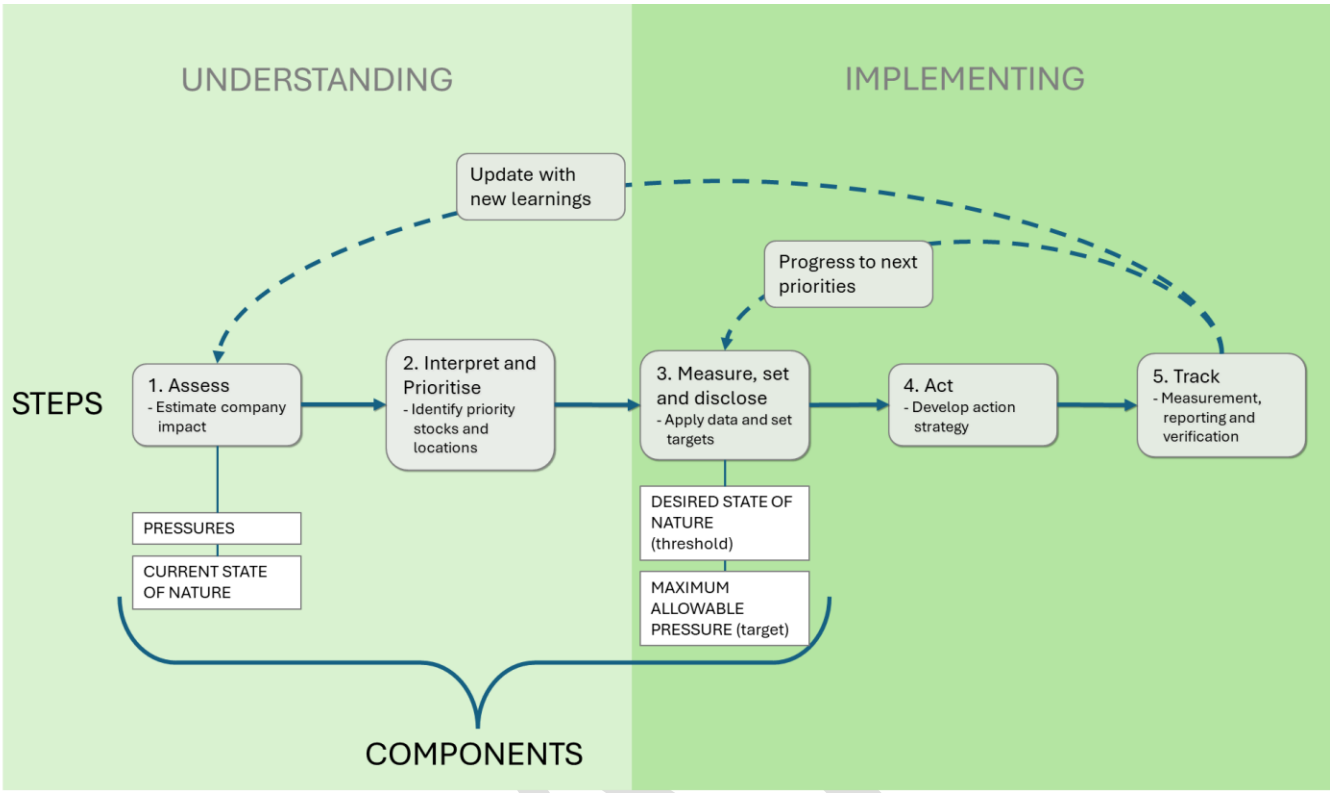
More examples and guidance on undertaking HRDD is available to companies in the Annex, and will follow in future versions of Ocean Hub guidance as this work continues.

1.3 SBTN Process for Setting Science-Based Targets

There is a five-step process to set SBTs for nature:

- ***Step 1: Assess*** – screen and estimate impacts
- ***Step 2: Interpret & Prioritize*** – set target boundary and prioritize
- ***Step 3: Measure, Set & Disclose*** – set and validate targets
- (***Step 4***) ***Act***–develop action strategy; and
- (***Step 5***) ***Track–Measurement, Reporting and Verification*** (MRV)

[13] https://wsr-network.org/



In Steps 1 and 2, companies will have screened their economic activities for materiality, completed an initial place-based assessment of pressures and states, defined the target boundary for each pressure with relevant SBTN methodology for target-setting, and prioritized locations to set SBTs for nature.

These steps are shown at the top of Figure 1. In areas where a company's **seafood production (wild capture or aquaculture)** or **seafood procurement** indicate that they **must** set the relevant ocean SBTs for a given practice or type of product, companies **must** use the guidance within this Step 3 Ocean method document.

Companies **must** set ocean SBTs for their sites (direct operations) and sourcing/purchasing (upstream) practices within their target boundary consistent with Step 2: Interpret & Prioritize. SBTN also *recommends* that companies utilize the methodology for the prioritization of target-setting found in Step 2: Interpret & Prioritize to identify top-priority commercial seafood stocks and marine habitats. If companies do not apply the prioritization methodology, they will be **required** to treat all commercial seafood stocks and marine habitats as top priority for all practices requiring Ocean SBTs. If companies do apply the prioritization methodology, in brief the process to set Ocean SBTs will be as follows:

1. Identify the top 10% of highest priority seafood sources by volume, or at minimum the top 10 highest priority seafood sources. See Step 2: Interpret & Prioritize for information on how to prioritize seafood sources, but in the simplest of terms companies prioritize where their pressures and or environmental urgency is greatest.
2. Set targets, where appropriate, for prioritized seafood sources.
3. Once these targets are met, return to prioritization and set another round of targets on next set of priority sources.

In the target-setting process, companies setting an ocean SBT will use a combination of company and external data. The remainder of this chapter describes the steps that companies **must** take to set science-based targets for their seafood value chains including the indicators to be used for each target, the current state of nature in relevant sites or habitats, indicators of pressure on relevant wild seafood stocks, structural marine habitats, and endangered, threatened, and protected marine wildlife populations, and the tools that can be used to help companies find the necessary data.

The remainder of this chapter defines the specific indicators to be used, their threshold values representing the desired state of nature, and the tools to be applied in calculating targets.

TARGET 1: AVOID AND REDUCE OVEREXPLOITATION

2.1 Introduction To The Avoid And Reduce Overexploitation Target

2.1.1 TARGET RATIONALE AND APPROACH

This methodology is meant to create a pathway for companies within seafood value chains to support resilient wild capture fisheries through effective engagement with resources, operational areas, and supply chain stakeholders. The desired outcome of this target is to reduce and avoid overexploitation in wild capture seafood systems (marine and freshwater; finfish and invertebrates), aligning pressure on seafood stocks with desired states of nature. Wild capture systems are complex, and companies rarely operate within, or influence, these systems alone. Therefore, while structured to refer specifically to individual companies, collective action across companies operating within a single system is welcomed and encouraged within this approach. Opportunities to do so are highlighted in the sections of this chapter. While primarily focused on companies engaged in or sourcing from wild capture fisheries, aquaculture companies that source feed from wild capture fisheries are also encouraged to work to avoid and reduce overexploitation through Target 1.

This section of the document details the steps companies **must** take to select data sources (Section 2.2), identify appropriate target pathways (Section 2.3), and based on these pathways understand how to proceed. Given the complexity of this target in particular, for this section of the document the target 3 steps are broken down by target pathway, rather than addressed collectively as they are for Targets 2 and 3. As a result, this section details how to set targets to reduce fishing pressure (Section 2.4), cap sourcing and engage (Section 2.5), or focus specifically on engagement (Section 2.6). Within each of these pathways, information will be provided on establishing baseline values on a company's relevant pressures, determining maximum allowable pressure thresholds against the state of nature determined in Step 2, setting company- specific targets and target validation. Actions that a company **must** take in each section are prioritized and highlighted in bold; additional actions that a company *may* take are included subsequently under each section.

Target 1 adheres to a 'help first' principle, encouraging active engagement within a company's value chain to help create positive for nature and biodiversity that is equitable and has the greatest benefit for local communities and the people that depend on these resources and supply chains. In alignment with the Sustainable Seafood Coalition's Voluntary Codes of Conduct,[14] only after engagement options have been exhausted and sufficient improvement has not been made will a company's targets shift to prioritizing disengagement with a resource.

If this process results in a decision to not source the fish, companies should communicate the decision and reasoning to the relevant fishery managers and suppliers and indicate that improvements could lead to future sourcing (if this is the case), thereby providing a market incentive for improvement.

[14] Sustainable Seafood Coalition, 2021 "Voluntary Codes of Conduct"

Once a company has set Avoid and Reduce Overexploitation targets, it will have outlined the pathways with which it will contribute to the reduction of overexploitation pressure on relevant wild seafood stocks, in the next several years, to maintain or achieve a desired state of nature.

2.1.2 PROCESS FOR SETTING AVOID AND REDUCE OVEREXPLOITATION TARGETS

When a company has material impacts on seafood stocks in their direct or upstream operations from wild capture fishing practices, they will set habitat protection targets via the prioritization process of Step 2. The company will follow the summarized steps below to identify target requirements and prepare materials to be submitted for target validation:

1) **Select data sources**: Companies can use a range of data sources, including stock assessments, certifications and sustainability rating reports[15], data-limited methodologies, and indigenous and local knowledge (ILK) sources to determine baseline values of pressure and state of nature on relevant fish stocks. For each pathway, these are detailed in subsequent sections and the Annex. Data availability will inform what pathways should be set.
2) **Select pathway(s) for target setting**
    a) Use the following approaches, as appropriate for setting avoid and reduce overexploitation targets (described in more detail in Section 2.3 below):
        i) Reduction pathway: Companies commit to reduce sourcing pressure (from production or procurement) on overexploited wild fishery resources in their supply chains.
        ii) Cap Sourcing and Engage pathway: Companies commit to cap sourcing pressure (from production or procurement) on overexploited wild fishery resources from their supply chains at current levels *and* engage in improvement initiatives at the seascape or jurisdiction level to reduce commercial overexploitation of fish and invertebrates and/or support/create positive conservation outcomes for relevant species.
        iii) Engagement pathway: Companies commit to engage in improvement initiatives at seascape or jurisdictional levels that reduce commercial overexploitation of fish and invertebrates and/or support/create positive conservation outcomes for relevant species.
3) **Determine current and desired states of nature, and maximum allowable pressures**: Using selected data sources, determine the current and desired states of nature for stocks within the company's target boundary, and the maximum allowable pressure associated with those stocks.
4) **Determine company specific targets:** Using data described above, and calculations of maximum allowable pressure specific to the company, set targets using either the reduction or engagement target pathways, or both.
5) **Target validation**: After completing the above steps, a company is ready to submit its data for target validation and move on to Step 4 for the development of an Action Plan.

[15] Those that include information and data about stock health, including for example Seafood Watch seafood sustainability ratings.

2.2 Data Source Selection

Before determining the right pathway for Target 1, it is necessary to determine what data is available on relevant fish stocks. Data quality, availability, and type help determine what target pathways (Section 2.3) are appropriate for a given company and seafood stock. This section outlines types of data sources that can be used, the consultation process with stakeholders on these data sources, and finally the selection of the data sources used Target 1.

2.2.1 TYPES OF DATA SOURCES

Ocean SBTs rely on biologically, spatially, temporally relevant information to indicate what a given seafood stock and its users need to achieve sustainability. For SBTs to be effective for wild caught seafood (marine and freshwater species), pressure mitigation and engagement actions **must** be applied at relevant seafood stock, habitat (see Section 3: Target 2 – Protect Marine Habitats) and jurisdictional levels. Therefore, understanding the relationship between the health of relevant fish stocks (state of nature) and fishery specific conditions (pressure) is required to set SBTs.

To set targets, companies rely on existing data and indicators of stock health, which are evaluated and endorsed by local experts and stakeholders, to determine the current state of nature and maximum pressure thresholds for each of their targets. Companies are not expected or asked to evaluate the health of a stock or perform fisheries modeling for themselves.

Data availability and quality is variable within seafood and marine systems and often depends on the location of the stock, size of the fishery (industrial or small-scale), and, most importantly, management and regulation in the fishing jurisdiction. Because data sources vary across the global fishing industry – in method and frequency of collection, data type, quality, and uncertainty – and are not yet available in many parts of the world[16] with up to 80% of global catch lacking formal assessment,[17] SBTN accepts several different approaches to the use of data sources to determine state of nature. These approaches are used to determine if overexploitation is occurring, and the amount and type of pressure mitigation needed, which is a based on an evaluation of the current state of nature and the desired state of nature (i.e., threshold).

The following data sources may be used to help companies develop their science-based targets:

2.2.1.1 Stock Assessments

A fishery stock assessment is the scientific process of collecting, analyzing, and reporting on the condition of a fish (finfish or invertebrate) stock and estimating its sustainable yield. Stock assessments are the backbone of sustainable fisheries management. Stock assessment models are the mathematical and statistical techniques stock assessments use to analyze and understand the impact of fisheries and environmental factors on fish stocks.[18] Targets can be developed and set using data from stock assessments specific to a given seafood stock and developed for that stock. SBTN emphasizes the use of stock assessments that are recognized and used by local, national, or regional fisheries management authorities and organizations. Scientific studies with stock assessments that are performed

[16] Ritchie and Roser, 2024 "Fishing and Overfishing"
[17] Costello et. al, 2012 "Status and Solutions for the World's Unassessed Fisheries"
[18] NOAA, "Stock Assessment and Model Descriptions"

independently of fisheries management authorities may also be used when the former is not available. Seafood certification and ratings reports, such as those from organizations within the Certification and Ratings Collaboration or recognized by the Global Sustainable Seafood Initiative may also be used to find relevant stock assessment data. Using stock assessments will allow companies to determine quantitative thresholds for their targets.

For use within the SBTN process, it is *recommended* that data sources follow the following criteria:

- Provides management advice based on robust scientific analyses.
- Provides clear fishing mortality and biomass (or proxy) reference points
- Accounts for ecosystem effect/drivers as scientifically appropriate
- Accounts for climate change sensitivity
- Incorporates a wide range of accurate fishery-independent and dependent data
- Includes population dynamics (age, natural mortality, size distribution, predator-prey interactions) and if possible, projections for scenario testing
- Is performed regularly based on generational timing of the selected species
- Provides estimates of uncertainty
- Includes external, independent scientific review

2.2.1.2 Data-limited methodologies

In the absence of stock assessments, as described above, targets can be developed with "data-limited" methodologies. Data limited methodologies are used to provide fisheries management advice when there is "little or no knowledge of a stock's size or fishery characteristics[19]"), using performance indicators and reference points to assess stock health, such as those from records of total catch, estimates of stock growth, reproduction, and natural mortality rates[20].

Data-limited models provide management advice in relative or qualitative terms and methods may vary between stocks and geographies. They indicate whether a stock's harvest level should increase or decrease compared to previous years. That advice typically comes as a recommended maximum volume of fish that can be harvested in a year. Data-limited assessment models do not estimate a stock's current size or minimum stock size threshold. As a result, they *cannot determine whether a stock is overfished.*[8] Therefore, companies using data limited methodologies may not be able to set quantitative reduction targets.

2.2.1.3 Indigenous and local knowledge (ILK)

Indigenous and local knowledge, also known as traditional ecological knowledge, can also be used in the SBT development process. ILK "refers to dynamic bodies of integrated, holistic, social and ecological knowledge, practices and beliefs pertaining to the relationship of living beings, including people, with one another and with their environments."[21] Like data limited methodologies, the use of ILK in target setting will likely not result in quantitative estimates of current stock health. Therefore, companies using ILK may not be able to set quantitative reduction targets.

[19] NOAA, "Stock Assessment Model Descriptions"
[20] EDF, "Framework for Integrated Stock and Habitat Evaluation
[21] IPBES, 2017 "Report of the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services on the work of its fifth session"

Regardless of the method used, stakeholder engagement is a critical part of ensuring that the data source and current state of nature and state of nature thresholds derived from that data source are accurate.

2.2.2 EXPERT AND STAKEHOLDER CONSULTATION

The first stage of the consultation process consists of checking the SBTN data source tool (which is under development) for available **stock assessments**, or related reports on stock health. This tool will contain stock assessments and thresholds that have either been used by other companies that have set and have had externally validated SBTs for wild seafood or have been identified and approved through research efforts by the SBTN Ocean Hub. SBTN will populate this tool as companies set and validate targets using local models, so that coverage will increase as time goes on. While the tool is in development, companies can skip this step and proceed to the jurisdictional consultation.

The second stage of the consultation process involves engagement with **jurisdictional stakeholders**. Relevant jurisdictional stakeholders are individuals or organizations that are actively engaged with a given seafood stock or within the corresponding management jurisdiction. They have specialized knowledge and insights relevant to the given fish stock or fisheries science or the area in question. Companies *should* start with an internal consultation within their company and supply chain to identify the stakeholders that may have relevant information to inform data source selection (refer to Section 2.2.2). See SBTNs Stakeholder Engagement guidance[22] for more information on how companies should work with stakeholders.

Companies are **required** to consult at least one of the following on the existence of appropriate[23] data source for the stock of interest, and interpretation of that data:

- Regional Fisheries Management Organizations (RFMO)
- Government regulators and fishery managers
- Offices of SBTN Ocean Hub partner organizations (Conservation International, WWF, The Nature Conservancy, Sustainable Fisheries Partnership, FishWise, Marine Stewardship Council)
- Local seafood-related NGOs or local chapters of international NGOs
- Local communities and/or indigenous groups or their representatives

Companies should identify all relevant stocks that fall within the same jurisdiction for consultation with the above organizations to expedite this process. Through this consultation, companies are **required** to document whether the stakeholders were able to do the following:

- Identify the scientific data source
- Identify existing thresholds or targets (at the outset of the process)
- Provide/share data sources, thresholds, and/or data
- Endorse thresholds identified by the company

Companies will be required to provide this documentation as part of their validation submission.

[22] SBTN, 2023 "Stakeholder Engagement Guidance V0.1"
[23] As defined through stakeholder engagement process with jurisdictional stakeholders.

Addressing Data Deficiency

While data-limited methodologies and ILK can be used to set targets within this methodology, they may be insufficient for formulating effective fishery management strategies, which influence positive outcomes in fish population status. "Countries with currently less-effective management systems have the greatest potential for improving long-term stock status outcomes and should be the focus of efforts to improve fisheries management globally."[1]

Companies using data-limited methodologies or ILK ***must*** document data limitations relevant to the SBTN target setting process and report their findings[1] during the validation process (Section 2.6). If a company cannot find sufficient data on the status of a stock within its target boundary, it ***must*** also report the data deficiency. In instances of data deficiency, companies should continue to the expert and stakeholder consultation process to determine if sourcing from that stock should be capped or reduced. Regardless of whether a company caps sourcing, in instances of data deficiency it should apply the engagement target pathway with the goal of enhancing data collection to support effective fisheries management and improve its ability to set ambitious science-based targets.

[1] Including the management conditions of the fishery, documentation on assessments that can be verified by a credible source, as defined by stakeholder engagement process.

2.2.3 DATA SOURCE SELECTION

When available, companies are *required* to use stock assessments, or related certification and/or ratings reports, to develop their targets. To ensure target validation, companies **must** use the most recent stock assessments that are endorsed by local experts and have been published within five years of the proposed target set date, unless otherwise specified and endorsed by local experts (e.g. targets set in 2028 **must** use stock assessments from no earlier than 2023).

If stock assessments, or associated ratings or certification reports, are out of date companies **must** supplement data from the most recent stock assessments with data from indigenous and local knowledge (ILK) or data-limited methodologies to determine current and desired states of nature for a given seafood stock. Companies must consult with local experts and stakeholders to determine which sources or combination of sources are appropriate.

If stock assessments are unavailable, because they have not been developed or are not endorsed by the appropriate local experts, companies can use data from ILK or data-limited methodologies to determine current and desired levels of stock health. Again, companies **must** consult with local experts and stakeholders to determine which sources or combination of sources are appropriate.

Once the data source has been selected, companies will be able to define the spatial scale for target-setting (Section 2.4.1.2 for reduction and Section 2.6.1.2 for engagement targets) and record their baselines and thresholds.

2.3 Pathway Selection

Specific targets will enable companies to both reduce direct impacts from operations, including fishing pressure and seafood procurement, as well as engaging in initiatives in the regions of their operation or impact to improve practices, management, governance, or conservation outcomes that can reduce overexploitation in wild capture fisheries.

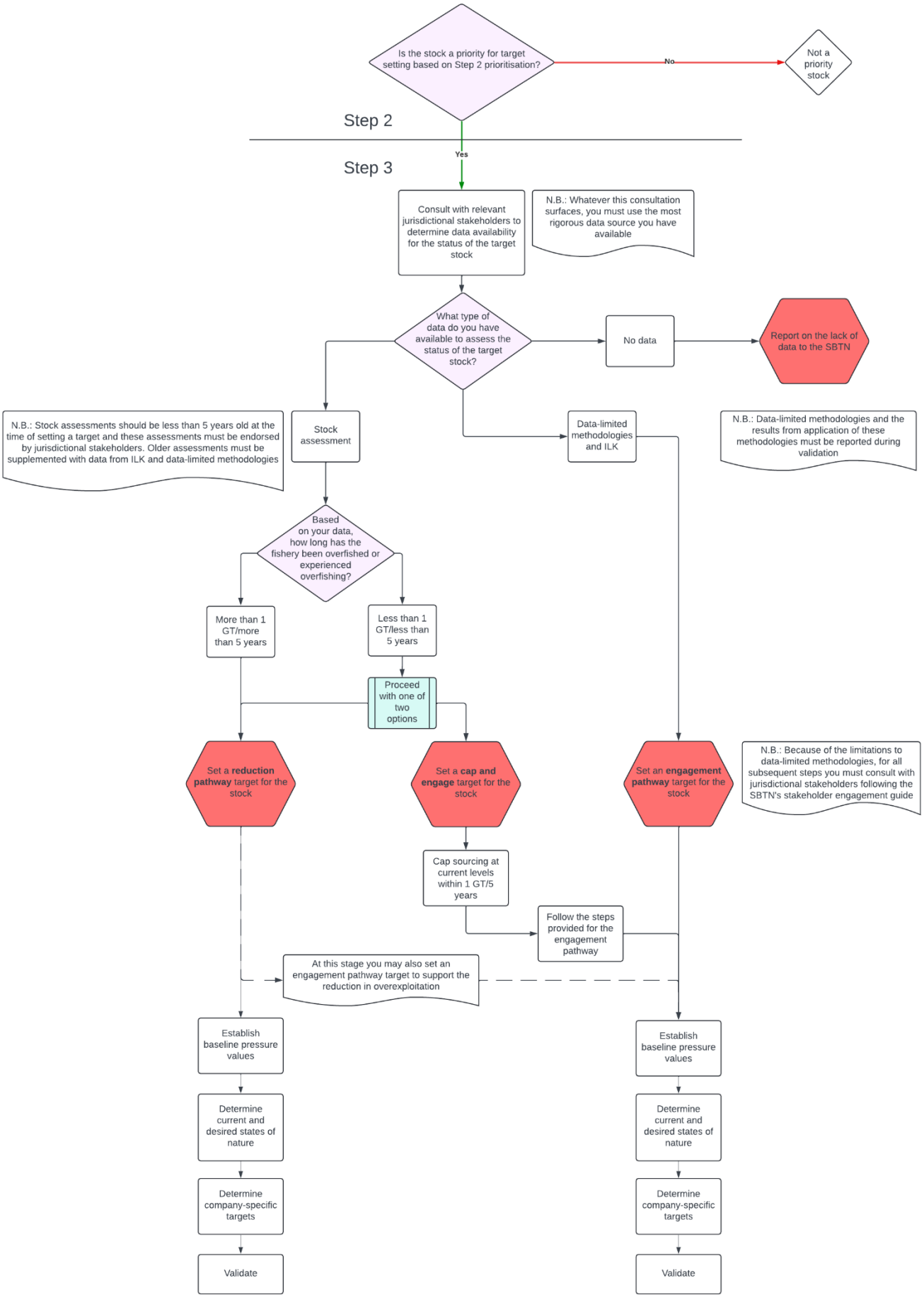
Before detailing how to set targets, it is important to describe the types of targets (pathways) that are expected of companies, and how and to whom they apply, as the necessary steps to implement targets along the different pathways are distinct. The characteristics of the SBTN Ocean Hub's targets align with the United Nations Environment Programme Finance Initiative's (UNEP FI) Turning the Tide report[24] and Target Setting Manual.[25]

2.3.1 TARGET PATHWAY TYPES

Three pathways are presented for companies to implement the avoid and reduce overexploitation target – reduction, cap sourcing and engagement, and engagement; whether a company follows one of, or all pathways depends on available data for and health status of the target stock. These pathways approach overexploitation from different directions. Engagement targets are designed to improve operations and conditions in the jurisdictions where seafood is sourced, to reduce overexploitation collectively amongst stakeholders and improve the health of target seafood populations. Reduction targets are designed to directly reduce pressure on seafood resources, measured by the amount of seafood in a company's value chain, as a way of contributing to reductions in overexploitation directly, with an opportunity for collective action across multiple companies.

It is important to note that the target types are complementary and seek to address different facets of sustainability challenges; as such, they should ideally be used in concert to achieve and support impact.[3]

[24] UNEP FI, 2021 "Turning the Tide"
[25] UNEP FI, 2024 "Setting Sail"


Is the stock a priority for target setting based on Step 2 prioritisation?
No
Not a priority stock
Step 2
Step 3
Yes
Consult with relevant jurisdictional stakeholders to determine data availability for the status of the target stock
N.B.: Whatever this consultation surfaces, you must use the most rigorous data source you have available
What type of data do you have available to assess the status of the target stock?
No data
Report on the lack of data to the SBTN
N.B.: Stock assessments should be less than 5 years old at the time of setting a target and these assessments must be endorsed by jurisdictional stakeholders. Older assessments must be supplemented with data from ILK and data-limited methodologies
Stock assessment
Data-limited methodologies and ILK
N.B.: Data-limited methodologies and the results from application of these methodologies must be reported during validation
Based on your data, how long has the fishery been overfished or experienced overfishing?
More than 1 GT/more than 5 years
Less than 1 GT/less than 5 years
Proceed with one of two options
Set a reduction pathway target for the stock
Set a cap and engage target for the stock
Set an engagement pathway target for the stock
N.B.: Because of the limitations to data-limited methodologies, for all subsequent steps you must consult with jurisdictional stakeholders following the SBTN's stakeholder engagement guide
Cap sourcing at current levels within 1 GT/5 years
Follow the steps provided for the engagement pathway
At this stage you may also set an engagement pathway target to support the reduction in overexploitation
Establish baseline pressure values
Determine current and desired states of nature
Determine company-specific targets
Validate
Establish baseline pressure values
Determine current and desired states of nature
Determine company-specific targets
Validate

2.3.1.1 Reduction target pathway

The reduction pathway relates to the composition of a company's seafood sourcing, either through production (e.g. fishing companies) or procurement (e.g. mid-supply chain stakeholders and end buyers). This pathway **must** be used by companies if data indicates that relevant fish stocks have been overfished or experiencing overfishing for more than one generational time (GT) or more than five years, whichever is the lower number (see Section 2.4.2.1). For stocks that have been overfished or experienced overfishing for less than this time, companies may instead choose to set a cap and engage target (see 2.3.1.2 and 2.5, below).

Reduction targets rely on calculations and stakeholder input related to the current health of a seafood stock and the commercial bycatch (see Section 2.4.2.4) associated with it, as well as maximum allowable pressure thresholds for given seafood resources. These calculations and inputs enable companies to determine sourcing reduction commitments that are proportional to the pressure reduction needed across the entire stock to reduce, and ideally eliminate, overexploitation (see Section 2.4.3).

While companies **must** act individually on a reduction target, as part of this pathway companies may work collectively, through pre-competitive collaborations, with others in the same fishery towards a joint reduction target. Section 2.4 covers the process for setting reduction pathway targets.

2.3.1.2 Cap sourcing and engage pathways

The cap sourcing and engage pathway provides a pathway for target setting that allows for companies to engage in improvements to a fishery that may be experiencing overfishing in a limited context without needing to reduce sourcing. It is used in specific cases when:

1) a fish stock has been overfished or experiencing overfishing for less than one generational time or less than five years (whichever is the lower number); *or*
2) when data-limited methodologies or ILK indicate that a stock is overfished or experiencing overfishing but lack data necessary to set a quantifiable target using the reduction pathway.

In these cases, companies *may* choose to cap seafood sourcing at current levels rather than reduce sourcing. However, if a company chooses to cap sourcing it **must** also set targets using the engagement pathway (Section 2.6). Companies *may* choose to reduce sourcing rather than cap & engage. Section 2.5 covers the process for setting reduction pathway targets.

2.3.1.3 Engagement target pathways

The engagement pathway relates to company commitments in seascapes or jurisdictions linked to their direct operations or seafood sources that will result in a substantial reduction in overexploitation and/or contribute to conservation outcomes. In this context, engagement pathways for avoiding and reducing overexploitation may be closely linked to engagement pathways for protecting structural habitats (see Target 2) to contribute to overall improvement in stock health. [26]

Companies use engagement pathways when relevant fish stocks are not found to be overfished or experiencing overfishing but are still prioritized for engagement in Step 2.

[26] Note that the linkages between targets and co-benefits across pathways will be further articulated in Step 4 guidance.

The urgency of biodiversity loss and seafood overexploitation and the need for collective action at jurisdictional scales now outweighs the importance of precise measurement in the interim. For this reason, the engagement target pathway is broad by design and encompasses a variety of potential approaches that companies and other stakeholders can implement for achieving holistic, multi-objective environmental, biodiversity, and social outcomes. Section 2.6 covers the process for setting engagement pathway targets.

2.4 Reduction Pathway

2.4.1 ESTABLISH BASELINE VALUES FOR RELEVANT PRESSURES

2.4.1.1 Data Needs

In SBTN's Steps 1 and 2, companies collect data on their seafood sources including: species (or species complex), relevant locations (as granular as possible, e.g. exclusive economic zone, FAO subareas), volume (product and procurement), sustainability certifications or ratings if relevant, and gear type. But to set this target, companies will need further data to measure their impact on and the state of nature (stock health) of wild-capture seafood stocks.

For each wild capture seafood source, along with the information necessary for Steps 1 and 2, companies will also need to identify:

- Current health (state of nature) of relevant seafood stocks
- Desired states of nature thresholds for relevant seafood stocks
- Maximum allowable pressure on a given stock
- The presence or risk of bycatch or other commercial species caught incidentally

2.4.1.2 Spatial Scale for Target Setting

Companies are *required* to report the scale for which target(s) will be set at which health of relevant wild seafood stocks will be evaluated. Companies **must** identify the stock from which their seafood originates, which includes the species or species complex (common and scientific name) and geographic location of harvest (as granular as possible, e.g. FAO sub-area). Reduction values are based on the health of fishing pressure on the entire stock, which may cover a geographic range beyond the footprint of a fishery from which a company sources.

Reduction pathway targets **must** also account for life history of relevant seafood stocks, which is address in Section 2.4.3 – Determine Company Specific Reduction Targets.

2.4.2 DETERMINE STATE OF NATURE THRESHOLDS

To set reduction targets, companies **must** next determine the current and desired state of nature for a given stock. Note that this section is designed to produce results that are at the lower limit of what would be acceptable, such that there is no buffer built in as a margin of error. Ideally, a company would be more ambitious than these targets (i.e., set an Avoid and Reduce Overexploitation target that aims at reducing seafood overexploitation more drastically than what is to be required through the targets).

2.4.2.1 Using Stock Assessments to Determine a Threshold

If a stock assessment or report with the requisite data is available (Section 2.2.1), companies **must** use it to determine the current state of nature and the desired state of nature **threshold** for the given seafood stock. The values used for this approach **must** be endorsed by the relevant jurisdictional stakeholders and not independently determined by the company.

The state of nature threshold for this methodology is based on the concepts of fish stocks being "overfished" and experiencing "overfishing." These statuses are determined quantitatively, through stock assessments, and depend on the health of the resource and status of current fishing pressure.

- A stock is generally considered overfished when its ratio of biomass (B) to maximum sustainable yield (B_{msy}) falls below 1 ($B/B_{msy} < 1$).
- A stock is generally considered to be experiencing overfishing when its ratio of fishing mortality (F) to maximum sustainable yield (F_{msy}) has exceeded 1 ($F/F_{msy} > 1$).

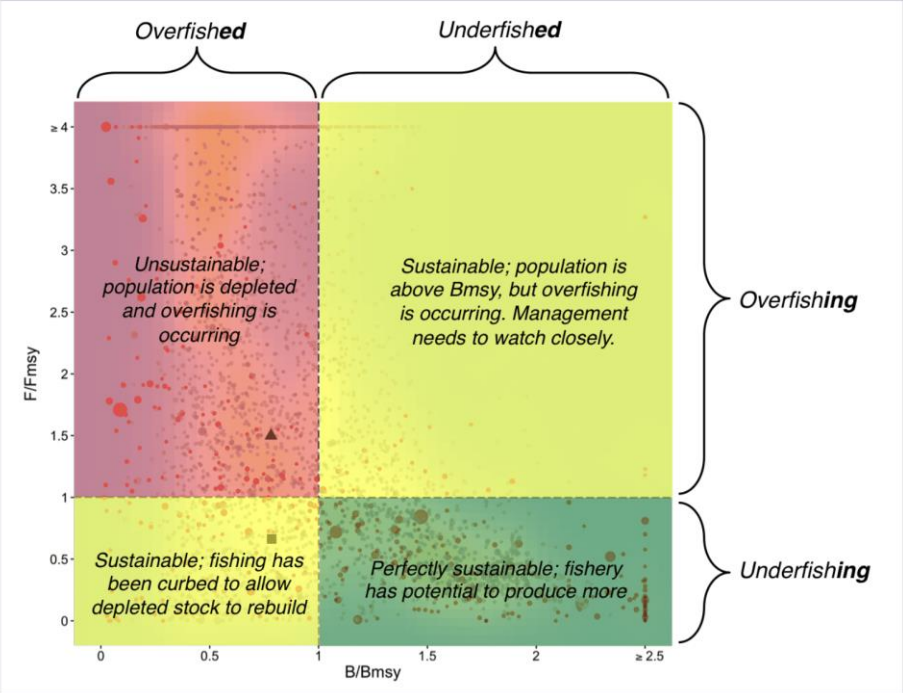


Figure 2. Ratios and situations explaining overfishing and overfished[27]

Reduction targets depend on the relationship of these two ratios (Figure 1) and the amount by which biomass and fishing mortality are above or below their respective thresholds. Note that the ratios described above are broad, foundational descriptions of overexploitation. Depending on the stock assessment, other more precise metrics describing stock health and desired states of nature may be available. Companies **must** also consult relevant stakeholders to determine the specific metrics used to determine thresholds.

If a stock is overfished and/or experiencing overfishing, as determined by a stock assessment, and endorsed by the relevant stakeholders, companies are expected to set SBTs to avoid and reduce overexploitation.

[27] University of Washington Sustainable Fisheries, "The science of sustainable seafood, explained"

To account for natural fluctuations in biomass, which may lead a stock to be considered to be experiencing overfishing at a given point in time, companies should consider trends within the relevant seafood stock. Here, SBTN follows guidance from the Marine Stewardship Council stock rebuilding performance indicator. Companies should consider trends in stock status and overfishing based on the generational time (GT) for a given stock (GT = AM50 + 1/M, where AM50 is the age at 50% maturity, and M is natural mortality).[28]

If, through stakeholder engagement and expert review, it is determined that the fluctuation is anomalous, companies are not required to set reduction targets for the given stock. In these cases, companies **must** produce evidence for validation.

2.4.2.2 Using Data-limited Methodologies to Determine Thresholds

Estimates of current states of nature and thresholds for maximum allowable pressure can be derived from data limited methodologies. By using data-limited methodologies, thresholds may not be based on current biomass, fishing mortality, and maximum sustainable yield, but rather values by which harvest should decrease or can increase, compared to previous years. In the absence of stock assessments, companies may use quantitative values determined using data limited methodologies in pressure reduction calculations or to cap sourcing.

If the methodology recommends that harvesting from a stock should be reduced compared to previous years, companies **must** consider the stock to be overexploited and either cap sourcing and set engagement targets (Section 2.5) *or*, if the recommendation is quantifiable, set reduction targets per this section.

If the methodology indicates that harvest can be increased, companies should not consider the stock to be overexploited. However, given the data-limited nature of the assessment, companies should not use this as a rationale for increasing sourcing pressure.

For validation of approaches using data limited methodologies, companies **must** consult relevant stakeholders to determine appropriate thresholds. They should also consider trends in the fishery over one generational time for the species (GT = AM50 + 1/M), or a similar time period determined through stakeholder engagement.

2.4.2.3 Using Local/Traditional Ecological Knowledge to Determine Thresholds

Qualitative determinations of current states of nature and thresholds for maximum allowable pressure can be derived from indigenous or local knowledge (ILK) (Section 2.2.1.3). By using ILK as a data source for target setting, companies will not be able to calculate the amount by which exploitation needs to be reduced to meet a maximum allowable pressure threshold. Therefore, thresholds derived from this type of data source pressure will likely be binary – a stock is either considered by ILK to be overexploited or not overexploited, leading companies to cap sourcing rather than reduce. However, if a quantitative value is determined using ILK, companies may use that value to set their reduction targets.

[28] MSC 2018

For validation of approaches using ILK, companies **must** consult relevant stakeholders to determine appropriate thresholds. They should also consider trends in the fishery over one generational time for the species (GT = AM50 + 1/M), or a similar time-period determined through stakeholder engagement.

2.4.2.4 Addressing Fisheries Bycatch in Avoid and Reduce Overexploitation Targets

This methodology directly addresses overexploitation of wild-capture fish and invertebrates, which may include some forms of bycatch. While commercial fishing also puts pressure, in the form of incidental catch of marine wildlife such as sea birds, marine mammals, sea turtles, and other megafauna and protected species, this target only covers bycatch of fish that are included in management plan(s) even if they are listed species. Impacts to endangered, threatened and protected species are addressed in Target 3: Reduce Risk to ETP Species.

Companies should consider relevant bycatch species to be 'chokes' for the seafood stocks that their targets are meant to address. 'Choke' or 'pinch point' species are species with limited quota or interactions that co-occur with species of fishing interest and limit fishing opportunities on a co-occurring target species once catch quota limits on choke species are reached.[29] This methodology uses a similar principle.

If a bycatch species is found to be caught alongside the target species, and a stock assessment or other form of data is available[30] for the bycatch species to determine the current state of nature and maximum allowable pressure threshold for the given bycatch stock, companies should evaluate the stocks in tandem with target stocks. Companies **must** then use the lower threshold of the stocks in question to set the target. Companies may also consult published papers and other publicly available sources (such as certification or ratings reports) on fisheries and stocks at high risk for choke bycatch species[31] to understand their bycatch risks and seek out further data.

2.4.3 DETERMINE COMPANY SPECIFIC REDUCTION TARGETS

Following on from the above steps, companies **must** define measurable contributions that they can make to the reduction and avoidance of overexploitation, through company-specific targets.

Companies calculate specific reductions in pressure for these targets based on desired state of nature and maximum allowable pressure thresholds (Figure 3) or based on recommendation of fishery managers, as stated in relevant stock assessments. Where pressure reductions are based on recommendations of fishery managers these **must** be communicated. Companies may apply these equations collectively with peers exploiting the same stock to achieve an aggregate reduction in pressure, within which individual companies **must** then report their own contribution to the collective pressure reduction.

Reductions that a company **must** make can be calculated as inversely proportional to the difference between the desired state of nature and current state of nature or directly proportional to the difference between current sourcing pressure and maximum allowable pressure.

[29] English et al., 2023 "Spatial restrictions hinder avoidance of choke species in an Indigenous rights-based fishery"
[30] For data-limited methodologies, the same approach applies as outlined in Section 2.2.3
[31] To be developed: Resource of papers referencing known commercial stocks with high levels of bycatch species.

Equation 1: State of Nature

$$\%\ \text{Reduction in Pressure} = \frac{\text{Desired state of nature threshold} - \text{Current state of nature value}}{\text{Desired state of nature threshold}} \times 100$$

Equation 2: Pressure

$$\%\ \text{Reduction in Pressure} = \frac{\text{Current sourcing pressure} - \text{Maximum allowable pressure}}{\text{Current sourcing pressure}} \times 100$$

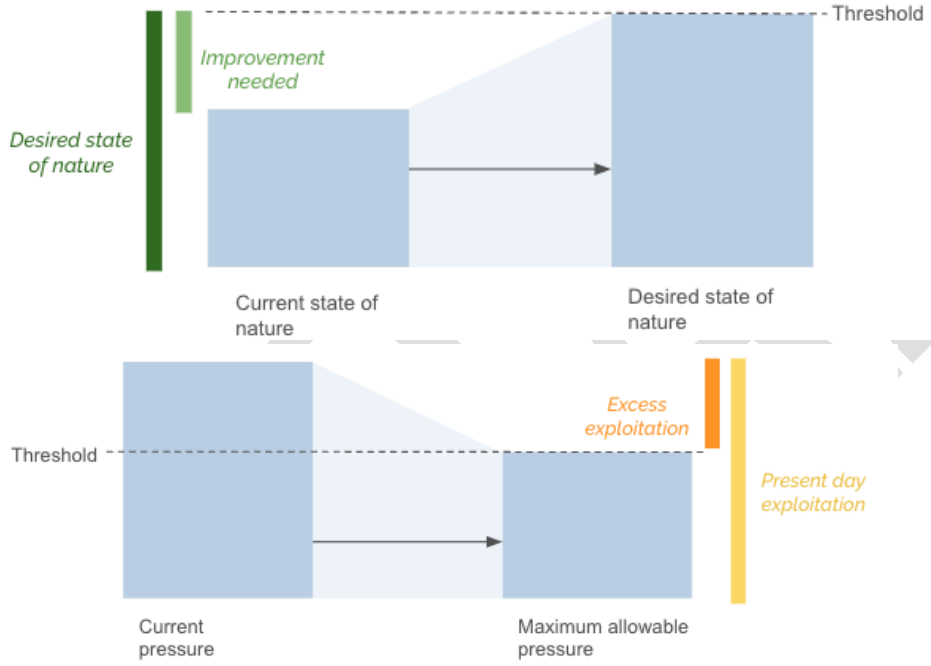


Figure 3: Desired State of Nature and maximum allowable pressure thresholds

- If a stock is overfished and experiencing overfishing (e.g. $B/B_{msy} < 1$ and $F/F_{msy} > 1$), companies are required to set Reduction Targets using the highest percentage reduction of the two calculations.
- If the stock is rebuilding, that is, it is overfished but not currently experiencing overfishing, (e.g. $B/B_{msy} < 1$ and $F/F_{msy} \leq 1$) companies **must** use the state of nature formula (equation 1) to calculate percentage reduction needed for its targets.
- If the stock is not overfished but overfishing is occurring (e.g. $B/B_{msy} \geq 1$ and $F/F_{msy} > 1$), companies **must** use the pressure formula (equation 2) to calculate the percentage reduction needed for its targets (see example formulas).

For reduction targets, companies **must** determine a measurable contribution that they can make to the reduction overexploitation of relevant fish stocks, which is derived directly from measurements of stock status. Companies calculate new pressure levels using Equation 4 (Figure 6).

Equation 3

$$\text{Company target pressure} = \frac{100 - \text{\% Reduction in pressure}}{100} \times \text{Present day pressure}$$

This allocation approach effectively gives each stakeholder the same level of reduction ambition, defined as a percentage, relative to its starting position (i.e., the moment when the stakeholder calculates its baseline). This allocation approach was chosen for its simplicity, as the only input data required is the baseline level of an individual company's impacts. For practical reasons, this version of the methodology does not address potential allocation factors such as social, economic, technological, or political aspects.

2.4.4 ESTABLISHING REDUCTION TARGET TIMELINES

Companies **must** establish timelines upon which they will develop, and subsequently act on (Step 4) and monitor (Step 5) science-based targets. A company's target start date is established as the year the target is set. The target end date will depend on the type of target the company is setting but should be both an ambitious and achievable period within which to meet the target, and no later than 10 years from the start date. In addition, there are several considerations to target timelines as part of the SBTN process:

- Target end dates for reduction targets may be set using the same approach if they are also consistent with the biological characteristics (i.e. life cycles and generational timelines) and condition of stocks within the target boundary and the data available during the target setting process. Life cycles and generation timelines of marine species vary, so it is not uncommon for species populations change to occur over a shorter or longer period than specified for setting reduction targets. These times may undershoot or exceed the total period of a company's overexploitation target (max. 10 years). In these cases, companies are advised to consider what is achievable in the period of the target and establish those goals as the outcomes of their target with an intent to continue progress beyond the target end date.
- Companies **must** consult with relevant stakeholders, according to SBTNs Stakeholder Engagement guidance, when determining timelines for reduction targets.

2.4.5 REDUCTION TARGET TEMPLATE LANGUAGE

Avoid and Reduce Overexploitation targets via the Reduction pathway will be stated in the following form:

By [target end date], [Company X] will reduce its sourcing of [species] from [stock name] by X% compared to a [date] baseline.

*Recommended if quantitative threshold value is determined (through use of stock assessments).

2.4.6 REDUCTION TARGET VALIDATION

To begin the target validation process, companies **must** submit:

- International Standard Industrial Classification (ISIC) sector classification(s) describing their direct operations and upstream activities
- Demonstration of legal status of commercial fishing sources
- Activity amounts (i.e., quantities of seafood-based products produced or purchased) of the most recent year or other relevant reporting period
- Data used to establish baseline and desired state of nature of the relevant stocks
- Calculation details for reduction pathway targets (e.g. percentage reduction in pressure, company's target pressure)
- If the company is not the direct operator, documentation of working relationship with the direct operator
- A narrative description of their strategy and potential response options for achieving the Avoid Overexploitation target, including the proposed approach to addressing potential risks associated with responsible/positive changes in fishing activities (e.g., changes to gear and fishing practices, temporal or geographic changes to sourcing) and unintended social consequences of reducing activity.

2.5 Cap Sourcing And Engage Pathway

2.5.1 ESTABLISH BASELINE VALUES FOR RELEVANT PRESSURES

The data needs and spatial scale for this pathway are the same as for the reduction and engagement pathways. Refer to Section 2.4.1 and Section 2.6.1.

2.5.2 DETERMINE COMPANY SPECIFIC ENGAGEMENT TARGETS

Company specific engagement targets for this pathway are determined using the same methodology as the engagement targets pathway. Refer to Section 2.6.2.

2.5.3 ESTABLISHING CAP SOURCING AND ENGAGE TARGET TIMELINES IN IMPROVEMENT INITIATIVES

Companies **must** establish timelines upon which they will develop, and subsequently act on (Step 4) and monitor (Step 5) science-based targets. A company's target start date is established as the year the target is set. The target end date will depend on the type of target the company is setting but should be both an ambitious and achievable period within which to meet the target, and no later than 10 years from the start date. In addition, there are several considerations to target timelines as part of the SBTN process:

- For cap sourcing targets, a company **must** commit to cap sourcing within one generational time (GT) of five years of the target start date (whichever is the lower number).
- Target end dates for engagement targets will be set at least five years from the start date of the target, at which point the target will be re-evaluated and must be re-validated.
- Companies **must** consult with relevant stakeholders, according to SBTNs Stakeholder Engagement guidance, when determining timelines for reduction targets.

2.5.4 CAP SOURCING AND ENGAGE TARGET TEMPLATE LANGUAGE

By [target end date], [Company X] will cap (not increase) its sourcing of [species] from [stock name] compared to a [date] baseline.

AND

[Company X] will engage in [initiative name] in [location] by [target start date] to reduce overexploitation in [stock name] by [target end date] as compared to [target start date] baseline.

2.5.5 CAP SOURCING AND ENGAGE TARGET VALIDATION

To begin the target validation process, companies **must** submit:

- International Standard Industrial Classification (ISIC) sector classification(s) describing their direct operations and upstream activities
- Demonstration of legal status of commercial fishing sources
- Activity amounts (i.e., quantities of seafood-based products produced or purchased) of the most recent year or other relevant reporting period
- Data used to establish baseline and desired state of nature of the relevant stocks
- A narrative description of rationale for choosing to cap sourcing
- If the company is not the direct operator, documentation of working relationship with the direct operator
- A narrative description of their strategy and potential response options for achieving the Avoid Overexploitation target, including the proposed approach to addressing potential risks associated with responsible/positive changes in fishing activities (e.g., changes to gear and fishing practices, temporal or geographic changes to sourcing) and unintended social consequences of reducing activity.
- Roadmap of Engagement Pathway, as laid out in the Annex

2.6 Engagement Pathway

2.6.1 ESTABLISH BASELINE VALUES FOR RELEVANT PRESSURES

2.6.1.1 Data Needs

In SBTN's Steps 1 and 2, companies collect data on all seafood sources including: species (or species complex), location (e.g. FAO area), volume (production and procurement), sustainability certifications or ratings if relevant, and gear type. Engagement pathways by design relate to broader efforts than those solely of the company. Thus, to set this target, companies will need further data to measure baselines against a substantial reduction in overexploitation and contribute to conservation outcomes inherent to the engagement pathway. This data **must** relate to the company's pressures, but due to this pathway's focus on seascape or jurisdictional initiatives that extend beyond an individual company, baselining **must** collect data from the initiatives that they engage as part of this pathway (see below for more information on eligible jurisdictional initiatives).

For each jurisdictional initiative, along with the information necessary for Steps 1 and 2, the initiative will need to be able to identify, and share with the company, baseline data relevant to the initiative's goals that are further expanded on in the Annex. For Target 1, for example, if an initiative is focusing on the improvement of a particular stock the initiative may need to provide data on:

- The presence or risk of bycatch or other commercial species caught incidentally
- Current health (state of nature) of relevant seafood stocks
- Desired states of nature thresholds for relevant seafood stocks
- Maximum allowable pressure on a given stock

2.6.1.2 Spatial Scale for Target Setting

Engagement pathway targets will have a spatial scale relevant to the seascape or jurisdiction that falls within the target boundary or that are prioritized by companies applying prioritization from Step 2, and may vary significantly from other pathway spatial scales or between engagement initiatives. Most often for Target 1 engagement pathways, the spatial scale will correspond to the biological scale of the fish stock. However, engagements may occur at a broader scale and more information can be found in the Annex.

2.6.1.3 Baseline Pressure Values

While indicator selection is required at time of target submission for engagement initiatives, baseline calculations for those indicators are not required at time of target submission if they are not currently available via the initiative and may be submitted up to 12 months after successful target submission. See the Annex for further information.

2.6.2 DETERMINE COMPANY-SPECIFIC ENGAGEMENT TARGETS

Engagement targets are designed to improve operations and conditions in the jurisdictions where seafood is sourced to reduce overexploitation, and therefore are focused on external activities that a company can support to effect change. This framework focuses on Improvement Initiatives as the external activity to focus on within an engagement target. Improvement initiatives are place-based projects that a company can engage in, finance, or develop that result in improvements for nature and people in the jurisdictions where that company has operations that fall within the target boundary.

Jurisdictional Initiatives[32] and Seascape Approaches[33] are both examples of improvement initiatives, but are not the only types of initiatives that companies can engage in. For this target, engagement **must** directly relate to the reduction of overexploitation of relevant fish stocks or improve management and policy that will reduce overexploitation. Eligible improvement initiatives are characterized by the following requirements:

1. Every seascape or jurisdictional approach **must** operate at the scale of a recognized ecological area (such as a Large Marine Ecosystems) or administrative area (such as states, provinces, municipalities, districts).
    a. The seascape boundary may be defined by local stakeholders
2. The vision and needs of relevant stakeholder groups **must** be included in the design, implementation, and monitoring of an initiative.
    a. At least three stakeholder groups participated in one or more phases of the seascape initiative.
3. There are collective goals and actions for nature and people based on science that are tied to the pressures and ambition of the target.
    a. Nature and people goals have been defined collectively (i.e., by three or more stakeholder groups)
    b. There is a link between initiative actions/investment and one or more of the seascape goals on nature and people.
4. There are transparent reporting and presentation/information systems sharing the actions/investments made in the initiative.
    a. Actions are reported to stakeholders.
5. There is baseline data available about the state of nature and pressures that correspond to the company's identified pressures.
    a. The initiative is able and willing to share this baseline data with the company.

See the Annex, Section 5.3 for further information on seascape initiative maturity and how to develop an Engagement Roadmap to fulfill this target.

Companies are encouraged to submit Engagement pathway targets for existing initiatives they engage in that meet the above criteria that may not follow the Prioritization process of Step 2 (i.e. a location that is not prioritized in Step 2). These targets *can* be validated but they will not substitute for the required targets via the Prioritization process and will only be validated *after* Prioritized location targets are submitted and approved.

2.6.3 ESTABLISHING ENGAGEMENT TARGET TIMELINES

Companies **must** establish timelines upon which they will develop, and subsequently act on (Step 4) and monitor (Step 5) science-based targets. A company's target start date is established as the year the target is set. The target end date will depend on the type of target the company is setting but should be both an ambitious and achievable period within which to meet the target, and no later than 10 years from the start date. In addition, there are several considerations to target timelines as part of the SBTN process:

[32] "Developing Jurisdictional Initiatives for the Seafood Sector."
[33] Murphy et al., "Fifteen Years of Lessons from the Seascape Approach."

- Target end dates for engagement targets will be set at least five years from the start date of the target, at which point the target will be re-evaluated and **must** be re-validated.
- Companies **must** consult with relevant stakeholders, according to SBTNs Stakeholder Engagement guidance, when determining timelines for reduction targets.

2.6.4 ENGAGEMENT TARGET TEMPLATE LANGUAGE

Avoid and Reduce Over Exploitation targets via the Engagement pathway will be stated in the following form:

[Company X] will engage in [initiative name] in [location] by [target start date] to reduce overexploitation in [stock name] by [target end date] as compared to [target start date] baseline.

2.6.5 ENGAGEMENT TARGET VALIDATION

To ensure an engagement pathway target is validated, a company **must** submit:

- Demonstration of legal status of fishing or farming operations at locations
- Data used to establish baseline and desired state of nature of the relevant stocks
- Roadmap of Engagement Pathway, as laid out in the Annex

Target 2: Protect Structural Habitats

3.1 Introduction To Protect Structural Habitats Target

3.1.1 TARGET RATIONALE AND APPROACH

The Protect Structural Habitats target aims to contribute to halting and reversing major sources of harmful impacts to marine and transitional habitats from wild capture and aquaculture production.[34][35] Marine and transitional habitats, particularly those that are structural, are key supports of biodiversity in the ocean and their degradation is believed to be a key contribution to biodiversity loss.[36] This target supports Goals A and B of the Kunming-Montreal Global Biodiversity Framework to maintain, enhance, and restore the integrity, connectivity, and resilience of ecosystems as well as support the sustainable use and management of biodiversity and ecosystems services, respectively. This target also contributes to the achievement of the Kunming-Montreal Global Biodiversity Framework targets 3 and 10.[37] Due to its focus on habitats, this target is suitable for both fishing and aquaculture companies. Please note that where habitat-forming species that are listed as endangered, threatened, or protected (e.g. coral) are present, these should be addressed under Target 3: Reduce Risk to ETP Marine Wildlife (See Section 4), rather than Target 2.

This target is approached in two pathways which will be discussed in more detail later in the guidance, in order to acknowledge that there are two primary mechanisms by which corporate action can impact the protection and restoration of marine and transitional habitats: directly changing operations and influencing policy. While directly changing operations is possible for habitat protection, public policy decisions, as noted by the Kunming-Montreal Global Biodiversity Framework, have an outsize influence on the protection and restoration of marine habitats. In addition, depending on a company's placement in the seafood supply chain, a company may have limited ability or influence to effect change on operations or practices within its supply chain. Similarly, while some companies cite power to influence through the supply chain as a primary tool that they use in their corporate social responsibility commitments[38] that power may be reserved exclusively for the largest buyers.

This target therefore is structured to provide opportunities both for companies that can change their operations directly, as well as those throughout the supply chain that may not be able to leverage supply chain power or impact change on direct operations. These latter companies can still engage directly in the known approaches to improving environmental and social outcomes in their upstream operations via improvement initiatives and advocacy for improved management and governance of marine and transitional habitats.

[34] Thrush and Dayton, "Disturbance to Marine Benthic Habitats by Trawling and Dredging."
[35] Diana, "Aquaculture Production and Biodiversity Conservation."
[36] Airoldi, Balata, and Beck, "The Gray Zone."
[37] "Kunming-Montreal Global Biodiversity Framework."
[38] Packer et al., "Corporate Social Responsibility (CSR) Practices of the Largest Seafood Suppliers in the Wild Capture Fisheries Sector."

3.1.2 PROCESS FOR SETTING A PROTECT STRUCTURAL HABITATS TARGET

When a company has material impacts on marine and transitional habitats in their direct or upstream operations from wild capture or aquaculture practices, they will set habitat protection targets via the prioritization process of Step 2. The company will follow the summarized steps below to identify target requirements and prepare materials to be submitted for target validation:

1. **Select pathway(s) for target setting**[39]
    a. Use one or both approaches for setting a habitat protection target (outlined in more detail in Section 3.2 below):
        Operations pathway: Companies commit to improvements in direct operations or operations within upstream supply chain to meet standards of best practice for wild capture fisheries or aquaculture.
        Engagement pathway: Companies commit to improvement initiatives at the seascape or jurisdiction level to improve the protection or restoration of marine and transitional habitats.
    b. Companies with impacts in their direct operations **must** set Operations pathway targets and are encouraged to also set Engagement pathway targets
2. **Select data sources and establish baseline values**

Companies can use a range of data sources, from primary through data-limited and local and indigenous knowledge sources to determine baseline values of habitat impacts and pressures as detailed in Section 3.3 and the Annex.

3. **Commit to:**
    a. Improving operations to standards of best practice
    b. Improvement of ecological and social conditions in the seascape or jurisdiction with goals that tie directly to the protection and/or restoration of marine and transitional habitats
4. **Identify indicators to monitor progress towards target and initiative outcomes**

Companies will identify the indicators most relevant to the baselines and commitments they have selected for their targets, with further details and examples laid out in Section 3.4 and the accompanying Engagement pathway target validation roadmap in the Annex.

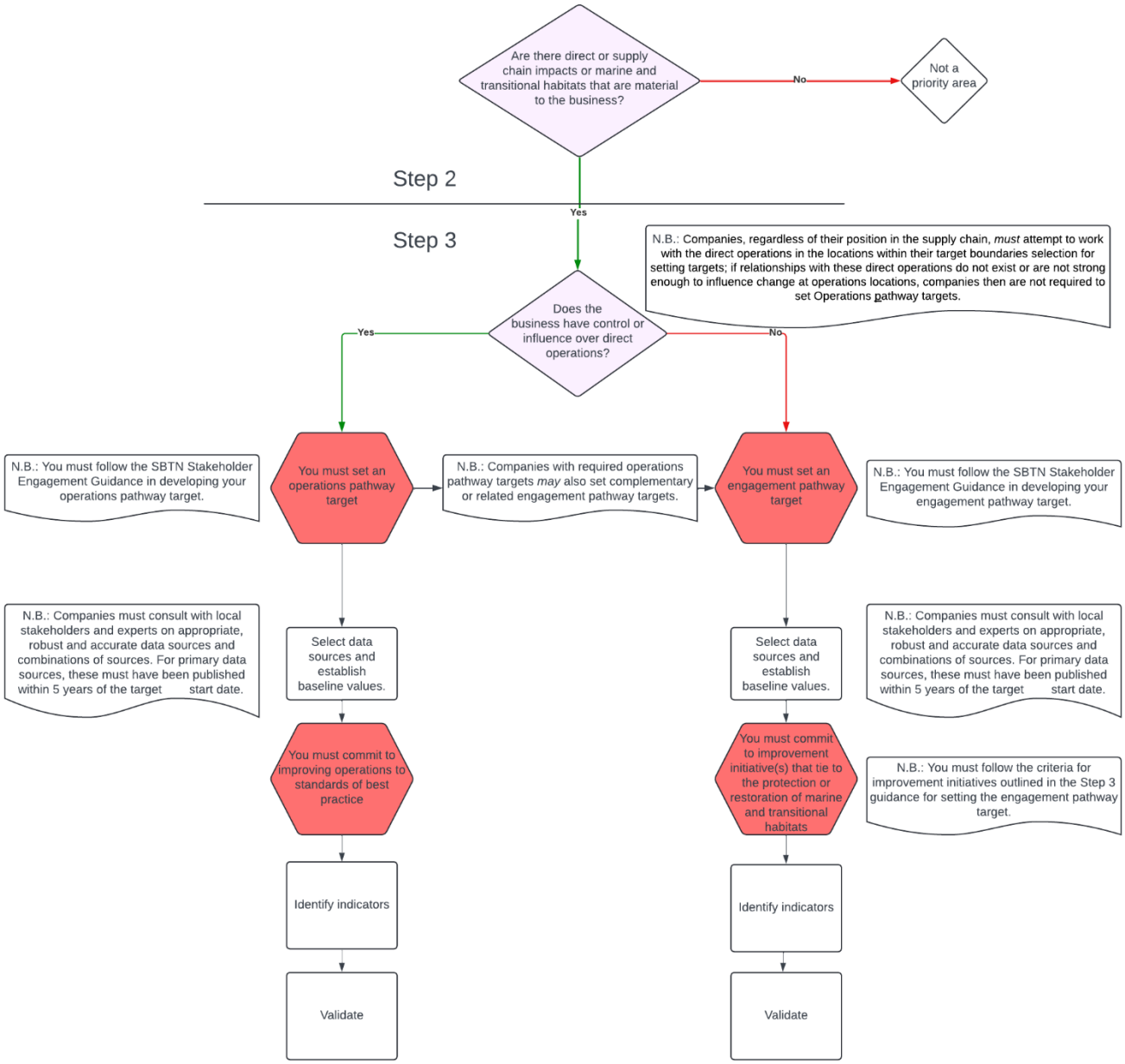
5. **Target validation**

After completing the above steps, a company is ready to submit its data for target validation and move on to Step 4 to develop an Action Plan.

3.2 Protect Structural Habitats Target Pathways

Companies may set the Protect Structural Habitat target through two pathways depending on whether their target impacts are in their direct operations, if they have strong relationships to exert influence with the direct operators in their upstream operations, or if they will be engaging in initiatives in their areas of impact, as described below.

[39] Please note that unlike the order of operations for Target 1 which begins with data sources, Target 2 begins with pathway selection.



3.2.1 OPERATIONS PATHWAYS

Companies that take the operations pathway to set targets commit to improvements in their own practices and operations or those of suppliers with which they can exert influence and work with to facilitate change. Operations pathways are required for companies with pressures from direct operations. Companies, regardless of their position in the supply chain, **must** attempt to work with the direct operations in the locations within their target boundaries selection for setting targets to enact standards of best practice; if relationships with these direct operations do not exist or are not strong enough to influence changes at operations locations, companies then are not required to set Operations pathway targets.

Operations pathways will primarily establish and ensure standards of best practice for a company's operations, described below, at operation locations. If standards of best practice impact reduction and habitat recovery are not already in place, they should be implemented first in target-setting as they are the foundation for ensuring habitat protection and restoration, however they are not the only actions available to companies for operations pathways.

Companies **must** consult the SBTN Stakeholder Engagement Guidance in developing their Operations pathway targets. Companies are recommended but not required to undertake stakeholder engagement under this pathway as it focuses on a company's internal practice.

3.2.1.1 Best Practices for Wild Capture Fisheries

Companies can find best practices for wild capture fisheries related to protecting marine and transitional habitats in threat abatement plans, Biodiversity Strategic Action Plans (BSAPs), regional ecological standards, local knowledge, industry associations, academic and agency resources, and local, regional, or global NGOs as well as from Fishery Improvement Projects. While companies are encouraged to seek out engagement with local stakeholders to ensure the most appropriate understanding of best practices within the jurisdiction of operation, this target draws on a number of relevant standard-setting resources, including the FAO Code of Conduct for Responsible Fisheries (CCRF)[40] and the Monterey Bay Aquarium Seafood Watch's Standards for Fisheries[41] as general standards of best practice for fisheries, as follows:

- All critical fisheries habitats in marine and freshwater ecosystems, such as wetlands, mangroves, reefs, lagoons, nursery and spawning areas, should be protected and rehabilitated as far as possible and where necessary – these habitats should be protected from destruction, degradation, pollution and other significant impacts from human activities that threaten the health and viability of the fishery resources.
    - Avoid negative impacts on the structure, function, or associated biota of marine and transitional habitats where fishing occurs. The fishery should not adversely affect the physical structure of the seafloor, habitats, or associated biological communities.
- If high-impact gears (e.g., trawls, dredges) are used, vulnerable seafloor habitats (e.g., corals, seamounts) are not fished, and potential damage to the seafloor is mitigated through substantial spatial protection, gear modifications, and/or other highly effective methods to avoid/minimize damage. Selective and environmentally safe fishing gear and practices should be developed and applied to the extent practicable.
- Mobile bottom-contact gear is not used in marine protected and conserved areas (MPAs) designated/established to conserve benthic habitats/communities under national and/or international law.
- Follow the principles of ecosystem-based fisheries management. In other words, the fishery is managed to ensure the integrity of the entire ecosystem, rather than solely focusing on maintenance of single species stock productivity. To the extent allowed by the current state of science, ecological interactions affected by the fishery are understood and protected, and the structure and function of the ecosystem is maintained.

[40] While directed towards a public sector audience, the CCRF forms the basis of fisheries certifications recognised by the Global Seafood Sustainability Initiative (GSSI).
[41] Monterey Bay Aquarium Seafood Watch, "Standard for Fisheries V4."

3.2.1.2 Best Practices for Aquaculture

Companies can find best practices for aquaculture facilities, related to protecting and restoring marine and transitional habitats in threat abatement plans, Biodiversity Strategic Action Plans (BSAPs), regional ecological standards, local knowledge, industry associations, academic and agency resources, and local, regional, or global NGOs as well as from Aquaculture Improvement Projects. While companies are encouraged to seek out engagement with local stakeholders to ensure the most appropriate understanding of best practices for the jurisdiction of operation, this target draws on a number of relevant standard-setting resources, including the FAO Code of Conduct for Responsible Fisheries (CCRF)[42] and the Monterey Bay Aquarium Seafood Watch's Standards for Aquaculture[43] as general standards of best practice for aquaculture, as follows:

- Effluent discharge, while difficult to assess, should be managed by risk assessment and monitored not only for immediate impacts within the farm's immediate vicinity but also for cumulative impacts at a regional scale. Effluent discharge should be managed to the carrying capacity of the receiving waterbody.[44]
- Use of therapeutants, hormones, drugs, antibiotics and other disease control chemicals should be at minimal levels considered safe and effective.
- Aquaculture facilities should not cause the loss of any functionality or ecosystem services in the habitats where it operates as compared to the historic or recent past (before or since 1991).
- Aquaculture facilities should be based in jurisdictions where there are area-based, cumulative management systems.
- Employ farm-level and industry-wide best practices that reduce specific threats to nature and people in the industry
- Verified, transparent farm-level reporting and disclosure
- Area-based or producer organization agreements, or farm-level management systems that are focused on ecosystem health and objectives (e.g. habitat and biodiversity protection, reduction of impact on water quality, etc.)

3.2.2 ENGAGEMENT PATHWAYS

An engagement pathway target will lead to improvements in seascapes or jurisdictions relevant to a company's direct or upstream operations, resulting in protection or restoration of marine and transitional water habitats. These pathways are required for companies with upstream impacts in marine and transitional habitats that are unable to work through their supply chains with the direct operators at locations within the target boundary to influence adoption of standards of best practice. They are additionally recommended for companies that are utilizing operations pathways.

Engagement targets are designed to improve operations and conditions in the jurisdictions where seafood is sourced to support the protection of marine and transitional habitats, and therefore are focused on external activities that a company can support in order to effect change. This framework focuses on Improvement Initiatives as the external activity to focus on within an engagement target, and further information on specific actions companies can take within improvement initiatives are detailed in the annex. Improvement initiatives selected for engagement pathways can include those

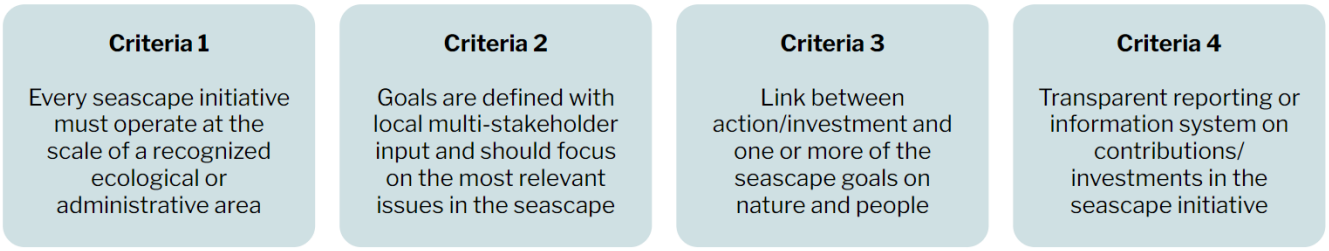
[42] While directed towards a public sector audience, the CCRF forms the basis of fisheries certifications recognised by the Global Seafood Sustainability Initiative (GSSI).
[43] Monterey Bay Aquarium Seafood Watch, "Standards for Aquaculture V4."
[44] For an example, see the Freshwater Hub Guidance: Freshwater Quality Target guidance for an example of carrying capacity guidance in freshwater waterbodies.

that promote positive management practices, good governance, restoration, and material improvements in the regions where the company has impacts on marine and transitional habitats. They may also include advocacy to improve policy and management (as long as the target can be measured with indicators directly tied to outcomes for habitat protections), increase protections for vulnerable or valuable habitat, and to establish marine protected areas (MPAs) and other effective area-based conservation measured (OECMs), particularly to protect habitat from the impacts of fishing or aquaculture.

Companies **must** follow the SBTN Stakeholder Engagement Guidance in developing their Engagement pathways targets and have a stakeholder engagement process as further outlined in Section 3.3.2.1.

3.2.2.1 Criteria for Improvement Initiatives

Improvement initiatives are place-based projects that a company can engage in, finance, or develop that result in improvements for nature and people in the jurisdictions where that company has operations that fall within the target boundary. Jurisdictional Initiatives[45] and Seascape Approaches[46] are both examples of improvement initiatives that companies can support, for example through funding or participation. Habitat restoration initiatives are also appropriate projects for engagement pathway targets if they meet the following criteria. Improvement initiatives are characterized by the following criteria:



1. Every seascape or jurisdictional approach **must** operate at the scale of a recognized ecological area (such as a Large Marine Ecosystems) or administrative area (such as states, provinces, municipalities, districts).
    a. The seascape boundary may be defined by local stakeholders
2. The vision and needs of relevant stakeholder groups **must** be included in the design, implementation, and monitoring of an initiative.
    a. At least three stakeholder groups participated in one or more phases of the seascape initiative.
3. There are collective goals and actions for nature and people based on science that are tied to the pressures and ambition of the target.
    a. Nature and people goals have been defined collectively (i.e., by three or more stakeholder groups)
    b. There is a link between initiative actions/investment and one or more of the seascape goals on nature and people.
4. There are transparent reporting and presentation/information systems sharing the actions/investments made in the initiative.
    a. Actions are reported to stakeholders.

[45] "Developing Jurisdictional Initiatives for the Seafood Sector."
[46] Murphy et al., "Fifteen Years of Lessons from the Seascape Approach."

See the Annex and Section 5.3 for further information on seascape initiative maturity and how to develop an Engagement Roadmap of specific steps companies can take to fulfill this target.

Companies are encouraged to submit Engagement pathway targets for existing initiatives they engage in that meet the above criteria that may not follow the Prioritization process of Step 2 (i.e. a location that is not prioritized in Step 2). These targets *can* be validated but they will not substitute for the required targets via the Prioritization process and will only be validated *after* Prioritized location targets are submitted and approved.

3.3 Data Selection & Establish Baseline Values

3.3.1 DATA NEEDS

In SBTN's Steps 1 and 2, companies collect data on all seafood sources including: species (or species complex), location (farm site or fishery), volume, sustainability certifications or ratings if relevant, and gear type/culture method. This facilitates the prioritization of seafood commodities and locations. But to set this target, companies will need further data to measure the impact of each source on marine and transitional habitats.

The data needs for each seafood commodity are distinct depending on if it is wild capture or farmed, as follows:

3.3.1.1 Wild Capture Seafood Data

For each wild capture seafood source, along with the information necessary for Steps 1 and 2, companies will also need to identify:

- The presence of highly damaging practices within the geographic area of the fishery.
- The presence of Protected Areas and Key Biodiversity Areas within the geographic area of the fishery.
- The marine habitats within the geographic area of the fishery.
- Where possible, if the fishery operates to standards of best practice for habitat protection (see Section 2.5.1)
- Available historic (before 2020) extent of marine habitat within the geographic area of the fishery

While data on ecosystem linkages and dependencies associated with wild caught seafood are welcomed for inclusion in this assessment, these linkages and dependencies are highly complex and not mandatory to include to determine impact on marine and transitional habitats.

3.3.1.2 Farmed Seafood Data

For each farmed seafood source, along with the information necessary for Steps 1 and 2, companies will also need to identify:

- The zoning and permitting for aquaculture farms in the region

- Impact Assessments from establishing the site and any further assessments
- The presence of highly damaging practices at the farm site
- The marine habitats within 5km of the farm site
- The operational outputs of the farm: antibiotic usage, feed ingredient practices, escapes, nutrient release, mortality, etc.
- Habitat or output monitoring data, if available
- Infrastructure development and maintenance impacts: e.g. vessel traffic
- Where possible, if the farm operates to standards of best practice for habitat protection (see Section 3.2.1.2)
- Available historic (before 2020) extent of marine habitat within 5km of the farm area

Resources for finding these data sources will be compiled in the Annex.

3.3.2 DATA SOURCE SELECTION

Where available, companies are required to use fishery- or farm-specific data collected via stock assessments, management plans, certification or ratings programs, independent reports or audits, or other sources, to develop their targets. If these primary data sources are available, the most recent data must be used for target validation and must have been published within five years of the proposed target set date, unless otherwise specified and endorsed by local experts (e.g. targets set in 2028 must use audit data from no earlier than 2023).

If primary data sources are out of date or not available, companies may use data from indigenous and local knowledge sources (ILK) or secondary data sources to determine current and desired states of nature for marine and transitional habitats. Companies **must** consult with local experts and stakeholders to determine which sources or combination of sources are appropriate. More information on tools and resources for secondary data sources is available in the Annex.

3.3.2.1 Expert and Stakeholder Consultation

Particularly when primary data sources from the fishery or farm are not available, companies **must** engage with local experts and stakeholders to ensure their data selection is robust and accurate. Relevant stakeholders are individuals or organizations that are actively engaged with a given fishery or within the corresponding management jurisdiction of the fishery or farm. They have specialized knowledge and insights relevant to the given fishery, farm or farm practices, or the area in question. See SBTNs Stakeholder Engagement Guidance for more information on how companies should work with stakeholders.

Companies are *required* to consult at least one of the following on the existence of appropriate data source for the stock of interest, and interpretation of that data:

- Government regulators, fishery managers, aquaculture managers
- Local seafood-related NGOs or local chapters of international NGOs
- Local communities and/or indigenous groups or their representatives

Companies should identify all relevant seafood sources that fall within the same jurisdiction to expedite this process. Through this consultation, companies are *required* to document whether the stakeholders were able to do the following:

- Identify the scientific data source(s)

- Identify existing thresholds or targets (at the outset of the process)
- Provide/share data sources, thresholds, and/or data
- Endorse thresholds identified by the company

Companies will be required to provide this documentation as part of their validation submission.

3.3.3 BASELINE PRESSURE VALUES AND CORRESPONDING METRICS

Companies will establish a baseline of marine habitat impact at each site location at the time of setting their target. This baseline will be dependent on the operational practices at the site, the company's pathway(s) to target setting (operations or engagement), and the data available during the target setting process. In cases of limited or no known habitat impact or extent data, Engagement targets may allow companies to establish a baseline on metrics in the ecological or social dimensions that are relevant to the stated goals of the initiative, as provided in the illustrative and non-exhaustive list below. Due to the complexity of baselining these indicators, it is not required to submit a baseline value for engagement pathways targets at the time of target submission as long as appropriate indicators have been selected (see the Annex for further information). Baseline pressure values can be submitted up to 12 months after successful target submission to allow time for companies and initiatives to properly establish data collection.

Table 1: List Of Potential Indicators

Pathway	Dimension	Metric
Operations	Outputs	Nutrient output at site
Operations	Outputs	Fallow and rest schedule
Operations	Gear	Adoption (%) of non-damaging gear
Operations	Efficiency	Percent reduction of forage fish dependency in feed
Engagement	Ecosystem	Services provided by ecosystems or an assessment of critical natural assets
Engagement	Ecosystem	Habitat connectivity, extent, etc.
Engagement	Ecosystem	Species Threat Abatement and Restoration (STAR) score at the seascape scale
Engagement	Governance	Implementation of Marine Protected Areas, Conserved Areas, and Other Effective Conservation Measures (OECMs)
Engagement	Governance	Type of governance implemented in the initiative, e.g. full, equitable, inclusive, effective, and gender-responsive representation and participation in decision-making, including a gender-action plan
Engagement	Governance	Ecosystem-based Management emplaced
Engagement	Governance	Co-management systems and areas established in the area
Engagement	Social	Gender equity in the fishery

Engagement	Social	Markers of human health and wellbeing
Engagement	Social	Access to Wi-Fi onboard fishing vessels and at aquaculture farm sites

3.4 Determine Company-Specific Protect Structural Habitat Targets

3.4.1 SPATIAL SCALE FOR TARGET SETTING

Marine and transitional habitat protection targets have variable spatial scales depending on the pathways used and the operational scale of the company setting the target. Operations pathway targets will have a smaller spatial scale as they are committing to operational changes in a wild capture fishery or fisheries or at an aquaculture farm or farms. However, engagement pathway targets will have a spatial scale relevant to the seascape or jurisdiction that falls within the target boundary or that are prioritized by companies applying prioritization from Step 2. Companies should collect habitat data within 5km of their aquaculture operations due to the variability of impact scale that occurs determined by depth of water at facility, the flow of currents, and more.

3.4.2 ESTABLISHING TARGET TIMELINES

Companies **must** establish timelines upon which they will develop, and subsequently act on (Step 4) and monitor (Step 5) science-based targets. A company's target start date is established as the year the target is set. The target end date will depend on the type of target the company is setting but should be both an ambitious and achievable period within which to meet the target, and no later than 10 years from the start date. In addition, there are several considerations to target timelines as part of the SBTN process:

- End dates for engagement targets will be set at least five years from the start date of the target, at which point the target will be re-evaluated and must be re-validated.
- Target end dates for operations targets may be set at any point between the target set date and 10 years, with incremental changes each year of the target period or with an overall change for the target period. End dates for operations targets should be set with the operational capacity of the company, facilities, and supply chain in mind, as well as the biological characteristics of the wild capture fishery or aquaculture stock and the state of the habitats in question. If operational changes are expected to exceed the maximum period of target setting (10 years), then companies are advised to consider what is achievable in the period of the target and establish those goals as the outcomes of their target with an intent to continue progress beyond the target end date.

Companies **must** consult with relevant stakeholders, according to SBTNs Stakeholder Engagement guidance, when determining timelines for protect structural habitat targets. This reflects the requirement that targets establish meaningful change and the ambition level of targets must be set for several years. In marine and transitional systems, it is not uncommon for habitat recovery or change to occur over a long period of time which may exceed the total period of a company's protection target (max. ten years). In these cases companies are advised to consider what is achievable in the time period of the target and establish those goals as the outcomes of their target with an intent to continue progress beyond the target end date.

Many initiatives and projects are likely to have a timeline that extends beyond a company's habitat protection target; when submitting a target for validation companies should ensure their data and roadmap reflects what is expected to be achievable in the target timeline.

3.4.3 TARGET TEMPLATE LANGUAGE

3.4.3.1 Operations Target Pathway

Protect Structural Habitats targets via the Operations pathway will be stated in the following form:

By [target end date], [Company name] will enact standards of best practice for [fisheries/aquaculture] at [fishery/farm location] to avoid impacts to [found habitats].

3.4.3.2 Engagement Target Pathway

Protect Structural Habitats targets via the Engagement pathway will be stated in the following form:

[Company name] is engaged in [initiative name] in [location] to achieve [stated goal relevant to habitat protection] by [target end date] as compared to a [target set date] baseline.

3.5 Target Validation

3.5.1 VALIDATION FOR OPERATIONS PATHWAYS

To ensure an operations pathway target is validated, a company **must** submit:

- Demonstration of legal status of fishing or farming operations at locations
- Data used to establish baseline of habitat condition
- Current fishing or aquaculture practices that do not meet standards of best practice
- Selection of indicators
- If the company is not the direct operator, documentation of working relationship with the direct operator

3.5.2 VALIDATION FOR ENGAGEMENT PATHWAYS

To ensure an operations pathway target is validated, a company **must** submit:

- Demonstration of legal status of fishing or farming operations at locations
- Data used to establish baseline of habitat condition
- Roadmap of Improvement Initiative, as laid out in the Annex

If an Engagement Pathway target is submitted without an Operations Pathway:

- Documentation of attempts to work with direct operations (fishers, aquaculture farms) at locations) to enact standards of best practice (e.g. emails)

or

- Documentation of standards of best practice already enacted at operation location(s)

TARGET 3: REDUCE RISK TO ENDANGERED, THREATENED, AND PROTECTED MARINE WILDLIFE POPULATIONS

4.1 Introduction To The Reduce Risk To Endangered, Threatened, And Protected Species Target

4.1.1 TARGET RATIONALE AND APPROACH

This methodology is meant to create a pathway for companies within seafood value chains to support responsible wild capture fisheries that limit risk to populations of endangered, threatened, and protected (ETP) marine wildlife by fishing activities. The desired outcome of this target is to reduce the risk to ETP marine wildlife from wild capture fishing and have companies engage in relevant fisheries and ecosystems in ways that protect and conserve these ETP marine wildlife populations.

Target 3 has a limited scope, focusing specifically on pressures from wild capture fishing impacts on ETP marine wildlife populations. For this target, the term ETP marine wildlife covers marine fauna that are endangered, threatened, and/or protected, according to international, regional, or national registries, and are not commercially harvested or managed. Fish and invertebrate species that are listed as endangered, threatened, or protected but are commercially harvested and managed (or managed as bycatch)[47] are addressed in Target 1: Avoid and Reduce Overexploitation. Species that are similarly listed as endangered, threatened, or protected that are habitat forming (e.g. corals) should be addressed under this target, rather than Target 2: Protect Structural Habitats. Indirect impacts to ETP marine wildlife through damage to habitat are addressed under Target 2: Protect Structural Habitats.

Due to the lack of data associating supply chains and end products with ETP marine wildlife interactions, note that there are limited opportunities for companies to take action to directly reduce observed fisheries interactions with those species. The primary approach of this target guidance is to require companies to engage in improvements that reduce risk of interaction and increase the level and quality of available data about impacts of fishing on marine wildlife populations.

4.1.2 PROCESS FOR SETTING REDUCE RISK TO ETPS TARGETS

When a company has evidence of material impacts to endangered, threatened, and protected marine wildlife from wild capture practices in their direct or upstream operations, they will set targets in

[47] Sources to reference to determine bycatch species groups include: Alverson et al (1994) https://www.fao.org/4/t4890e/T4890E03.htm#ch1.1.7 and Roda et al (2019) https://openknowledge.fao.org/server/api/core/bitstreams/141decf1-33f3-4837-a137-d6ba8b0a9456/content

alignment with the prioritization process of Step 2. The company will follow the summarized steps below to identify target requirements and prepare materials to be submitted for target validation:

1. **Select data sources**

Companies **must** use several types of data sources to determine baseline values of pressure and risk to ETP marine wildlife from wild capture fishing (Section 4.2)

2. **Determine baseline risk to ETP marine wildlife from wild fisheries sources**

Companies determine the risk to ETP marine wildlife that is present in their supply chains by using fisheries and external data to identify spatial and temporal overlaps between fishing activities and listed marine wildlife that can be impacted by specific gear types.

3. **Determine company specific targets**

Based on the baseline risk, use the following approaches, as appropriate (described in more detail in Section 4.4 below):

   i) Cessation pathway: Companies commit to cease sourcing of wild capture seafood known, through observation (by human observers or electronic monitoring), to have interactions (such as incidental bycatch and gear entanglement, noise pollution, or vessel strikes) with species listed as critically endangered without appropriate fisheries management precautions. This pathway is reserved only for specific sourcing cases (Section 4.4.1.1).

   ii) Operations pathway: Companies commit to improvements in direct operations or operations within upstream supply chains to meet standards of best practice that reduce risk to ETP marine wildlife (Section 4.4.1.2).

   iii) Engagement pathway: Companies commit to supporting existing, or developing new improvement initiatives to reduce risks to ETP marine wildlife and increase data availability from wild capture seafood (Section 4.4.1.3). Engagement can occur at the fishery, regional, seascape, jurisdictional, or global level.

4. **Target statements:** Using the appropriate pathway, develop target statements for each relevant seafood source.
5. **Target validation**: After completing the above steps, a company is ready to submit its data for target validation.

4.2 Data Source Selection

4.2.1 DESCRIPTION OF DATA NEEDS

In SBTN's Steps 1 and 2, companies collect data on all seafood sources including: species (or species complex), fishery location (as granular/specific as possible, e.g. exclusive economic zone, FAO subarea), sustainability certifications or ratings if relevant, and gear type. But to set this target, companies will need further data to measure the baseline risk to ETP marine wildlife.

Rather than relying solely on known interactions between fishing and marine wildlife, this target primarily uses an assessment of risk to determine if companies **must** set this target and which pathway to use (Section 4.3).[48]

[48] Most global fisheries continue to have poor observer coverage, hindering efforts to collect data and monitor compliance with fishing regulations. For example, less than 5 percent of longline tuna vessels have an observer on board to independently verify activity[48] and RFMOs rarely achieve observer coverage levels above 5 percent[48]. Therefore, the ability of companies and their suppliers to use observed interactions between seafood commodities and ETP marine wildlife to set targets is limited.

Companies are not expected or asked to define the risk a fishery poses to ETP marine wildlife for themselves. To set targets, companies rely on existing data and indicators of ETP marine wildlife risk and interactions, which are evaluated and endorsed by local experts and stakeholders, to determine the appropriate pathway for each of their targets. Companies **must** use a combination of data sources to determine if fisheries pose a high risk to ETP populations or, in limited cases, have evidence of interactions. SBTN accepts several different approaches to the use of data sources to determine risk to ETP marine wildlife. These data sources are used to determine if high risk to ETP is occurring and whether a cessation target is needed.

Finding Data for Target Setting

Risk to ETP marine wildlife can be derived by companies in different ways. Fishery management plans are likely the best sources for determining specific fisheries-related risk, using information collected over many years. Seafood sustainability certifications, improvement project documentation, or third-party platforms (e.g. Monterey Bay Aquarium Seafood Watch, Marine Stewardship Council) may also provide clarity of the types of fishing strategies that pose risks to marine wildlife. As stated above, observer data is likely to be the least common method for determining risk.

4.2.1.2 Data Needed to Set Targets

The following data **must** be used by companies to determine if they need to set a Reduce Risk to ETP Species target:

1. Fisheries Data is critical to understanding the spatial and temporal risks to marine wildlife from fishing activities. To understand risk, companies **must** know when and from where their seafood was harvested, as well as the methods used. This data may come from fishery management plans, stock assessments associated with relevant fisheries, seafood traceability and supply chain reporting, or certification reporting, such as the Marine Stewardship Council's Chain of Custody Standard. Data used to set targets should include:
    - Spatial extent of fishing operations (as specific/granular as possible – e.g. exclusive economic zone, areas on the high seas managed by Regional Fisheries Management Organization)
    - Seasonality of fishing activities (by month)
    - Gear types associated (**required**)
    - Rates of incidental catch
    - Type of interactions (incidental bycatch, entanglement, etc.)
    - Potential species affected by the given gear (**required**)
    - Incidental catch/interaction mitigation measures
2. Endangered, threatened, and protected species status: Once companies have a firm understanding of the scope of fishing operations associated with their value chains, they **must** identify the status of species that may be at risk from wild capture fishing. The status of species may be determined at the national or international level. Examples include:
    - Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

- International Union for Conservation of Nature's (IUCN) Red List of Threatened Species
- United States Endangered Species Act (ESA) and similar national level lists
- NOAA's Biological Opinions
- Fisheries and Oceans Canada Aquatic species at risk tool
- Non-governmental organizations, such as BirdLife International collect a variety of data and provide a holistic view of the state of ETP marine wildlife.

If a species is included on any of the above list, it must be covered by this target.

3. ETP Marine Wildlife Data: When companies have determined the status of species that might be impacted by negative interactions with fishing, they **must** understand the risk of interactions with relevant fisheries. Data needed for this determination includes:
    - Spatial extent of relevant ETP marine wildlife (similar scale as fishing activity where possible)
    - Seasonality of relevant ETP marine wildlife in relevant areas (monthly and/or behavioral cycles, e.g. mating, nursing, nesting, migration)
    - Threats to the species from wild capture fishing (e.g. incidental bycatch, entanglement, etc.)

4.2.2 EXPERT AND STAKEHOLDER CONSULTATION

The first stage of the consultation process consists of checking the SBTN data source tool (which is under development) for available resources that contain the information described in the previous section. This tool will contain relevant data sources that have either been used by other companies that have set and have had externally validated SBTs for wild seafood or have been identified and approved through research efforts by the SBTN Ocean Hub. SBTN will populate this tool as companies set and validate targets using best available data, so that coverage will increase as time goes on. While the tool is in development, companies can skip this step and proceed to the relevant consultation with stakeholders in the jurisdiction.

The second stage of the consultation process involves engagement with **jurisdictional stakeholders**. Relevant jurisdictional stakeholders are individuals or organizations that are actively engaged with a given ETP population within the corresponding management jurisdiction. They have specialized knowledge and insights relevant to the given ETP marine wildlife, the risks to species from wild capture fisheries, or relevant local considerations. Companies ***should*** start with an internal consultation within their company and supply chain to identify the stakeholders that may have relevant information to inform data source selection. See SBTNs Stakeholder Engagement guidance[49] for more information on how companies should work with stakeholders.

Companies are **required** to consult at least one of the following on the existence of appropriate data sources for the fishery with ETP risk, and interpretation of that data:

- Regional Fisheries Management Organizations (RFMO)
- Government regulators and fishery managers
- Offices of SBTN Ocean Hub partner organizations (Conservation International, WWF, The Nature Conservancy, Sustainable Fisheries Partnership, FishWise, Marine Stewardship Council)
- Local seafood- or marine wildlife-related NGOs or local chapters of international NGOs
- Local communities and/or Indigenous groups or their representatives

[49] SBTN, 2023 "Stakeholder Engagement Guidance V0.1"

Companies should identify all relevant fisheries that fall within the same jurisdiction with risks to ETP marine wildlife to expedite this process. Through this consultation, companies are *required* to document whether the stakeholders were able to do the following:

- Identify the scientific data source
- Identify risks to ETPs
- Provide/share data sources and/or data

Companies will be required to provide this documentation as part of their validation submission.

4.3 Establish Indicators And Baselines For ETP Species Interaction Risk And Mitigation

4.3.1 INDICATORS OF RISK TO ETPS

Ocean SBTs rely on biologically, spatially, and temporally relevant information to indicate what risks a given fishery may pose to ETP marine wildlife via entanglements, incidental catch, vessel strikes, noise pollution and more. As previously discussed, known or observed interactions with ETP wildlife that are traceable back to specific seafood products are uncommon. Therefore, this methodology uses indicators of risk to ETP marine wildlife populations in the target-setting process.

Seasonality, spatial extent of the fishery, and gear type are three key pressure-based indicators (see Section 4.2.1.1) that when analyzed together help companies understand the risk to marine wildlife generated by their seafood chains and develop targets. Other important pressure-based indicators for companies when selecting a target pathway (Section 4.4.1) include:

- Management practices to reduce the risk of interactions with ETP marine wildlife. These include:
    - Monitoring the status of and impacts to marine wildlife;
    - Mitigation strategies, such as gear improvements, changes to fishing season, etc.
- The presence or absence of electronic monitoring or observer coverage for monitoring fishing activity against fisheries management and regulation.

State of nature (SoN) data is also necessary for target setting. Data on the health of ETP marine wildlife populations is more variable than for commercially harvested fish species. Therefore, this methodology relies on ETP species lists to indicate the health of relevant species negatively impacted by fishing activity. Species that are listed as "critically endangered" (or similarly rated, compared to the definition provided by IUCN) are of particular concern, which is reflected in the Cessation pathway (see Section 4.4.1.1).

4.3.2 ESTABLISHING BASELINES

Risk baselines for the interaction between ETP marine wildlife and fishing are dependent on the spatial and temporal overlap between fishing activities and ETP marine wildlife populations, as well as the management practices and mitigation strategies used within the relevant fisheries.

Companies evaluate this risk using fishery and ETP population data and other relevant tools such as the Bycatch Solutions Hub[50], marine STAR[51], Ocean Health Index, Seafood Watch, and more to understand and identify areas and times where there is overlap between fishing activity and ETP marine species, and therefore risk of negative interactions. This is done with input and verification from relevant stakeholders.

Companies **must** use known or estimated interaction data (e.g. bycatch rates) as their risk baseline if available, or use the above data sources and stakeholder consultation to perform a data-limited, qualitative assessment of risk to ETP marine wildlife generated by their value chains. Companies **must** rate the level of risk on a scale from 0-5 (0 = not applicable, 1 = least concern, 5 = highest concern) posed by each indicator, as follows.

- **Gear type:** What level of risk does the gear type of the fishery pose to the relevant ETP species? (1-5)
- **Rate of interaction:** What level of risk does the estimated rate of interaction pose to relevant ETP species? (1-5)
- **Spatial overlap:** What level of risk does spatial overlap between the fishery and ETP species range pose (including feeding, mating, migratory)? (1-5)
- **Temporal Overlap:** What level of risk does temporal overlap between fishery activities and ETP species, in each geography, pose? (1-5)

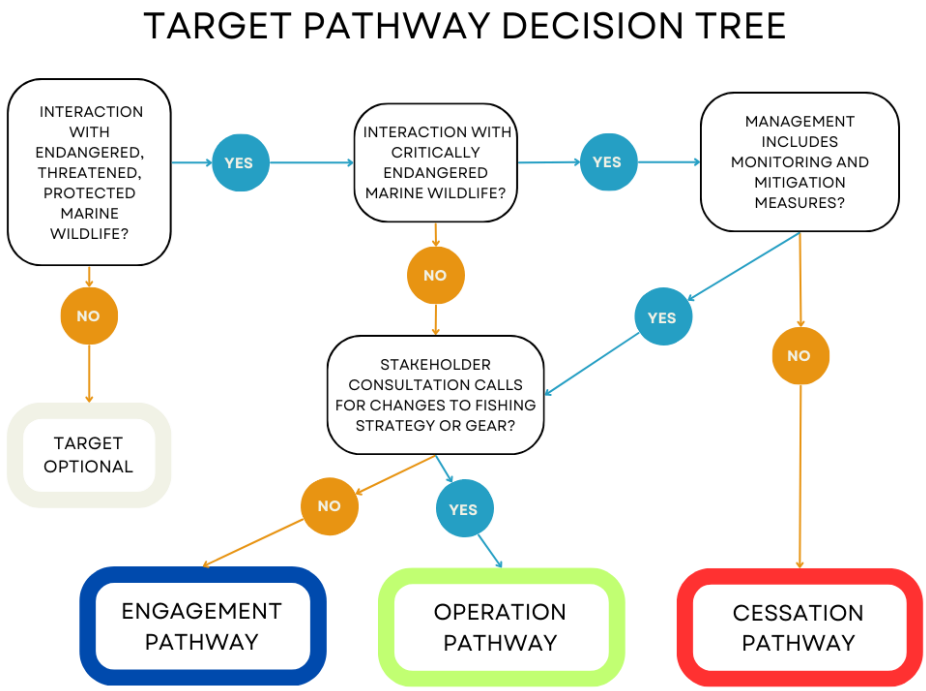
This score provides a reference baseline for companies by which they can measure progress against targets using pressure-based indicators. Companies may also use state of nature indicators (Section 4.3.1) to measure and monitor progress.

4.4 Determining Company Specific Targets

4.4.1 TARGET PATHWAYS

Before detailing the steps for target setting, it is important to describe the types of targets that are expected of companies, and how and to whom they apply. The characteristics of the SBTN Ocean Hub's targets align with the United Nations Environment Programme Finance Initiative's (UNEP FI) Turning the Tide report[52] and Target Setting Manual.[53] Companies may set the Reduce Risks to ETP Species target through three pathways depending on the characteristics of risk ETP marine wildlife, as described below.

[50] Best practices to reduce ETP bycatch in fisheries. - Reducing bycatch is good for the environment. And it's good for business. (bycatchsolutions.org)
[51] Turner, J.A., Starkey, M., Dulvy, N.K. *et al.* Targeting ocean conservation outcomes through threat reduction. *npj Ocean Sustain* 3, 4 (2024). https://doi.org/10.1038/s44183-023-00040-8
[52] UNEP FI, 2020 "Turning the Ride"
[53] UNEP FI, 2024 "Target Setting Manual"



4.4.1.1 Cessation Pathways

Cessation target pathways relate directly to a company's own practices and operations. More specifically relating to the composition of its seafood sourcing, through production (e.g. fishing companies) or procurement (e.g. mid-supply chain stakeholders and end buyers). Companies that take the cessation pathway to set targets commit to cease sourcing of wild capture seafood in their portfolio where observed and documented interactions with critically endangered marine wildlife are considered too high risk for improvement, or mitigation efforts that could be achieved via the engagement pathway, as described below, due to a lack of adequate management structures in place.

To determine sourcing cessation commitments, cessation pathway targets rely on observed, fishery-dependent data and stakeholder input related to critically endangered marine wildlife interactions and incidental catch from a commercial fishery in the company's seafood portfolio.

Cessation pathways are only required for companies that produce or source seafood from fisheries that meet both of the following criteria:

1. Relevant fisheries have evidence of or observed (using human observers or electronic monitoring) interactions with critically endangered marine wildlife, according to fishery-dependent data or geographically appropriate lists (see Section 4.2.1 for more detail on data source lists)
2. There are no required or voluntary incidental catch/interaction mitigation measures in place to reduce risk from the fishery to critically endangered species (such as modifications to fishing gears, spatial or temporal closures, or other modifications to fishing strategy such as soak times) and the management plan does not include adequate monitoring for the critically endangered marine wildlife interactions (such as electronic monitoring, observer coverage, or fishery independent surveying) or the health of the species.

The cessation pathway is the least common pathway in the Reduce Risks to ETP Species target, as it should only arise when there is confirmed data on critically endangered interactions in seafood supply chains and a lack of mitigation strategies and adequate monitoring to reduce risks to ETP marine wildlife (see the Bycatch Management Information Systems reference list for resources on mitigation strategy resources[54]).

4.4.1.2 Operations Pathways

Companies that find risk of interactions with ETP marine wildlife in their seafood sources, but do not trigger the cessation pathway may take the operations pathway to set targets. With this pathway, they commit to improvements in their own practices and operations or those of suppliers with whom they can work to facilitate change. Companies with pressures from direct operations **must** set operations pathways if stakeholder consultation results in recommendation that changes in fishing strategy and/or gear (or other operational practices) would best reduce risk to ETP marine wildlife. See Section 5.2.2 for a list of required and recommended stakeholders for consultation for this target. If companies are unable to make changes to fishing strategy or gear (e.g. unable to work with suppliers, management restrictions), they **must** submit justification for an exception along with their target submission.

The operations pathway includes changes to fishing strategies and gear types that reduce the risks and likelihood of interactions with the identified ETP marine wildlife species, or any other operational practice that could reduce that risk.

4.4.1.3 Engagement Pathways

An engagement pathway target will lead to improvements in seascapes or jurisdictions relevant to a company's direct or upstream operations, resulting in a reduction of risk to ETP marine wildlife or the recovery, conservation or protection of ETP marine wildlife. If stakeholder consultation does not result in a recommendation of changes in fishing strategy or other operational practices, companies **must** set engagement pathway targets.

Improvement initiatives selected for engagement pathways can include those that promote positive management practices, ETP marine wildlife habitat restoration, and other material improvements in the fisheries or regions where the company has impacts on ETP marine wildlife. They may also include advocacy at local or regional levels to improve policy and management, increase protections for ETPs, and to establish marine protected areas (MPAs) and other effective area-based conservation measures (OECMs), particularly to protect ETPs from the impacts of fishing. Advocacy initiatives must still include measurable outcomes at the seascape or jurisdictional level for target-setting either via changes in policy that contribute towards stated goals for ETP marine wildlife risk reductions and protections or via outcomes in the seascape or jurisdiction.

Companies **must** follow the SBTN Stakeholder Engagement Guidance in developing their Engagement pathways targets and have a stakeholder engagement process as further outlined in Section 4.2.2.

<u>Criteria for Improvement Initiatives</u>

Improvement initiatives are place-based projects that a company can engage in, finance, or develop that result in improvements for nature and people relevant to the population status and recovery of ETP

[54] Search References | Bycatch Management Information System (BMIS) (bmis-bycatch.org)

marine wildlife in the jurisdictions where that company has operations that fall within the target boundary. Jurisdictional Initiatives[55] and Seascape Approaches[56] are both examples of improvement initiatives. Habitat restoration initiatives are also appropriate projects for engagement pathway targets if they meet the following criteria and benefit ETP marine wildlife. Improvement initiatives are characterized by the following criteria:

1. Every seascape or jurisdictional approach **must** operate at the scale of a recognized ecological area (such as a Large Marine Ecosystems) or administrative area (such as states, provinces, municipalities, districts).
    a. The seascape boundary may be defined by local stakeholders
2. The vision and needs of relevant stakeholder groups **must** be included in the design, implementation, and monitoring of an initiative.
    a. At least three distinct stakeholder groups participated in one or more phases of the seascape initiative. (See the SBTN Stakeholder Engagement Guidance for more details)
3. There are collective goals and actions for nature and people that are tied to the pressures and ambition of the target.
    a. Nature and people goals have been defined collectively (i.e., by three or more stakeholder groups)
    b. There is a link between initiative actions/investment and one or more of the seascape goals on nature and people.
4. There are transparent reporting and presentation/information systems sharing the actions/investments made in the initiative.
    a. Actions are reported to relevant stakeholders.

Existing initiatives **must** meet the first two criteria at the time of target submission along with an action plan and financial plan to qualify for target validation and submit a plan for achieving the third and fourth criteria within one year. New initiatives started by the company **must** submit documentation of plans to meet all four criteria within one year of target submission. The Annex of this Guidance goes into more detail of the documentation and requirements for all engagement pathways for all targets and a description of each, but a basic summary is as follows:

Required at target submission:

- Action plan and timeline of initiative
- Financial plan
- Description of the scale of the initiative (if not self-evident in name of initiative)
- Stakeholder Engagement
    - Assessment of needs of local communities with stakeholder consultation
    - Documentation of stakeholder support
- MOU of initiative, governance structure, evidence of clear and transparent operating procedures (or plan to improve procedures)
- Selection of indicator(s) to measure progress and impacts of planned actions
    - Reasoning for the indicator selected

Required within 12 months of target submission:

[55] "Developing Jurisdictional Initiatives for the Seafood Sector."
[56] Murphy et al., "Fifteen Years of Lessons from the Seascape Approach."

- Calculation of the baseline corresponding to each indicator
- Assessment of unintended negative consequences
- Implementation plan for safeguards, including monitoring
- Documentation of data governance systems for credible gathering, storage, analysis, and use of data in the initiative
- Clear reporting framework and strategy for communication

Recommended:

- Terms of reference and membership of governance bodies
- Operating procedures/Code of Conduct
- Dispute resolution processes
- Publicly available information on the structure, agreements, financing, and actions of the initiative

Companies are encouraged to submit Engagement pathway targets for existing initiatives that meet the above criteria but may not follow the Prioritization process of Step 2 (i.e. a location that is not prioritized in Step 2). These targets may be validated but will not substitute for the required targets via the Prioritization process and will only be validated after they are submitted and approved.

4.4.2 SPATIAL SCALE FOR TARGET SETTING

These targets have variable spatial scales depending on the pathways used, the footprint of the company setting the target, and the life history and habitat of the relevant ETP marine wildlife. Cessation and operations pathway targets are set around the footprint of a specific fishery and thus will have a smaller spatial scale as they are tied to sourcing from that wild capture fishery or fisheries at a distinct location. However, engagement pathway targets may have a spatial scale relevant to the seascape, jurisdiction or to a critical habitat for ETP marine wildlife and can have a much larger spatial extent than cessation and operations pathways. Therefore, it may be possible for the engagement pathway to be applied outside the jurisdiction in which the fishery operates in cases where an initiative's actions may materially benefit an ETP marine wildlife with habitats that extend beyond the operational locations of a fishery. Companies are encouraged to first seek out initiatives that improve on pressures from their direct or upstream operations or within the jurisdiction and to set targets with as small and relevant a spatial scale to their operations as possible.

4.4.3 ESTABLISHING TARGET TIMELINES

4.4.3.1 Cessation pathway

A company's target start date is established as the year the target is set, and the end date of the target is established as within at most five years from the start date of the target. This reflects the need for urgent and meaningful change, but the allowance for sourcing contracts and the need to secure suitable alternative sources. Companies may apply for exceptions to extend their target end date with their target submission with evidence for their need for extension.

4.4.3.2 Operations and Engagement pathways

A company's target start date is established as the year the target is set, and the end date of the target is established as at least five years from the start date of the target and no more than ten years from the start date. This reflects the requirement that targets establish meaningful change, and the ambition

level of targets must be set for several years. In marine and transitional systems, it is not uncommon for ETP marine wildlife recovery or change to occur over a long period of time which may exceed the total period of a company's reduced risk to ETP marine wildlife target (max. ten years), in these cases companies **must** consider what is achievable in the time period of the target and establish those goals as the outcomes of their target with an intent to continue progress beyond the target end date.

Many initiatives and projects are likely to have a timeline that extends beyond a company's ETP risk reduction target; when submitting a target for validation companies should ensure their data and roadmap reflects what is expected to be achievable in the target timeline.

4.5 Template Statements For Reduce Risk To ETPS Targets

4.5.1 CESSATION TARGET PATHWAY

Reduce Risks to ETP Species targets via the Cessation pathway will be stated in the following form:

By [target end date], [Company name] will cease to source seafood with material impacts on [ETP marine wildlife] in [location].

4.5.2 OPERATIONS TARGET PATHWAY

Reduce Risks to ETP Species targets via the Operations pathway will be stated in the following form:

By [target end date], [Company name] will reduce risk of negative impacts to [ETP marine wildlife] in [location] from [fishery operations].

4.5.3 ENGAGEMENT TARGET PATHWAY

Reduce Risks to ETP Species targets via the Engagement pathway will be stated in the following form:

[Company name] is engaged in [initiative name] in [location] to reduce risks to [ETP marine wildlife] by [target end date] as compared to a [target set date] baseline.

4.6 Target Validation

4.6.1 VALIDATION FOR CESSATION PATHWAYS

To ensure a cessation pathway target is validated, a company **must** submit:

- Current seafood portfolio which meets the criteria for the cessation pathway.

4.6.2 VALIDATION FOR OPERATION PATHWAYS

To ensure an operation pathway target is validated, a company **must** submit:

- Data Submission Template for target.
    - Data used to establish baseline of risks to ETP marine wildlife.
- Stakeholder Consultation documentation.

4.6.3 VALIDATION FOR ENGAGEMENT PATHWAYS

To ensure an engagement pathway target is validated, a company **must** submit:

- Data Submission Template for target.
    - Data used to establish baseline of risks to ETP marine wildlife.
- Roadmap of Improvement Initiative, as laid out in the Annex.

Annex

5.1 Social Responsibility Annex

5.1.1 THE IMPORTANCE OF SOCIAL RESPONSIBILITY AND HUMAN/LABOR RIGHTS IN THE SEAFOOD SECTOR

The seafood sector is characterized by complex and opaque supply chains, highlighting the need for companies to assess human and labor rights risks in order to act on them accordingly. Less than 10% of food companies have a full human rights due diligence (HRDD) mechanism in place, which is essential for identifying, assessing, and acting on human rights risks in their business activities and supply chains[57]. This lack of human rights due diligence commitments, along with the lack of worker-led supply chain monitoring and verification processes, enables and contributes to human and labor rights abuses in seafood.

The increase in human rights due diligence regulation, alongside demand from buyers, investors, and consumers, is leading companies to identify systemic solutions and take action at an unprecedented pace. However, given the weak implementation of human rights due diligence processes in seafood supply chains (i.e., companies do not typically engage with suppliers beyond Tier 1, do not engage directly with fishers and their representatives as part of due diligence processes, nor have processes for remediation to address the abuses found), we are at a critical juncture to identify and test credible, holistic, and worker-centric HRDD models.

Despite the progress achieved to date, the seafood industry is still far from adopting robust, effective social responsibility programs at scale. Advancing decent work for tens of millions of people worldwide, at all stages of the supply chain, requires a paradigm shift in how companies address human rights and labor abuses in supply chains by placing corporate respect for fishworkers' human rights at the top of the agenda.

5.1.2 THE INTERCONNECTED NATURE OF ENVIRONMENT, CLIMATE AND SOCIAL RESPONSIBILITY

Illegal fishing and human rights violations at sea represent significant threats to ocean ecosystems and human communities in the blue economy. Opacity and the lack of digital infrastructure in global seafood supply chains have long created the conditions under which illegal activities can thrive. Approximately 11-26 million tonnes of seafood is lost each year to illegal, unreported, and unregulated (IUU) fishing, representing a mean loss of 18% across all fisheries[58], leading to significant global impacts on fisheries and loss of revenue and livelihood opportunities in both the wild capture and aquaculture sectors.

Illegality in the sector also encompasses a wide range of human rights violations. Fishworkers in the aquaculture, wild harvest, and seafood processing sectors often face similar issues (i.e., poor recruiting practices, withholding of personal documents, unhealthy and/or dangerous working and/or living conditions, and discrimination). Fishers at sea are particularly vulnerable to human and labor rights abuses due to the remote nature of fish harvesting and this phenomenon is both globally prevalent and highly complex in its root causes. It is estimated that up to 32,000 deaths occur every year in fisheries, making fishing one of the most dangerous professions in the world[59] Human rights abuses in industrial

[57] World Benchmarking Alliance 2021 Food and Agriculture Benchmark, 2021 Food and Agriculture Benchmark | World Benchmarking Alliance
[58] Agnew et al., 2009 Estimating the Worldwide Extent of Illegal Fishing | PLOS ONE
[59] Saftey and Working Conditions in the Fisheries Sector and Protection of the Marine Environment, FAO. (2022) Collection of fisher safety data and accident and mortality information (fao.org)

fisheries include forced labor, human trafficking, debt bondage, and sexual and labor exploitation, and these issues largely go undetected on vessels despite being widely acknowledged by regulatory authorities, multilateral institutions, the private sector, and non-governmental actors.

Finally, climate change is exacerbating social issues for coastal and marginalized communities. As fish species migrate to new geographic areas, threatening to disrupt regional and national economies[60], weather patterns change, and the number of climate refugees and migrants increases globally, fishworkers will increasingly need access to decent work, alternative livelihoods, and/or adaptation support (e.g., education, capital, etc.). Understanding the ramifications of climate change on particular species and supply chains will be critical to ensure the long-term socio-economic and environmental sustainability of local communities, and thus the long-term surety of supply for seafood buyers.

5.1.3 STAKEHOLDER IDENTIFICATION

The SBTN Ocean Hub's Social Responsibility Guidance builds on SBTN's Stakeholder Engagement Guidance. Here, social responsibility and human rights relate to critical stakeholders, as defined in the Stakeholder Engagement guidance. Of particular importance to ocean sectors are a company's workforce and supply chain workers that perform labor upstream or downstream of the company This includes smallholder farmers as well as migrant workers and women workers who play significant but often undervalued roles in seafood supply and value chains. Indigenous Peoples and local communities that depend on marine resources should also be considered when setting science-based targets for the ocean.

5.1.4 RESOURCES

Resources for developing a Public Social Responsibility Commitment

- Global Compact Network Netherlands, Oxfam, and Shift: Examples of Policy Commitments
- RISEseafood.org: Crafting social responsibility commitments

5.1.4.1 Examples of Human Rights Due Diligence

- United Nations Guiding Principles on Business and Human Rights
- Roadmap for Improving Seafood Ethics (RISE)
- OECD Due Diligence Guidance for Responsible BusinessAccountability Framework
- Human rights impact assessment guidance and toolbox (Danish Institute for Human Rights)
- United Nations Global Compact
- Environmental, Social, and Governance (ESG) frameworks

5.1.4.2 Conventions, Protocols, and Guidance

1) International Labour Organization Conventions (ILO):
    a) Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87)
    b) Right to Organise and Non-Discrimination of Unions, 1949 (No. 98)
    c) Collective Bargaining Convention (No. 154)
    d) Forced Labour Convention, 1930 (No. 29)
    e) Abolition of Forced Labour Convention, 1957 (No. 105)
    f) Minimum Age Convention, 1973 (No. 138)
    g) Worst Forms of Child Labour Convention, 1999 (No. 182)
    h) Equal Remuneration Convention, 1951 (No. 100)
    i) Discrimination (Employment and Occupation) Convention, 1958 (No. 111)
2) ILO General principles and operational guidelines for fair recruitment, 2016

[60] Bell et al., 2021

3) ILO General principles and operational guidelines for fair recruitment & Definition of recruitment fees and related costs. International Labour Office– Fundamental Principles and Rights at Work Branch, Labour Migration Branch – Geneva, 2019
4) ILO Work in Fishing Convention, 2007 (No. 188)
5) ILO Maritime Labour Convention 2006 (No. 186)
6) ILO Migrant Workers (Supplementary Provisions) Convention, 1975 (No. 143)
7) ILO Recommendation Concerning the Prohibition and Immediate Action For the Elimination of the Worst Forms of Child Labour, 1999 (No. 190)
8) ILO Supplementary Convention on the Abolition of Slavery, 1956
9) ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy, 2017
10) International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, 1990
11) International Covenant on Civil and Political Rights, 1966
12) International Covenant on Economic, Social and Cultural Rights, 1966
13) IOBR 2013. International Observer Bill of Rights - A guide to the health, safety, welfare, and professionalism of observers. https://apo-observers.s3.us-west-2.amazonaws.com/wp-content/uploads/2021/01/18142557/international-observer-bill-of-rights-guide.pdf
14) FAO Code of Conduct for Responsible Fisheries, 1995
15) OEDC Due Diligence for the Inclusion of Indigenous Peoples
16) OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractive Sector
17) OECD Guidelines for Citizen Participation Processes
18) UN Convention on the Elimination of All Forms of Discrimination against Women, 1979
19) UN Convention on the Rights of the Child, 1990
20) UN Declaration on the Right to Development, 1986
21) UN Declaration on the Rights of Indigenous Peoples, 2007
22) UN Declaration on the Rights of Persons Belonging to National or Ethnic, Religious, and Linguistic Minorities, 1992
23) UN Guiding Principles on Business and Human Rights, 2011
24) UN Protocol to Prevent, Suppress, and Punish Trafficking in Persons Especially Women and Children, 2000
25) UN Universal Declaration of Human Rights, 1948
26) CGIAR: Consultative Group for International Agriculture Research, Research Program on Aquatic Agricultural Systems
27) FAO Goodfish Code
28) FAO Voluntary guidelines for securing sustainable small-scale fisheries in the context of food security and poverty eradication, 2015
29) FAO Voluntary guidelines on the responsible governance of tenure of land, fisheries and forests in the context of national food security, 2012
30) FAO Voluntary guidelines to support the progressive realization of the right to adequate food in the context of national food security, 2004
31) FAO & WHO Rome Declaration on Nutrition, 2014
32) Oxfam (2016). "Identifying Gender Inequalities and Possibilities for Change in Shrimp Value Chains in Indonesia and Vietnam."
33) Roadmap for Improving Seafood Ethics (RISEseafood.org)

34) SOMO (Centre for Research on Multinational Corporations). "Human rights and grievance mechanisms." www.somo.nl/human-rights-and-grievancemechanisms
35) United Nations Office of Drugs and Crime (UNODC, 2013). "Human Trafficking."

5.2 Secondary Data Sources

The Ocean Hub has developed a spreadsheet of Data Resources for target development and submission that can be downloaded alongside the Guidance from [link to follow].

5.3 Seascape Engagement Initiative Roadmap Information

5.3.1 THE MINIMUM CRITERIA OF A SEASCAPE INITIATIVE

In addition to context provided in the main text, this annex serves to expand on the minimum criteria and necessary documentation for submitting engagement initiatives under the Engagement pathways of the Ocean Hub Guidance.

There are four criteria that all engagement initiatives must meet regardless of the target the pathways sits within, but not all criteria must be met at time of target submission to allow for companies and initiatives to progress on target submission and improvements in a timely manner. The four criteria are as follows:
At time of target submission:

1. Every seascape or jurisdictional approach must operate at the scale of a recognized ecological area (such as a Large Marine Ecosystems) or administrative area (such as states, provinces, municipalities, districts).
    a. The seascape boundary may be defined by local stakeholders
2. The vision and needs of relevant stakeholder groups must be included in the design, implementation, and monitoring of an initiative.
    a. At least three distinct stakeholder groups participated in one or more phases of the seascape initiative. (See the SBTN Stakeholder Engagement Guidance for more details)

Within one year of target submission:

3. There are collective goals and actions for nature and people that are tied to the pressures and ambition of the target.
    a. Nature and people goals have been defined collectively (i.e., by three or more stakeholder groups)
    b. There is a link between initiative actions/investment and one or more of the seascape goals on nature and people.
4. There are transparent reporting and presentation/information systems sharing the actions/investments made in the initiative.
    a. Actions are reported to relevant stakeholders.

If a company is engaging in an existing initiative that meets all four criteria, or is establishing an new initiative and is able to satisfy all four criteria at the time of target submission, the company is welcome

to submit all documentation. However, if the existing or new initiative does not meet these criteria, the company will submit documentation (further defined below) that satisfies the first two criteria and a brief summary of how the company and/or the initiative plans to meet the remaining criteria within the following year.

Initiatives can range from very local and engaged with a specific fishery or habitat patch all the way up to jurisdictional or even global advocacy, however they all must result in outcomes that are tied to the seafood source for which the target is being set. Advocacy initiatives can be difficult for companies to establish as engagement targets simply because there must be an indicator selected for baseline measurement that is connected to the pressures addressed by the target and that the advocacy undertaken by the initiative and the company is then able to make progress on. For example, advocacy initiatives are not appropriate for target setting where awareness, meetings, or other communications-based indicators are intended for measurement. However, advocacy initiatives where a change in policy which will have meaningful outcomes within the target boundary, or where advocacy will lead to actual closures or protections for marine species or habitats, is the indicator can be appropriate for target setting as long as they meet all initiative criteria.

Companies are encouraged to engage with stakeholders and environmental organizations local to their pressures to select initiatives for engagement if they are not already engaged in qualifying initiatives. Companies are also encouraged to work with the members of the Ocean Hub seafood Steering Committee if they are seeking initiatives.

IMPLEMENTATION AND VALIDATION GUIDANCE

Companies **must** complete a self-assessment of whether the seascape initiative they have selected fulfills the four minimum criteria listed below. This is a binary assessment conducted for each criterion individually:

Criteria 1. Does the seascape initiative fulfill these criteria? *Yes or No*

Criteria 2. Does the seascape initiative fulfill these criteria? *Yes or No*

Criteria 3. Does the seascape initiative fulfill these criteria? *Yes or No*

Criteria 4. Does the seascape initiative fulfill these criteria? *Yes or No*

If the answer to all four criteria is *Yes*, then the initiative is ready for target submission and the company can submit all documentation for the initiative.

If the answer to Criteria 1 or 2 is *No*, then the initiative is not ready to be submitted to fulfill an Engagement pathway target. Companies may consult the Documentation table below to determine if they are able to submit a plan to meet the Criteria or what is needed to meet Criteria.

If the answer to Criteria 1 & 2 is *Yes* but the answer to Criteria 3 and/or 4 is *No*, then the initiative is still ready for target submission and the company can submit all documentation for Criteria that are fulfilled upon target submission. The company and initiative **must** ensure any Criteria not fulfilled at time of submission are met within 12 months and re-submit documentation.

Validators will ask for evidence that the self-assessment has been completed.

The table below includes all the information and documentation the company will need to provide in a seascape engagement roadmap. The information below is required for each seascape initiative, though not all is required at time of target submission.

Companies **must** submit a Seascape Initiative Roadmap Template along with their Target Submission Templates to facilitate implementation and in the future enable audits. Therefore, it should be presented as such during validation.

5.3.2 ROADMAP FOR ENGAGEMENT PATHWAYS TARGET

A full roadmap template which companies may fill out for target submission is available online via SBTN's website.[61] This is a modified roadmap to provide documentation detail only.

	Documentation	Criteria	Description	Desired Content
Required at target submission	Action plan and timeline	Min.	Collective action plan showing how the initiative intends to improve ecological and social conditions in the seascape.	Documentation with list and description of actions and/or investments the company made and is making, together with: - Expected outcome for each action/investment; - Timeline to measure progress.
	Financial plan	Min.	Detailed financial plan for the seascape/initiative.	Explanation and quantification of investments and funding supporting the implementation of any investments they are making in improving the seascape initiative overall.
	Description of the scale of the initiative (if not self-evident in name of initiative)	1	A defined scale of the initiative.	Explanation of the scale of the initiative for validators, especially if not evident in the name. May include: - region, province, fishery, or MPA location - coverage of the initiative's work, e.g. all Pacific tuna stocks
	Assessment of needs of local communities with stakeholder consultation	2	Demonstration that key stakeholders in the jurisdiction, including local government and producing enterprises, are actively engaged and committed to any action plans and their stated outcomes, or the development process.	Documentation showing evidence that an adequate assessment of needs of local communities has taken place with stakeholder consultation, may include mapping assessments, communication records, or a report produced by the initiative.
	Documentation of stakeholder support	2	Demonstration that key stakeholders support the initiative.	Documentation of formal support of stakeholders for the company's involvement in the seascape collective action plan.

[61] The seascape engagement roadmap has been built following the Landscape Engagement Roadmap developed by the SBTN Land Hub and is intended to have close alignment for ease of use for companies.

	MOU of initative, governance structure, evidence of clear and transparent operating procedures (or plan to improve procedures)	2	Governance documentation and structure of the initiative	Documentation showing: - Formal collaboration agreements (e.g. MoU); - Governance structure; - Evidence of clear and transparent operating procedures (or plans to improve procedures)
	Selection of indicator(s) to measure progress and impacts of planned actions	3	A selection of indicator(s) to monitor progress towards improvement in the seascape or jurisdiction related to the target objective.	Selection of an indicator or set of metrics that are suitable to measure progress and impact of planned actions, and improvement in ecological and social conditions at seascape scale.
	Reasoning for the use of each indicator	3	The connection between the selected indicator(s) and the target outcomes.	Justification for the use of each indicator in relation to the target and measuring progress towards the target outcomes.
Required within 12 months of target submission	Calculation of the baseline corresponding to each indicator(s)	3	The baseline value for each indicator at the set date of the target.	Calculation of the baseline corresponding to each indicator; if indicators have changed since initial submission, renewed justification along with their baseline.
	Assessment of unintended negative consequences	3	Demonstration that the initiative is considering negative consequences from actions holistically.	Documentation that the initiative has assessed potential unintended consequences of proposed actions in the seascape.
	Implementation plan for safeguards, including monitoring	3	Demonstration that the initiative is preparing social and environmental safeguards and monitoring in place	Implementation plan for environmental and social safeguards including monitoring.
	Credible data storage and analysis systems in place	4	Demonstration that the company and/or initiative are prepared to maintain data in a credible and responsible way.	Documentation showing how the company, in the seascape initiative, has in place data governance systems and protocols to credibly gather, store, analyze and use the data collected in the seascape initiative.
	Clear reporting framework and strategy for communicating out accessible information	4	Demonstration that the company is prepared to transparently report on their participation in the initiative	Documentation of company's reporting structure historically, or a strategy moving forward for public communication.

	about results, partners and future actions on a regular and recurring basis.		and the progress for the duration.	
Recommended	ToRs and membership of governance bodies	2	Governance documentation and structure of the initiative	Documentation as described
	Operating procedures/Code of Conduct	2	Governance documentation and structure of the initiative	Documentation as described
	Dispute resolution process	2	Governance documentation and structure of the initiative	Documentation as described
	Information on the structure, agreements, financing, and actions of the initiative are publicly available and easily accessible	4	Documentation that the initiative is transparent, and information is publicly available	Documentation as described

SCIENCE BASED TARGETS NETWORK

GLOBAL COMMONS ALLIANCE