

TECHNICAL GUIDANCE

**STEP**

**3**

**MEASURE, SET &  
DISCLOSE**

OCEAN



# Credits and Acknowledgments

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This guidance was developed by the Science Based Targets Network's Ocean Hub as a contribution to the Science Based Targets Network (SBTN) which aims to transform economic systems and protect the global commons—our air, water, land, biodiversity, and the ocean. SBTN unites experts from more than 80 non-governmental organizations (NGOs), business associations, and consultancies to collectively define what is necessary to do “enough” to stay within Earth's limits and meet society's needs.

In partnership with SBTN, the Ocean Hub is a collaboration between World Wildlife Fund, Conservation International, Marine Stewardship Council, Sustainable Fisheries Partnership, FishWise, UNEP FI, TNC, and Aquaculture Stewardship Council. The objective of the SBTN Ocean Hub is to develop and promote a methodology that will allow companies to set, track, and measure progress on quantifiable targets that are representative of the progress required in land systems to sustain nature and people. The Ocean Hub is responsible for developing the technical content of these targets for inclusion as part of SBTN's multi-stakeholder, multiyear initiative to provide companies with comprehensive science-based targets for nature.

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# Executive Summary

The ocean covers

# 70%+

of the planet and is vital to human health and well-being, supporting global food security, livelihoods, climate regulation, and oxygen production.

## The Need for Ocean Targets

The ocean covers over 70% of the planet and is vital to human health and well-being, supporting global food security, livelihoods, climate regulation, and oxygen production. However, current pressures on ocean health pose significant risks to nature, and the economies and communities that depend on them. By setting science-based targets, companies can play a pivotal role in mitigating these risks and promoting sustainable ocean use.

Nature does not yet have a recognized and functional global assessment framework, such as the Greenhouse Gas Protocol for emissions accounting. This holds true for the ocean, including seafood systems. Assessing company impacts in the ocean and determining quantifiable targets for nature and biodiversity in marine systems is a scientific pursuit that is relatively new and still dynamic. By aligning with international sustainability frameworks, such as the United Nations Sustainable Development Goals (SDGs), Taskforce for Nature-related Financial Disclosures (TNFD), and leading seafood sustainability certifications and ratings initiatives, this guidance can be used by companies to contribute to broader efforts to protect the planet and ensure sustainable development.

## About this Guidance

The Science Based Targets Networks (SBTN) Ocean Hub has developed guidance to equip companies with the tools to set science-based targets for nature in the ocean, with an initial focus on seafood value chains, covering pressures (overexploitation, marine ecosystem use and change) related to commercial fishing and aquaculture.<sup>1</sup> This guidance is a critical component of SBTN's broader mission to halt and reverse nature loss by integrating ocean health into corporate sustainability strategies. The Ocean targets are applicable to any company that determines it has material impacts on the main pressures to nature in the ocean from its operations or supply chain, with an initial focus on seafood. These are the first ocean-related methods released by SBTN for Step 3 and are not expected to be usable by all companies for managing their impacts on the ocean.

The aim of SBTN is to develop a methodology for science-based targets that will enable the corporate sector to align its 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 for companies in the seafood value chain, covering production, and post-production activity for wild capture, and aquaculture seafood. Throughout this document, actions that a company **must** take in each section are prioritized and highlighted in bold; additional actions that a company should or may take are included subsequently under each section.

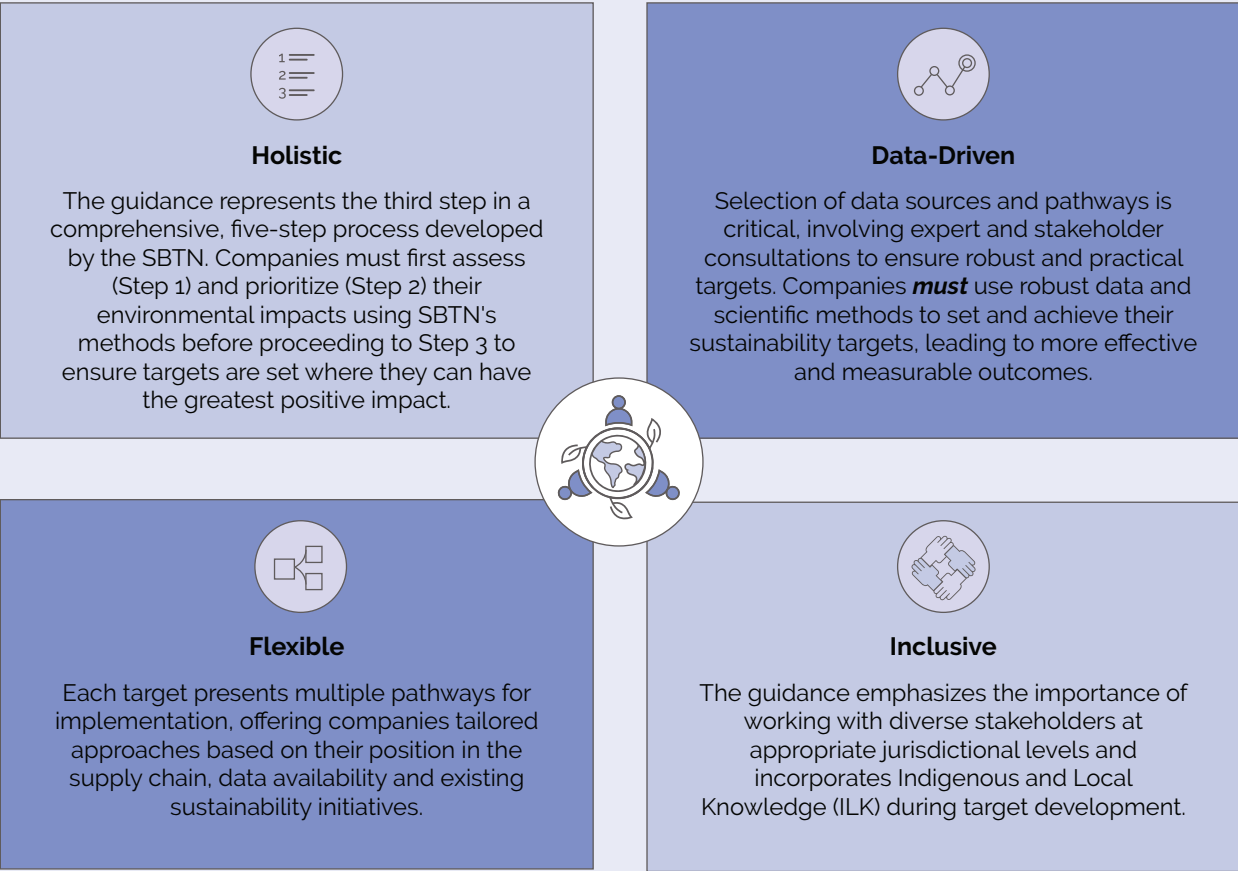
In developing this guidance, the organizations that represent the SBTN Ocean Hub (Marine Stewardship Council, Sustainable Fisheries Partnership, FishWise, UNEP FI, FishWise, and Aquaculture Stewardship Council, World Wildlife Fund and Conservation International) have balanced the ambition of science-based targets for nature, the availability of scientific evidence to support Ocean targets for seafood value chains, and the feasibility for companies to comply with target requirements. As one component of a voluntary corporate initiative, a primary goal of the guidance is to accelerate the ambition of corporate action on nature by bringing nature action into focus alongside climate action, and uniting company actions across multiple landscapes and seascapes, communities, and natural realms.

<sup>1</sup> Wild-capture fishing and seafood includes commercially targeted fish and invertebrates from marine and freshwater fisheries. Aquaculture covered by this guidance includes in situ farming and cultivation practices in marine, brackish, and freshwater ecosystems such as net pen, cage, and pond aquaculture methods. Ex situ cultivation methods, such as recirculating aquaculture systems (RAS), are covered by this guidance insofar as they use wild-capture seafood for feed or farm stock, or their methods directly impact marine habitats or wildlife.



Approach

The targets set forth here are the next step in voluntary corporate accountability for impacts and dependencies on the ocean and represent the SBTN collaborative partnership, which spans business, industry associations, academia, research institutions, intergovernmental organizations, non-governmental organizations, and the breadth of diverse views and perspectives represented by these groups. They have been developed with the following values in mind:



The broader set of actions that these methods incentivize include the reduction and avoidance of overexploitation of wild fish and invertebrate stocks, reduced degradation to marine habitats through destructive fishing and aquaculture techniques, and reduced risk to non-commercial marine species from fishing and aquaculture activities.

While firmly rooted the AR3T<sup>2</sup> Framework, Ocean targets will go further to create pathways for companies to deliver on 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, Indigenous and Local Knowledge (ILK), and human and labor rights into the development of ocean targets.

2 The AR3T framework was developed based on the mitigation hierarchy, set out in the International Financial Corporation's Performance Standard 6: 1) Avoid and Reduce pressures on nature loss; 2) Regenerate and Restore so that nature can recover; 3) Transform underlying systems in which companies are embedded to address the drivers of nature loss.

Targets

The targets exist to define and operationalize a consistent path for companies that will align their commitments and actions with the material pressures on the ocean and what nature needs across three of the most urgent challenges in seafood:

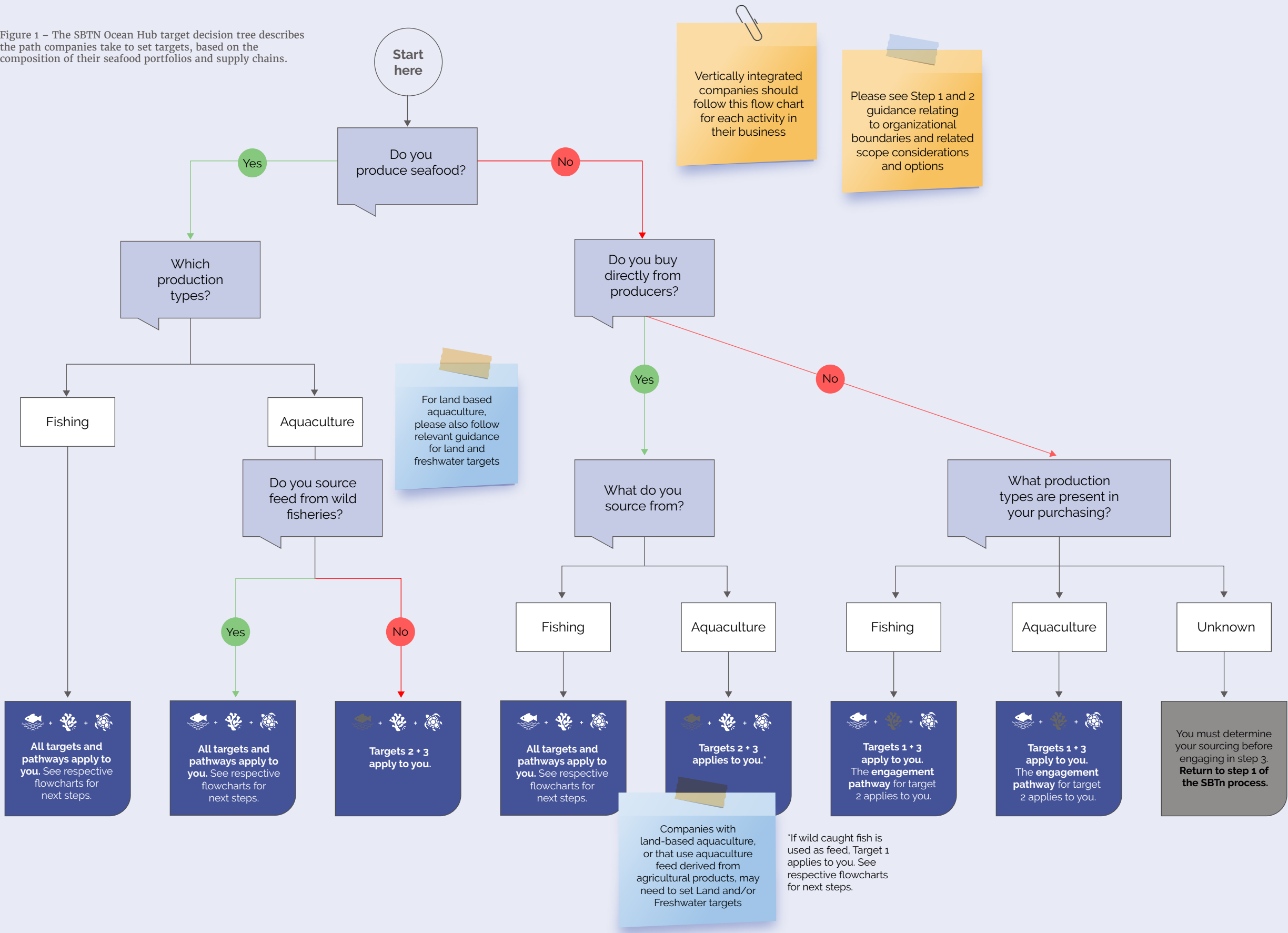


Not all companies in the seafood space will be required to set all targets, and this guidance provides clear instruction on which targets are necessary for which contexts.



For each target and the pathways embedded within them, the guidance provides step-by-step instructions for companies to source and interpret data, work with stakeholders, establish baselines, identify appropriate timelines and develop specific targets.

Figure 1 – The SBTN Ocean Hub target decision tree describes the path companies take to set targets, based on the composition of their seafood portfolios and supply chains.







## Next steps

This first release of seafood-specific guidance is designed to scale up and accelerate corporate action for nature while building alignment with future Ocean guidance that will expand to other sectors of the Blue Economy. Future versions will help drive collective action across industries that have similar and cumulative impacts on marine and coastal resources and ecosystems, enabling collective action to increase the pace at which companies address their impacts on nature and biodiversity in the ocean.

Following the target-setting process in Step 3, companies will continue on to SBTN Step 4: Act and Step 5: Track (currently in development) in order to implement and track progress against their targets.




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# Glossary of Terms

## Aquaculture

Aquaculture is the farming of aquatic organisms, including fish, mollusks, crustaceans and aquatic plants. Farming implies some form of intervention in the rearing process to enhance production, such as regular stocking, feeding, protection from predators, etc. Hatchery systems fall under the definition of aquaculture. Wild-capture fishing that is supported by hatcheries are defined as 'wild-capture seafood'. Farming also implies individual or corporate ownership of the stock being cultivated.

## Aquaculture Improvement Project

An aquaculture improvement project (AIP) is a multi-stakeholder effort that leverages the influence of the private sector to drive improvements in aquaculture production and make these changes endure through policy change. AIPs should operate at scales greater than farm level, focused on the implementation of sustainable aquaculture policies at zonal and regional scales and improved government management.

## 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.”<sup>3</sup> Often, the management authority or governance body of the fishery itself and the framework developed for managing harvesting is also considered to be a part of the fishery.

3 [FAO Fisheries and Aquaculture Department, FAO, 2014.](#)

## Fishery Improvement Projects

A fishery improvement project (FIP) brings together retailers, processors, producers, and fishers to incentivize better management of marine resources, by identifying environmental issues and implementing priority actions to improve fishing practices and management.

## Highly Damaging Practices

Operations or practices in wild capture fisheries 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, and abandoning gear or contributing to ghost gear.<sup>4</sup> 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

Place-based initiatives in key seafood commodity-producing regions that utilize policy and market-based approaches to drive holistic improvements in seafood production at relevant ecological and political scales.

## 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-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.<sup>5</sup>

## Marine Environment

All connected saline ocean waters characterized by waves, tides, and currents.<sup>6</sup>

## Maximum Allowable Pressure

The highest level of environmental pressure a specific ecosystem can withstand while still maintaining its desired state of nature.

4 McCarthy et al., 2024 “[Destructive Fishing: an expert-driven definition and exploration of this quasi-concept.](#)”

5 [International Union for the Conservation of Nature.](#)

6 Keith et al., 2020 “[IUCN Global Ecosystem Typology 2.0.](#)”

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, 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.”<sup>7</sup>

B<sub>msy</sub> is the biomass that enables a fish stock to deliver the maximum sustainable yield. In theory, BMSY is the population size at the point of maximum growth rate. The surplus biomass that is produced by the population at BMSY is the maximum sustainable yield that can be harvested without reducing the population.

F<sub>msy</sub> is the maximum rate of fishing mortality that can be sustained while supporting MSY.<sup>8</sup>

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.<sup>9</sup> Protected areas include Marine Protected Areas (MPAs), Locally Managed Marine Areas (LMMAs), and Other Effective Area-Based Conservation Measures (OECMs).

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.<sup>10</sup>

Seascape

Seascapes are large, multiple-use marine areas, defined scientifically and strategically, in which government authorities, private organizations, and other stakeholders cooperate to conserve the diversity and abundance of marine life and promote human well-being.<sup>11</sup>

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.<sup>12</sup>

7 Maunder, 2008 “Maximum Sustainable Yield.”  
8 International Union for the Conservation of Nature.  
9 MSC, 2016, https://www.msc.org/media-centre/news-opinion/news/2020/02/25/what-does-sustainable-fishing-really-mean  
10 NOAA, 2012 “Fish Stock Assessment 101 Series.”  
11 Murphy et al., 2021 “Fifteen years of lessons from the Seascape approach: A framework for improving ocean management at scale.”  
12 Marine Stewardship Council, “The Fisheries Standard 3.1.”

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 include water availability, terrestrial ecosystem intactness, net primary productivity, soil organic carbon content, water quality, and ecosystem extent or connectivity.<sup>13</sup>

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, Target 2 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 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.

Validation

An SBTN-independent process involving expert review to ensure the target meets the 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 two ‘segments’: direct operations and indirect actions within supply chains. Each of these segments involves 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 wild-capture seafood refers to marine or freshwater fish or invertebrates that are legally harvested from the wild (e.g., not farmed, see Aquaculture) for the purpose 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<sup>13</sup> in Step 1 of SBTN’s guidance to determine the material products in their supply chains. (In this guidance seafood may be referred to generally as ‘fish.’)

13 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.  
14 SBTN High Impact Commodity List.



# Introduction

## Step 3: Ocean

*Science-based targets (SBTs)* are defined as 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.

For the ocean, this refers to what the latest marine and fisheries science says is necessary to meet population and ecosystem thresholds.

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

This document provides technical guidance for Step 3: Measure, Set, & Disclose for companies to measure baselines for specific indicators and set ocean science-based targets. These are the first ocean-related methods released by SBTN for Step 3 and are not expected to be usable by all companies for managing their impacts on the 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 its 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<sup>15</sup> for companies in the seafood value chain, covering production and post-production

activity for wild capture and aquaculture seafood. The flowchart in Figure 1 outlines which companies are required to set which targets and aims to guide the reader towards the relevant sections of this document. Throughout this document, actions that a company **must** take in each section are prioritized and highlighted in bold; additional actions that a company should or may take are included subsequently under each section.

The approach to setting science-based targets 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, commercial fishing (**driver**) may result in overexploitation

(**pressure**), negatively impacting the health (**state of nature**) fish or invertebrate populations. Similarly, aquaculture operations (**driver**) may put direct **pressure** on nature and biodiversity in surrounding habitats or contribute to pressure on fish populations using feed derived from wild fisheries. Both fishing and aquaculture may also harm endangered, threatened, and protected (ETP) marine species populations. The broader set of actions that these methods incentivize include the reduction and avoidance of overexploitation of wild fish and invertebrate stocks, reduced degradation to marine habitats through destructive fishing and aquaculture techniques, and reduced risk to non-commercial marine species from fishing and aquaculture activities, while also creating opportunities for positive impacts through restoration, regeneration, and transformation.

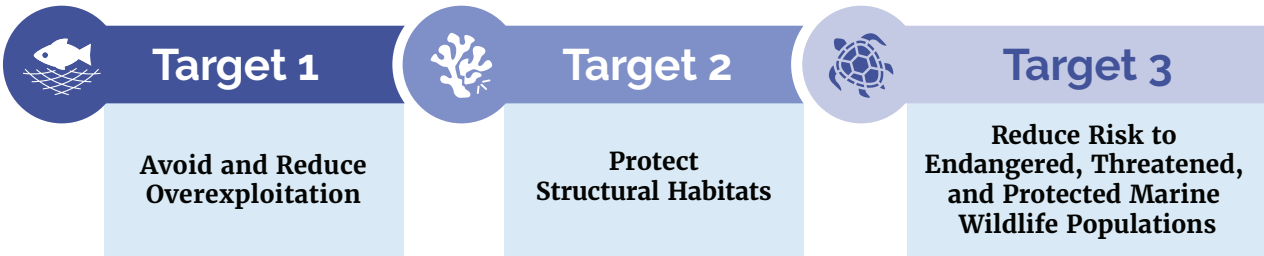
While firmly rooted in directing companies to assess, avoid, and/or mitigate their impacts on nature, ocean targets will go further by creating pathways for companies to deliver on regenerative, restorative, and transformative actions in collaboration with multiple stakeholders at the seascape scale. From the outset, and throughout this approach, recognizing and acting on social sustainability in seafood is essential, including through the incorporation of critical components of stakeholder engagement,<sup>16</sup> 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.

Figure 2—Defining Steps



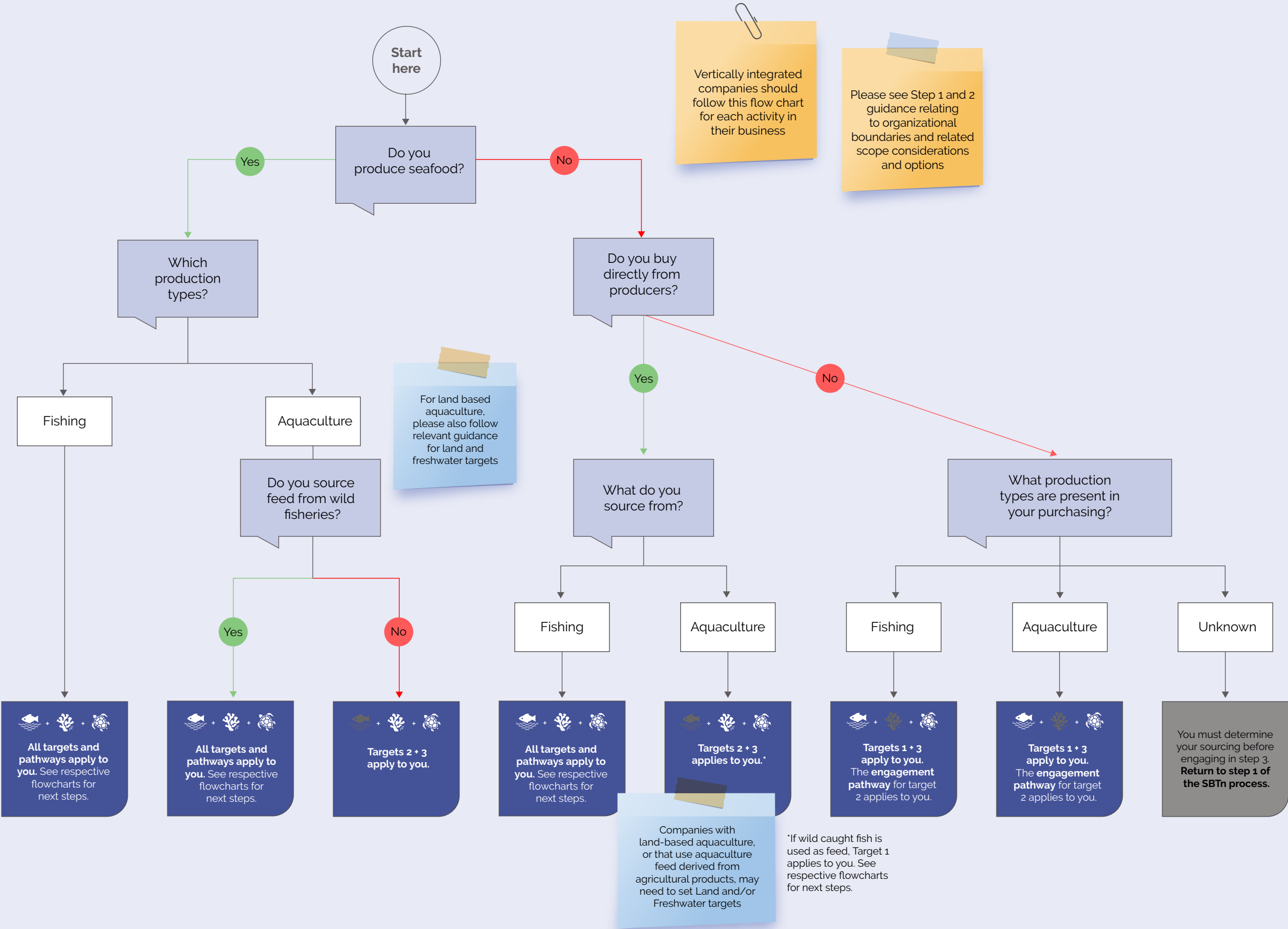
<sup>15</sup> Throughout this document, the terms “Ocean SBTs”, “Ocean targets”, and “Seafood targets” are also used to refer to this methodology.

Figure 3—SBTN Ocean Hub Step 3 targets.



<sup>16</sup> Companies are strongly recommended to consult the SBTN Stakeholder Engagement Guidance throughout implementation of the Step 3 guidance.

Figure 4 – The SBTN Ocean Hub target decision tree describes the paths companies can take to set targets, based on the composition of their seafood portfolios and supply chains.





1.1.1 HOW TO DETERMINE IF YOUR COMPANY MUST SET V1 OCEAN TARGETS

Setting Ocean targets is part of the five-step process for setting science-based targets for nature. Before using the Step 3 Ocean methods, companies **must** complete Step 1: Assess and Step 2: Interpret & Prioritize. These steps of the SBTN target-setting process enable companies to determine which pressures on nature they must address with targets, and which parts and locations of their business may represent the highest priority starting point.

The flowchart in Figure 1 outlines which targets companies are required to set and aims to guide the reader towards the relevant sections of this document. Companies will commit to the three Ocean targets depending on:

- 1. Their material pressures, from seafood production or procurement, on wild seafood stocks, marine and coastal habitats, and ETP marine wildlife populations, as determined by using Step 1 guidance from SBTN.
- 2. The company’s designated sector(s), as defined by the International Standard Industrial Classification of All Economic Activities (ISIC). For Version 1 of SBTN Ocean Hub methodology, only companies with seafood value chains are required to set targets.

Depending on these criteria (Figure 1), each target will be one of the following:

- a) Required
- b) Recommended
- c) Not required

Companies must address the applicability of each Ocean target. Each target section in this guidance described its requirements and provides more details around its scope across direct operations (having to do with aquaculture or wild-capture seafood production) and sourcing at different stages of the value chain. To have Ocean targets validated, companies will need to meet the requirements under each of the targets for which they are responsible. Companies that

are unable to meet these requirements will not be able to validate nor make claims on science-based targets for the ocean.

1.1.1.1 How to Determine if Your Company Must Set Target 1: Avoid and Reduce Overexploitation

If your company finds wild-caught seafood in its supply chain, it **must** set Target 1. **This includes aquaculture feed which contains marine ingredients derived from wild capture fisheries (as well as hybrid or semi-wild farming practices such as ranching) or the use of wild-caught juveniles for aquaculture operations/broodstock.**

1.1.1.2 How To Determine if Your Company Must Set Target 2: Protect Structural Habitats

**If, in SBTN Step 1, your company finds material impacts to structural marine or transitional habitats from aquaculture and, or wild-capture fishing, including aquaculture and wild-capture fishing, it must set Target 2.**

1.1.1.3 How To Determine if Your Company Must Set Target 3: Reduce Risk to ETP Marine Wildlife Populations

**If your company finds risk to ETP species’ populations—generated by aquaculture or wild-capture fishing activities—in its value chain, it must set Target 3.**

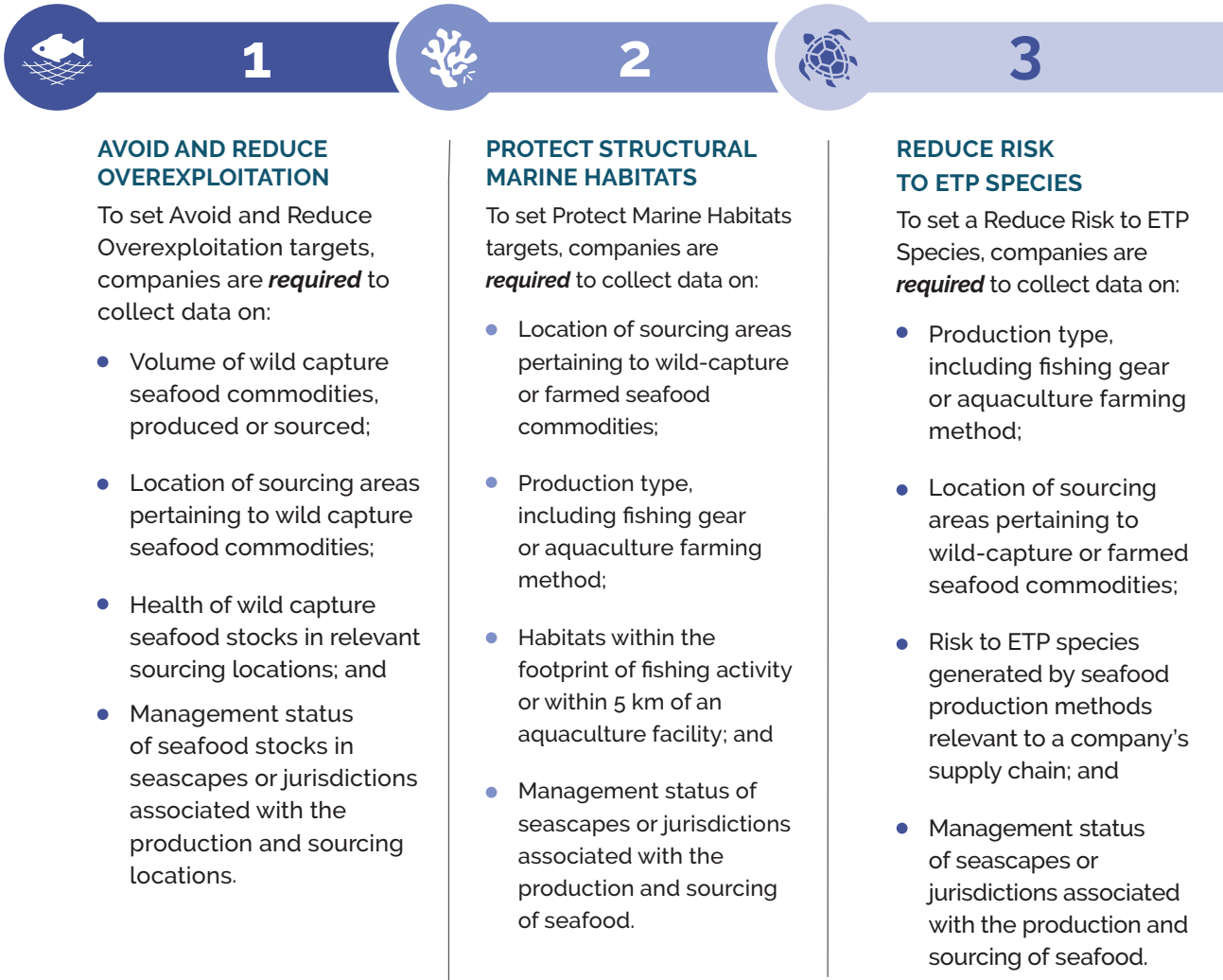
1.1.2 TYPES OF SEAFOOD COVERED BY THIS GUIDANCE

Wild-capture fishing and seafood includes commercially targeted fish and invertebrates from marine and freshwater fisheries. Aquaculture covered by this guidance includes in situ farming and cultivation practices in marine, brackish, and freshwater ecosystems such as net pen, cage, and pond aquaculture methods. Ex situ cultivation methods, such as recirculating aquaculture systems (RAS), are covered by this guidance insofar as they use wild-capture seafood for feed or farm stock, or their methods directly impact marine habitats or wildlife.

1.1.3 DATA REQUIREMENTS TO SET OCEAN TARGETS

Setting Ocean targets requires data collection (spatial and non-spatial) and management. Data requirements vary according to the stages of the value chain where a company operates and depending on its sourcing.

The headline data requirements for Step 3: Ocean are outlined below. These requirements build on those previously introduced for Step 1: Assess and Step 2: Interpret & Prioritize. Companies that have already collected data and completed these initial steps should have much of the data structure needed for setting science-based targets for the ocean.





1.2 Social Responsibility for Companies Setting Ocean Hub Targets

1.2.1 SOCIAL RESPONSIBILITY POLICY

All companies setting science-based targets under the Ocean Hub *must* have a public social responsibility policy for their seafood value chains. Companies that do not yet have a public social responsibility policy for their seafood value chains *must* develop one alongside their science-based targets for validation. If there is a company-wide policy, it *must* show that the existing scope is inclusive of seafood. Companies *must* submit their social responsibility policy as part of the SBTN validation process.

Consistent with the [United Nations’ Guiding Principles on Business and Human Rights](#), the International Labour Organization, and the [Roadmap for Improving Seafood Ethics](#) (RISE), companies’ social responsibility policy *must* include language that upholds the rights of workers (including vulnerable groups of workers), small-scale fishers, smallholder farmers, people involved in pre-and post-harvest processes throughout their business operations and seafood supply chain(s), and local communities and Indigenous groups. It *must* include a focus on gender equality and equity, including participation in decision-making.

Companies *must* share appropriate documentation to support this alignment at the time of validation.

Further information on the importance of social responsibility in the seafood industry as well as resources for the development of a social responsibility policy, including examples, are available in the Annex. Additional details regarding validation of the social responsibility policy, including a template for companies to utilize when developing a social responsibility policy, will be forthcoming.

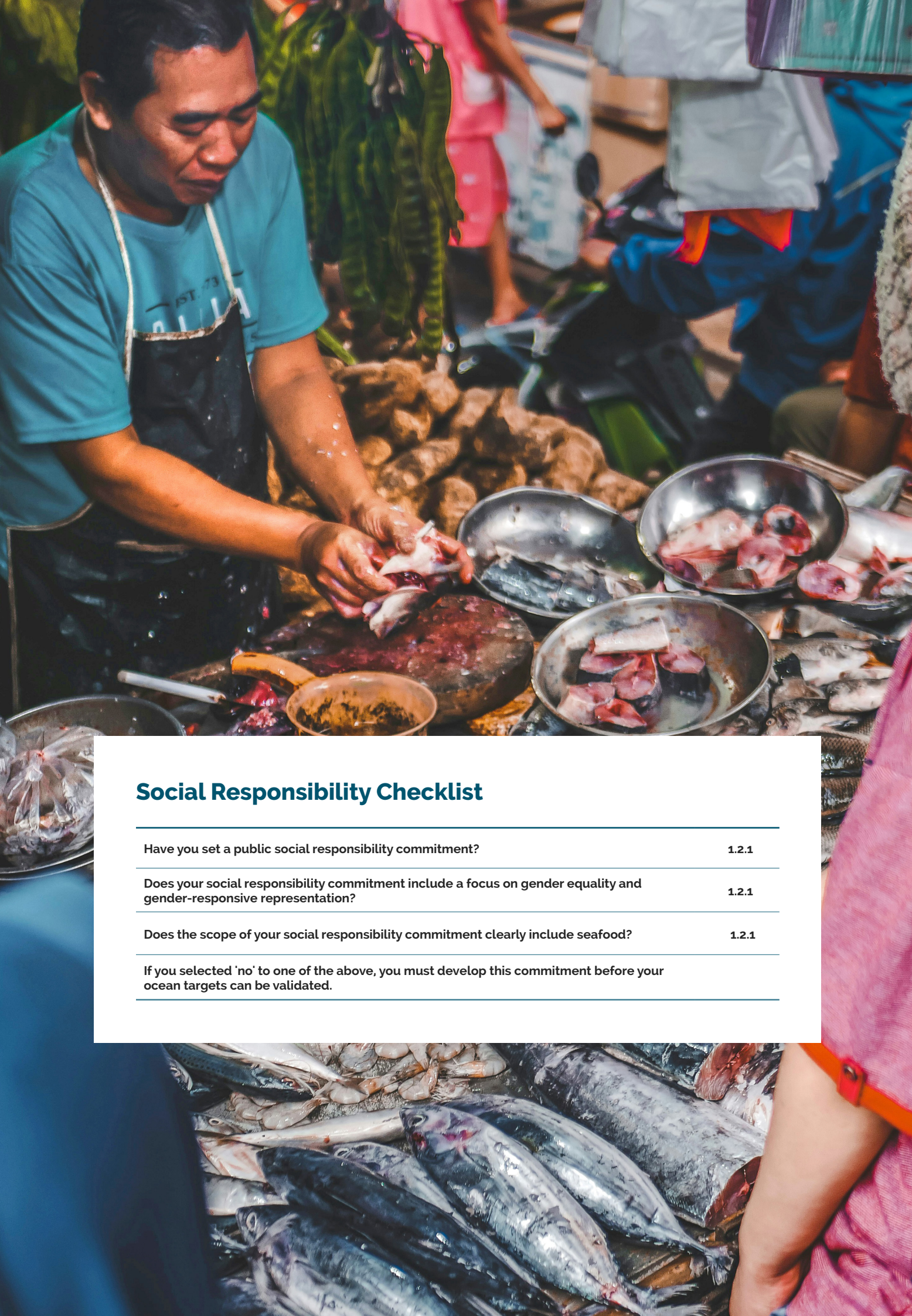
1.2.2 SOCIAL RESPONSIBILITY RECOMMENDATION

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., the Worker-Driven Social Responsibility Network<sup>17</sup>), as well as efforts to 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 science-based target 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.



Social Responsibility Checklist

Have you set a public social responsibility commitment?	1.2.1
Does your social responsibility commitment include a focus on gender equality and gender-responsive representation?	1.2.1
Does the scope of your social responsibility commitment clearly include seafood?	1.2.1
If you selected 'no' to one of the above, you must develop this commitment before your ocean targets can be validated.	

17 [Worker-Driven Social Responsibility Network](#).

Photo by Wasis Riyan on Unsplash



## **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 designed to create a pathway for companies within seafood value chains to support resilient wild capture fisheries through effective engagement with natural resources, operational areas, and supply chain stakeholders. The desired outcome of Target 1 is to reduce and avoid overexploitation in wild capture seafood systems (marine and freshwater; finfish and invertebrates) by aligning target structure and outcomes with established trajectories for stock recovery and desired states of nature. Target 1 is iterative within the SBTN target-setting process. If a wild capture seafood source requires continued engagement, a company may set a series of targets for overexploited stocks according to the steps outlined in Figure 3, as necessary for stock recovery.

Wild-capture systems are complex, and companies rarely operate within, or influence, these systems alone. Therefore, while structured to enable action by individual companies, collective action across companies sourcing from a seascape or jurisdiction is welcomed and encouraged. While primarily focused on companies engaged in or sourcing from wild-capture fisheries, aquaculture companies that source feed from wild capture fisheries **must** work to avoid and reduce overexploitation through Target 1.

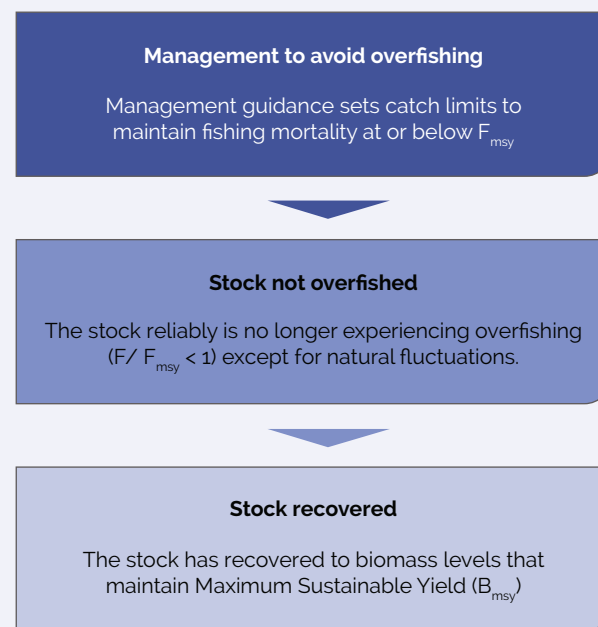


Figure 5 – A series of management and stock health outcomes that lead to stock recovery. This sequence, where  $F$  is fishing pressure and  $F_{msy}$  is fishing pressure at maximum sustainable yield, informs the iteration of targets, as stock recovery can take several years.

This section 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. Steps for target-setting for Target 1 are broken down by pathway: how to set targets to reduce fishing pressure (Section 2.4), cap sourcing and engage (Section 2.5), focus on engagement (Section 2.6), or, when prior options have been exhausted, cease to source (Section 2.7). Pathways 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. A fictional example of implementing Target 1 pathways is provided alongside these steps for illustrative purposes.

Target 1 adheres to a ‘help first’ principle, encouraging active engagement within a company’s value chain to help create equitable, positive impact for nature, biodiversity, and local communities who depend on these resources and supply chains. In alignment with the Sustainable Seafood Coalition’s Voluntary Codes of Conduct<sup>18</sup>, only after engagement options have been exhausted, and sufficient improvement has not been made through prior pathways, will a company’s targets shift to the ‘cease to source’ pathway that prioritizes disengagement with a fishery.<sup>19</sup>

### Example

*Silmaril Seafoods is a multinational seafood conglomerate that is vertically integrated across the seafood supply chain, ranging from caught and farmed seafood production to wholesale, with seafood aggregation and processing from both its own and third-party sources.*

*Silmaril has entered the SBTN process for seafood to demonstrate sustainability leadership. Based on its Step 2 screening, the activities and locations of greatest priority to Silmaril are longlining for Atlantic blue marlin off the coast of West Africa by one of Silmaril’s subsidiaries and processing North Sea herring sourced from third parties.*

*Wherever the worked example following Silmaril’s implementation of this guidance appears, it will be denoted in text by a blue background. Please note, this worked example is only illustrative and no real-world conclusions should be drawn from the decisions made in this example.*

<sup>18</sup> Sustainable Seafood Coalition, 2021, “[Voluntary Codes of Conduct](#).”

<sup>19</sup> If this process results in a ‘cease to source’ decision to not source the fish, companies **must** 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.





### 2.1.2 PROCESS FOR SETTING AVOID AND REDUCE OVEREXPLOITATION TARGETS

When a company has material impacts on stock health in its direct operations or sourcing from wild-capture fishing practices, it will set Avoid and Reduce Overexploitation 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<sup>20</sup>, data-limited methodologies, and ILK sources to determine baseline values of pressure and state of nature on relevant seafood stocks. For each pathway, data sources are detailed in subsequent sections, in the Ocean Hub Data Resources spreadsheet available on the SBTN website, and the Annex. Data availability will inform what pathways must be set.



#### 2. Select pathway(s) for target setting

Use the following approaches, as appropriate for setting Avoid and Reduce Overexploitation targets (described in more detail in Section 2.3 below):

**RE Reduce and Engage pathway:** Companies commit to reduce sourcing pressure (from production or procurement) on overexploited wild fishery resources in their supply chains *and* engage in improvement initiatives at the seascape or jurisdictional level to reduce commercial overexploitation of fish and invertebrates, contribute to stock recovery, and/or support/create positive conservation outcomes for relevant species.

**CE Cap Sourcing and Engage pathway:** Companies commit to cap sourcing pressure (from production or procurement) on overexploited wild fishery resources in their supply chains at current levels and engage in improvement initiatives at the seascape or jurisdictional level to reduce commercial overexploitation of fish and invertebrates and/or support/create positive conservation outcomes for relevant species.

**E 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.

**CS Cease to Source pathway:** Companies commit to cease sourcing from overexploited wild fishery resources in their supply chains if engagement opportunities have been exhausted and the stock remains overexploited. This pathway occurs only after other targets have been attempted.

#### 3. Determine current and desired states of nature and maximum allowable pressure

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, for example, maximum allowable pressure specific to the company, set targets using one or a combination of target pathways listed above.



#### 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.

<sup>20</sup> 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 are available on relevant fish or invertebrate 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 regarding data sources, and data selection.

### 2.2.1 TYPES OF DATA SOURCES

Ocean science-based targets rely on biologically, spatially, and temporally relevant information to indicate what a given seafood stock and its users need in order to achieve sustainability. For science-based targets 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 Structural Habitats) and jurisdictional levels. Therefore, understanding the relationship between the health of relevant stocks (state of nature) and fishery-specific conditions (pressure) is required to set science-based targets.

To set targets, companies rely on existing data and indicators of stock health to determine the state of nature and maximum pressure thresholds for each of their targets. While fisheries management and stock assessments are complex and should be evaluated using a wide range of ecosystem-based metrics, stock health is the best single indicator to capture the capacity of an ecosystem to support a healthy population of fish.

Data availability and quality is variable within seafood and marine systems, and often depends on the location of the stock and 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 levels of uncertainty—and are not yet available in many parts of the world<sup>21</sup>, with up to 80% of global catch lacking formal assessment<sup>22</sup>, SBTN accepts several data sources to determine state of nature. These sources are used to determine if overexploitation is occurring and the amount and type of pressure mitigation needed, which is 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

While stock assessments are only one component of effective fisheries management and conservation, they are the best tool for evaluating stock health, which is used as the state of nature indicator in this methodology.

A fishery stock assessment is the scientific process of collecting, analyzing, and reporting on the condition of a wild 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 and invertebrate stocks. Targets can be developed and set using data from assessments specific to a given seafood 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 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<sup>23</sup> or recognized by the Global Sustainable Seafood Initiative<sup>24</sup>, 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 stock assessments follow the below criteria:

- Provide management advice based on robust scientific analyses;
- Provide clear fishing mortality and biomass (or proxy) reference points;
- Account for ecosystem effects/drivers as scientifically appropriate;

- Account for climate change sensitivity;
- Incorporate a wide range of accurate fishery-independent and dependent data;
- Include population dynamics (age, natural mortality, size distribution, predator-prey interactions, fecundity) and if possible, projections for scenario testing;
- Are performed regularly based on generational timing of the selected species;
- Provide estimates of uncertainty; and
- Include external, independent scientific review.

*For Silmaril's target setting, the Atlantic blue marlin is subject to regular stock assessments and monitoring by the International Commission for the Conservation of Atlantic Tunas (ICCAT).*

*Silmaril can use stock assessment data for herring available from the International Council for the Exploration of the Sea (ICES).*

#### 2.2.1.2 Data-limited Methodologies

In the absence of stock assessments, targets can be developed with “data-limited” methodologies. Data-limited methodologies are often used to provide fisheries management advice when there is “little or no knowledge of a stock's size or fishery characteristics”<sup>25</sup>, using performance indicators and reference points to assess stock health, such as those from records of total catch, effort or catch per unit effort, estimates of stock growth, reproduction, and natural mortality rates. The goal of data-limited methodologies is to improve the performance of a fishery, in the absence of stock and ecosystem assessment information.

<sup>21</sup> Ritchie and Roser, 2021, “[Fishing and Overfishing](#).”

<sup>22</sup> Costello et al., 2012, “[Status and Solutions for the World's Unassessed Fisheries](#).”

<sup>23</sup> [Certifications and Ratings Collaboration](#).

<sup>24</sup> Global Sustainable Seafood Initiative.

<sup>25</sup> NOAA Fisheries, “[Stock Assessment Model Descriptions](#).”

Assessments, such as the Environmental Defense Fund’s Framework for Integrated Stock and Habitat Evaluation (FISHE), provide scientific guidance for the sustainable, climate-resilient management of data-limited fisheries.<sup>26</sup>

Data-limited assessments may indicate whether a stock’s harvest level can increase or should decrease compared to previous years. This 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 (be used to) determine whether a stock is overfished.<sup>20</sup> Therefore, companies relying on data-limited methodologies may not be able to set quantitative Reduction targets. An overview of data-limited methodologies and tools is available in the Ocean Hub Data Resources spreadsheet available on the SBTN website.

### 2.2.1.3 Indigenous and Local Knowledge

Indigenous and Local Knowledge (ILK), also known as traditional ecological knowledge, can also be used in the science-based target 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”<sup>27</sup>. 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. However, ILK can be helpful, and is often essential, to companies setting Engagement pathway targets.

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 Ocean Hub Data Resources spreadsheet available on the SBTN website 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 externally validated science-based targets for wild seafood or have been identified and approved through research efforts by the SBTN Ocean Hub.

The second stage of the consultation process involves engagement with **jurisdictional stakeholders** to evaluate appropriate data sources, such as stock assessments. 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 stock, fisheries science, or the area in question. Companies should start with an internal consultation within their company and supply chains to identify stakeholders who may have relevant information to inform data source selection. Companies **must** engage with these different jurisdictional stakeholders to inform the use of data during target setting.

See SBTN’s Stakeholder Engagement Guidance<sup>28</sup> for more information on different ways in which companies can work with stakeholders. For example, companies may create a multi-stakeholder working group to support their development of SBTN targets, consulting with the working group according to Ocean Hub and Stakeholder Engagement Guidance.

Companies are **required** to consult at least one of the following on the existence of appropriate<sup>29</sup> data sources for the stock(s) of interest and interpretation of those data:

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

Companies **must** identify all relevant stocks that fall within the same jurisdiction for consultation with the above organizations to expedite this process. Through this consultation, companies **must** 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 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.



Although up-to-date stock assessment data exists for both Atlantic blue marlin and North Sea herring, Silmaril is still required to conduct expert and stakeholder consultation as part of Target 1. Fortunately, both stocks are subject to fisheries management, and Silmaril can consult the relevant RFMO for Atlantic blue marlin (in this case, ICCAT) and scientific body for North Sea herring (in this case, ICES). Silmaril will periodically engage with both organizations, as well as SBTN Ocean Hub partner organizations, throughout the target-setting process, notably to share data and to seek endorsement for the thresholds for these stocks that Silmaril has identified.

29 As defined through stakeholder engagement process with jurisdictional stakeholders.

<sup>26</sup> Environmental Defense Fund, Framework for Integrated Stock and Habitat Evaluation.

<sup>27</sup> IPBES, 2017, “Report of the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services on the work of its fifth session.”

<sup>28</sup> SBTN, 2023 “Stakeholder Engagement Guidance Vo.1.”





### Addressing Data Deficiency

Companies using data-limited methodologies or ILK **must** document available information as well as data limitations relevant to the SBTN target-setting process and report their findings 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 **must** continue the 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 **must** 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. See the flowchart in Figure 6 for an overview of this sequence and steps to take.

#### 2.2.3 DATA SOURCE SELECTION

When available, companies are **required** to use stock assessments 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 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.

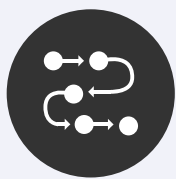
If stock assessments are unavailable, because they have not been developed or are not endorsed by the appropriate local experts, companies can use data from ILK or data-limited methodologies to determine current and desired levels of stock health. Again, companies **must** consult with local experts and stakeholders to determine which sources or combination of sources are appropriate and to endorse thresholds identified by the company. For stocks without stock assessments, companies **must** prioritize and include improved data collection and/or development of stakeholder-endorsed stock assessments in engagement initiatives (see Section 2.6 for Engagement initiative targets).

Once the data source has been selected, companies will be able to determine their baselines and thresholds.



Photo by Jess Aston on Unsplash





## 2.3 Pathway Determination

Specific targets will enable companies to both reduce impacts from direct operations, including pressure from fishing and aquaculture, and seafood procurement, as well as engage 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, this section describes the types of targets, described as **pathways**, that are expected of companies, and how and to whom they apply.

### 2.3.1 TARGET PATHWAY TYPES

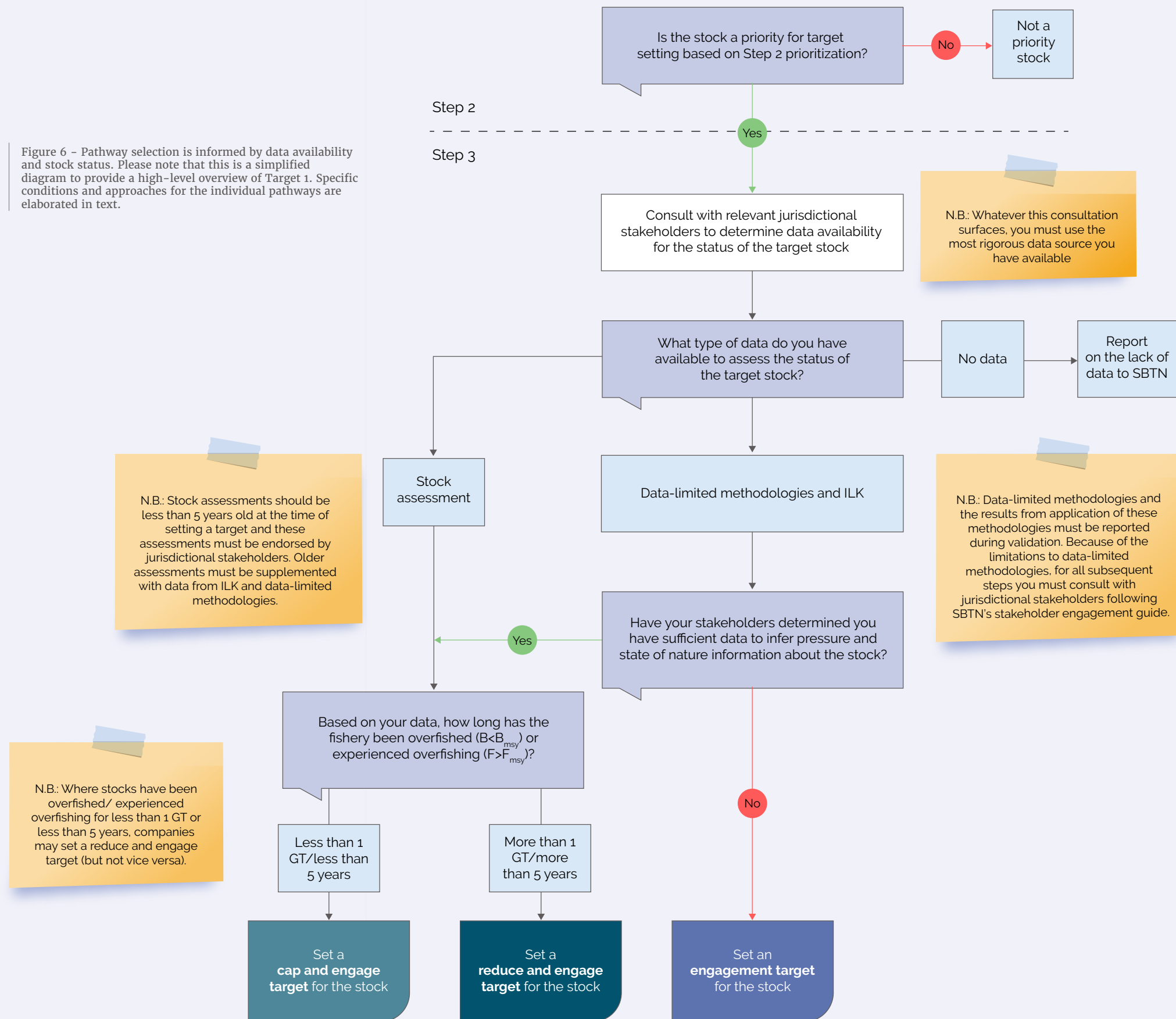


Four pathways are presented for the **Avoid and Reduce Overexploitation target**:

- RE Reduce and engage
- CE Cap sourcing and engage
- E Engage
- CS Cease to source

Pathways depend on the health of a target stock, current fishing pressure, and the availability of stock status data. To determine appropriate target pathways, companies **must** start by determining if relevant stocks are overfished or experiencing overfishing. If overexploitation is occurring, companies will be **required** to further report on the extent of overexploitation, enabling them to set specific targets based on the severity of overexploitation (Sections 2.4.3 and 2.5.1). These pathways approach overexploitation from different directions, but due to the complex nature of fisheries management and long timeframes for recovery of certain stocks, the pathways are designed to be iterative, as highlighted in Figure 3. As a result, a single target stock may progress through multiple pathways over time as management conditions are met and stock health changes.

Figure 6 – Pathway selection is informed by data availability and stock status. Please note that this is a simplified diagram to provide a high-level overview of Target 1. Specific conditions and approaches for the individual pathways are elaborated in text.







2.3.1.1 Reduce and Engage Pathway

The Reduce and Engage 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 indicate that relevant fish or invertebrate stocks have been overfished or experienced overfishing for more than one generation 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 Sections 2.3.1.2 and 2.5, right).

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). Companies **must** also set targets using the Engagement pathway (Section 2.6) when they set Reduction targets.

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.

*Silmaril's Atlantic blue marlin has been historically overfished, and its biomass (B) is below maximum sustainable yield (Bmsy) for this stock, though slowly recovering. However, management interventions to date have succeeded in reducing fishing mortality (F) to the point where it is just below fishing mortality at maximum sustainable yield (Fmsy). As a result, this Atlantic blue marlin stock is overfished but not experiencing overfishing. As a slow growth stock, this has been the case for more than five years. Silmaril **must** set a Reduce and Engage target for this stock.*

2.3.1.2 Cap Sourcing and Engage Pathway

The Cap Sourcing and Engage pathway provides a pathway for target setting that allows 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 or invertebrate stock has been overfished or experiencing overfishing for less than one GT or less than five years (whichever is the lower number); or
- 2. data-limited methodologies or ILK indicate that a stock is overfished or experiencing overfishing but lacks 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).

*The North Sea herring population has recently experienced several poor recruitment years, despite its MSC certification. Silmaril, consulting with ICES, concludes that the stock has experienced periods of overfishing within the last five years. Silmaril could elect to follow a Reduce and Engage pathway for North Sea herring but would find it difficult to meet demand for certified herring from other sources and therefore elects to follow a Cap Sourcing and Engage pathway for North Sea herring.*

Section 2.5 covers the process for setting Reduction pathway targets.

2.3.1.3 Engagement Pathway

The Engagement pathway relates to company commitments in seascapes or jurisdictions linked to their direct operations or seafood sources that will result in measured improvement in stock health, conservation of surrounding ecosystems to support stock health or recovery, and/or management and governance of the fishery to enable stock recovery, including through greater availability of data about the fishery and stock health. Given that protection and restoration of structural habitats may contribute to seafood stock health and recovery, improvement initiatives derived from Target 2 (Protect Structural Habitats) Engagement pathways may be used to fulfill commitments to Target 1 (Avoid and Reduce Overexploitation) Engagement pathways.<sup>30</sup>

Companies may solely use Engagement pathways if relevant stocks are not found to be overfished or experiencing overfishing but are still prioritized for engagement in Step 2 (e.g., if a company sources a high volume of seafood from a stock that is not overexploited but is in an area of high biodiversity).

The urgency of biodiversity loss and seafood overexploitation and the need for collective action at jurisdictional scales 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.

2.3.1.4 Cease to Source Pathway

Unlike the other pathways in this target, the Cease to Source pathway occurs as a result of prior targets not achieving the series of management and stock health outcomes necessary for stock recovery by the target end date (see Section 2.1.1). This means companies come to this pathway as a measure of last resort in Target 1 (see Figure 10, Section 2.7.2).

TARGET 1 INTRODUCTION CHECKLIST

Have you consulted with at least one of the outlined institutions on appropriate data sources for the stock?	2.2.2
Have you identified all relevant stocks that fall within the same jurisdiction for stakeholder consultation in 2.2.2?	2.2.2
Have you documented whether your stakeholders were able to complete all outlined tasks in 2.2.2?	2.2.2
Have you documented any data limitations?	2.2.2
Have you consulted the SBTN Stakeholder Engagement Guidance to develop your target?	2.2.2
Have you consulted with local experts and stakeholders to determine which data sources are appropriate for your stock(s)?	2.2.3
Have you used the most recent stock assessments, if available, for target validation?	2.2.3
Have you supplemented any out-of-date assessments with data from data-limited methodologies and ILK?	2.2.3
Have you identified which pathway you must follow?	2.3

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

2.4 Reduce and Engage 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. To set a Reduce and Engage target, companies will need further data to measure their impact on 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.

For engagement-related data needs, as well as the methodology for setting engagement targets alongside reduction targets, please refer to section 2.6.

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 minimally required).

2.4.2.1 Using Stock Assessments to Determine a Threshold

If stock assessments or reports with the requisite data are available (Section 2.2.1), companies **must** use these 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 or invertebrate stocks being “overfished” and “experiencing overfishing.” These statuses are determined quantitatively through stock assessments that indicate the health of the resource and status of current fishing pressure. This methodology also uses the

concepts of “critically overfished” and stocks “experiencing critical overfishing.” When stock assessments indicate that stock health and fishing pressure have exceeded science-based limits beyond the point at which stock productivity and ecosystem health are likely to be permanently impacted and trophic cascades and stock collapse are possible or imminent, the status of the fishery is considered critical and in need of urgent or greater action to facilitate recovery.<sup>31</sup>

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 critically overfished when its ratio of B to  $B_{msy}$  falls below a biomass limit reference point ( $B_{lim}$ ):

$B/B_{msy} < B_{lim}$

In the absence of a calculated  $B_{lim}$  in the stock assessment or report, critically overfished status is set using a global reference point of:  $B/B_{msy} < 0.5$

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

$F/F_{msy} > 1$

A stock is generally considered to be experiencing critical overfishing when its ratio of F to  $F_{msy}$  has exceeded a limit reference point for fishing mortality ( $F_{lim}$ )

$F/F_{msy} > F_{lim}$

In the absence of a calculated  $F_{lim}$  in the stock assessment or report, critical overfishing is set using a global reference point of:  $F/F_{msy} > 2$

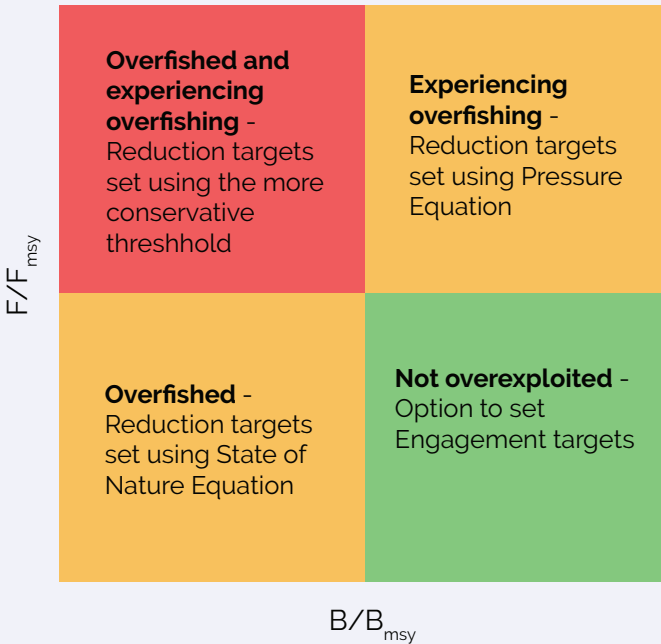


Figure 7 — Ratios and situations explaining overfishing and overfished and how they relate to equations that companies use to set Reduction targets (Section 2.4.3).<sup>32</sup>

Reduction targets depend on the relationship of these two ratios (Figure 7) 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.

*In consultation with ICCAT, Silmaril has already determined as part of its pathway selection that its Atlantic blue marlin stock is overfished, but not experiencing overfishing. Thanks to a number of years of management intervention, the stock is also determined not to be critically overfished.*

31 NAFO, [Science Abbreviations and Acronyms](#).  
32 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 as experiencing overfishing at a given point in time, companies **must** consider trends within the relevant seafood stock over the generation time (GT) of the stock. Here, SBTN follows guidance from the Marine Stewardship Council [stock rebuilding performance indicator](#). Companies **must** consider trends in stock status and overfishing based on generation time ((GT = AM50 + 1/M), where AM50 is the age at 50% maturity, and M is natural mortality)<sup>33</sup> or a five-year period .

If, through consideration of generation trends in the stock, or through stakeholder engagement and expert review, it is determined that the fluctuation is anomalous, or overexploitation has been occurring for less than one generation time, companies are not required to set Reduction targets for the given stock. In these cases, companies **must** produce evidence for validation and will proceed to Section 2.5 and follow the Cap and Engage pathway.

#### 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 may 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.

If the methodology recommends that harvesting from a stock should be reduced compared to previous years to become sustainable, companies proceed to setting company-specific Reduction targets (see Section 2.4.3). However, if the data-limited methodologies in use do not produce a quantifiable result for pressure reduction,

companies **must** move to setting a Cap and Engage target instead (suspend further work on the Reduction pathway and proceed to Section 2.5). In instances where quantifiable results are not achievable from data-limited methodologies, Engagement targets **must** focus on establishing data collection and stock assessments to facilitate future quantifiable results, in addition to other priority outcomes determined by local stakeholders.

If the methodology indicates that harvest can be increased, the stock is not considered to be overexploited. However, given the data-limited nature of the assessment, companies **must 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—stakeholders must consider trends in catch over a five-year period as part of this approach (See SBTN’s Stakeholder Engagement Guidance for more information on stakeholder consultation).

#### 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 ILK (Section 2.2.1.3). By using ILK as a primary data source for target setting, companies will likely not be able to calculate the amount by which exploitation needs to be reduced to meet a maximum allowable pressure threshold. Thresholds derived from this type of data source 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.

For validation of approaches using ILK, companies **must** consult relevant stakeholders to determine appropriate thresholds over a five-year period as part of this approach (See SBTN’s Stakeholder Engagement Guidance for more information on stakeholder consultation).

#### 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, on marine wildlife such as sea birds, marine mammals, sea turtles, and other megafauna and protected species, this target only covers bycatch of fish and invertebrates that are included in management plan(s) even if they are listed species. Impacts to ETP species are addressed in Target 3: Reduce Risk to ETP Marine Wildlife Populations.

If a bycatch species is found to be caught alongside the target species, and a stock assessment or other form of data are available<sup>34</sup> for the bycatch species to determine the current state of nature and maximum allowable pressure threshold for the bycatch stock, companies **must** evaluate these stocks in tandem with target stocks. Companies **must** then use the lower threshold of the commercially targeted and bycatch stocks to set their target.

*Atlantic tuna is typically caught as bycatch in Atlantic blue marlin longline fisheries. As a result, Silmaril needs to consider the stock health of Atlantic tuna (both yellowfin and bigeye) as part of its reduction threshold. Working again in consultation with ICCAT, it is determined that Atlantic yellowfin tuna is neither overfished nor experiencing overfishing, while bigeye tuna is overfished but not experiencing overfishing. Comparing the stock health data for bigeye tuna with that for Atlantic blue marlin, Silmaril and ICCAT determine that the Atlantic blue marlin stock is more degraded than the bigeye tuna stock, and therefore the target threshold will continue to be set based on the blue marlin stock. Note: any other bycatch that includes endangered species must be addressed by Silmaril in Target 3.*

34 For data-limited methodologies, the same approach applies as outlined in Section 2.2.3.



33 Marine Stewardship Council, 2018, “[Stock Rebuilding Performance Indicator](#).”



2.4.3 DETERMINE COMPANY-SPECIFIC REDUCE AND ENGAGE TARGETS

Following on from the above steps, companies *must* define measurable contributions 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 the desired state of nature and maximum allowable pressure thresholds (Figures 5 and 6) or based on recommendations of fishery managers.

- Companies *must* communicate whether they are using SBTN calculation or recommendations from fisheries manager for validation.
- Companies may apply reduction equations collectively with peers exploiting the same stock to achieve an aggregate reduction in pressure; 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. Depending on the exploitation of the fishery, different equations will be used to determine the Reduction target (Figure 7).

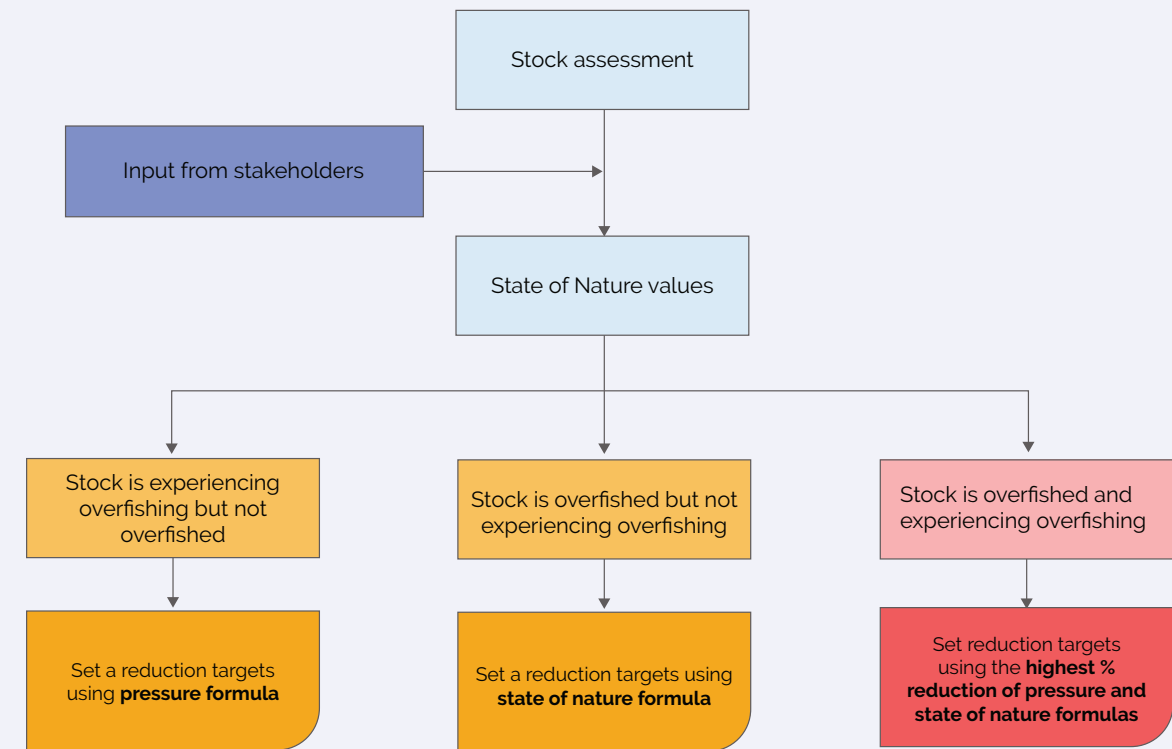


Figure 8—Stock exploitation status determines formulas to use for Reduction pathway targets. Biomass is used as the state of nature indicator; fishing mortality is used as the pressure indicator.

Equation 1: State of Nature (Biomass)

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

Equation 2: Pressure (Fishing Mortality)

$$\% \text{ Reduction in Pressure} = \frac{\text{Current sourcing pressure } (F) - \text{Maximum allowable pressure } (F_{msy})}{\text{Current sourcing pressure } (F)} \times 100$$

Figure 9—Equation 1 is used to determine proportional sourcing reductions based on biomass (B). Equation 2 is used to calculate proportional reductions in sourcing pressure based on fishing mortality (F)

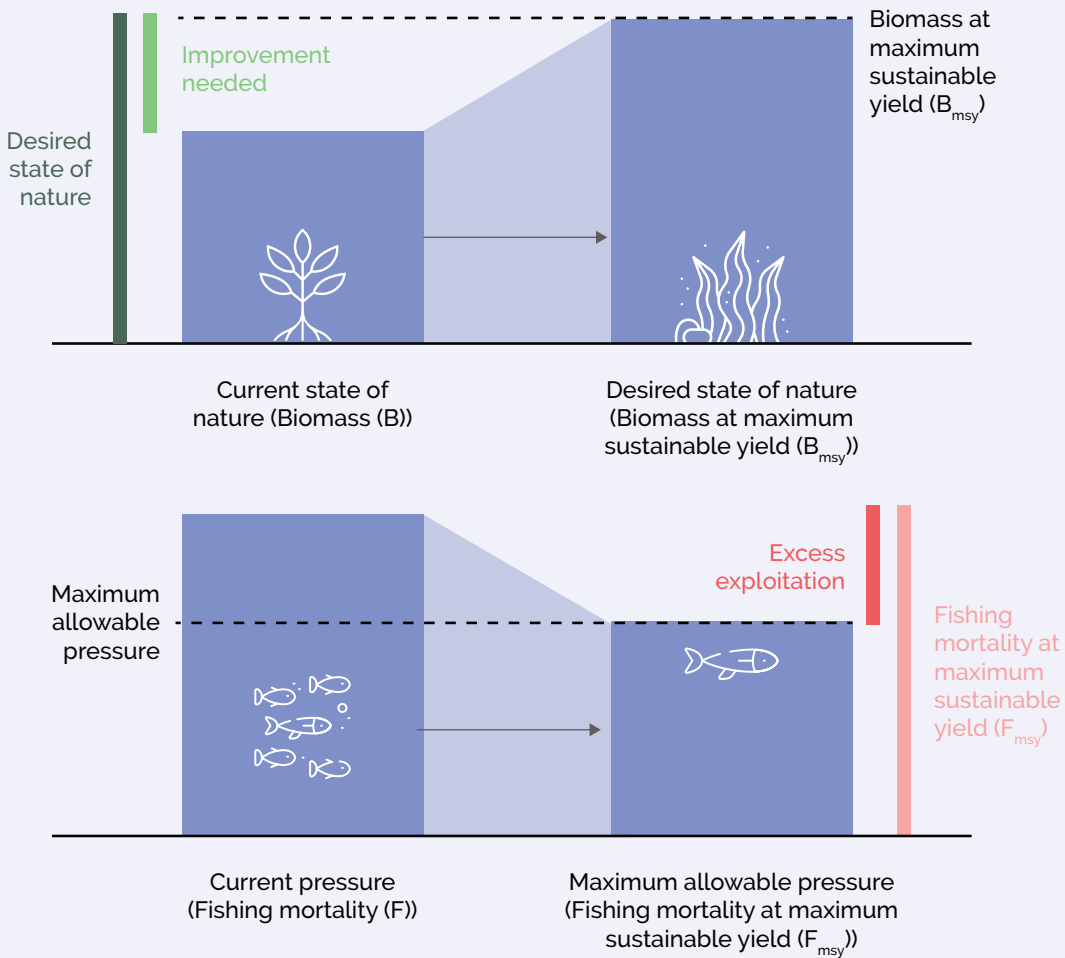


Figure 10—Desired State of Nature and maximum allowable pressure thresholds.





- 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).
- Critical overfishing and/or a stock being critically overfished do not change the guidance above; they change guidance on establishing target timelines in Section 2.4.4.

Because the Atlantic blue marlin is overfished but not experiencing overfishing, Silmaril will follow Equation 1 to determine the reduction in pressure needed. To do this, Silmaril will examine the latest stock assessment to determine the biomass (B) and biomass at MSY (B<sub>msy</sub>) figures to insert into the formula. From the stock assessment, Silmaril can see that the current biomass (B) provides a figure of 0.783, whereas B<sub>msy</sub> is 0.9. Because of this difference between B and B<sub>msy</sub>, by applying the Formula for State of Nature, Silmaril determines pressure on the stock needs to reduce by 13% to improve stock health and move the stock out of the state of being overfished:

$$((B_{msy}-B)/B_{msy}) \times 100 = X\%$$

$$((0.9-0.783)/0.9) \times 100 = 13\%$$

For Reduction targets, companies **must** determine a measurable contribution that they can make to the reduction of overexploitation of relevant fish or invertebrate stocks, which is derived directly from measurements of stock status. Note that present day pressure should be inclusive of discards for the target stock. Companies calculate new pressure levels using Equation 3 (Figure 8).

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.

Having calculated a 13% reduction need in pressure and knowing that its current pressure on the stock (determined as total catch [including discards]) amounts to 17,289 kg/year, Silmaril derives its pressure target as 15,041kg/year.

$$((100-X)/100) \times Y = Y-Z$$

$$((100-13)/100) \times 17,289 \text{ kg} = 15,041 \text{ kg}$$

(Company pressure target)

To protect its interests, while Silmaril now knows the absolute reduction required, the company needs only to disclose the relative (percentage) reduction publicly.

### Equation 3

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

Figure 11—New pressure (sourcing) levels, based on proportional reduction calculations. To set a target pressure, companies need to apply their catch data for this stock as their 'present day pressure' in Equation 3 and their % reduction in pressure from Equation 1 or 2.

#### 2.4.4 ESTABLISHING REDUCE & ENGAGE TARGET TIMELINES

Companies must establish timelines upon which they will act (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 must be both an ambitious and achievable period within which to meet the target. In addition, there are several considerations to target timelines as part of the SBTN process. Companies must use Table 3 to determine target end dates.

- Target end dates for Engagement targets will be set at least three years and no more than five years from the start date of the target, at which point the target and the stock will be reassessed for meeting the stage of stock recovery for that target.
- Target end dates for Reduce and Engage targets should also be consistent with the biological characteristics (i.e., life cycles and GT), stock condition, and data availability during the target-setting process. Life cycles and GTs of marine species vary, so population changes may occur over a shorter or longer period than specified for setting Reduction targets. In these cases, companies are advised to set targets that are achievable within established timelines, with an intent to continue progress beyond the target end date through iteration and the eventual setting of new targets.

#### Reduction Target End Date: Years from Target Start Date

		Overfished Status: Biomass (B)		
		$B/B_{msy} < B_{lim}$	$B/B_{msy} < 1$	$B/B_{msy} \geq 1$
Overfishing Status: Fishing Mortality (F)	$F/F_{msy} > F_{lim}$	3 years	3 years	3 years
	$F/F_{msy} > 1$	3 years	5 years	5 years
	$F/F_{msy} \leq 1$	3 years	5 years	Optional

Table 1—Description of target timelines based on type and severity of overexploitation.

- Companies **must** consult with relevant stakeholders, according to SBTN's Stakeholder Engagement Guidance, when determining timelines for Reduction targets.

As Atlantic blue marlin is not critically overfished, and fishing pressure is below F<sub>msy</sub>, the end date for Silmaril's reduction target for this stock is five years from the target start date.



2.4.5 REDUCTION TARGET TEMPLATE LANGUAGE

Avoid and Reduce Overexploitation targets via the Reduce and Engage pathway will be stated in the following form. Companies **must** disclose their relative reduction in sourcing within their Reduce and Engage target, and may disclose their absolute reduction. Proceed to Section 2.6 for information on how to set Engagement targets.

By [target end date], [Company X] will reduce its sourcing of [species] from [stock name] by X% 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. (See section 2.6 for more information on Engagement targets)

Silmaril's Reduce and Engage target, assuming a target start date of 2025, looks as follows:

By 2030, Silmaril Seafoods will reduce its sourcing of Atlantic blue marlin by 13% compared to a 2025 baseline.

To learn more about Silmaril's reduction target and work on Atlantic blue marlin after 2030, please proceed to Section 2.7.

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 indirect 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 Reduce and Engage 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 and Reduce 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; and
- Roadmap of Engagement pathway, as laid out in the Annex.

REDUCE AND ENGAGE PATHWAY CHECKLIST

Have you determined your spatial scale?	2.4.1.2
Have you identified the stock from which your seafood originates?	2.4.1.2
Have you accounted for the life history of your targeted stocks?	2.4.1.2
Are there stock assessments that you can use to determine the current state of nature of your stock?	2.4.2.1
If not, have you proceeded to use data-limited methodologies and ILK?	2.4.2.2 & 2.4.2.3
Have the values derived from your stock assessment, ILK and/or data-limited methodologies been endorsed by relevant stakeholders?	2.4.2
Have the metrics to determine your thresholds been endorsed by relevant stakeholders?	2.4.2
Have you considered trends in stock status within one generation time?	2.4.2.1
Do you have evidence to support a change to the Cap and Engage pathway, as applicable?	2.4.2
Have you determined whether your stock is critically overfished, or experiencing critical overfishing?	2.4.2.1
Have you considered and evaluated bycatch species?	2.4.2.4
Have you communicated whether reductions in pressure are based on recommendations from fishery managers?	2.4.3
Have you used the correct formulas based on whether your stock is overfished/experiencing overfishing?	2.4.3
Have you determined the measurable contribution that you can make to reduce overexploitation?	2.4.3
Have you determined the correct timeframe for your target, and is your target achievable within this timeframe (up to five years)?	2.4.4
Have you consulted the SBTN Stakeholder Engagement Guidance to develop your target?	2.4.4
Have you consulted with relevant stakeholders to determine your timeline?	2.4.4
Have you submitted all the required elements for validation?	2.4.5





## 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 Reduce and Engage pathway. Refer to Sections 2.4.1 and 2.6.1. Companies are directed to cap sourcing, rather than reduction, when overexploitation has been occurring for **less than five years or 1 GT**. If after five years or 1 GT overexploitation continues to occur in the absence of necessary management and stock health outcomes, companies will move from the Cap Sourcing pathway to the Reduction pathway.

Silmaril has determined that the North Sea herring it sources from a third party for processing should be subject to a Cap Sourcing and Engage target. As a result, it will cap its sourcing of North Sea herring at its most recent level. Silmaril will then proceed to set Engagement targets for North Sea herring (please skip to Section 2.6 to continue the worked example).

### 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, 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 must be both an ambitious and achievable period within which to meet the target, and no later than five 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 GT or five years of the target start date (whichever is the lower number).
- Target end dates for Engagement targets will be set at least three years from the start date of the target, at which point the target will be re-evaluated and must be re-validated.

### 2.5.4. CAP SOURCING AND ENGAGE TARGET TEMPLATE LANGUAGE

Avoid and Reduce Overexploitation targets via the Cap Sourcing & Engage pathway will be stated in the following form:

*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. (See section 2.6 for more information on Engagement targets.)*

Due to the short generation time of herring (3.3 years), Silmaril's Cap Sourcing target looks as follows:

*By 2028, Silmaril Seafoods will cap its sourcing of North Sea herring compared to a 2025 baseline.*

Silmaril's engagement target for North Sea herring is described in Section 2.6.

### 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 indirect 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 its strategy and potential response options for achieving the Avoid and Reduce 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 capping activity;
- Roadmap of Engagement pathway, as laid out in the Annex.

## CAP SOURCING AND ENGAGE PATHWAY CHECKLIST

Have you set a target that is achievable within five years?	2.5.3
Have you committed to cap sourcing within one GT/five years?	2.5.3
Have you consulted the SBTN Stakeholder Engagement Guidance to develop your target?	2.5.3
Have you consulted with relevant stakeholders to determine your timeline?	2.5.3
Have you submitted all the required elements for validation?	2.5.5



E

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 seafood source data. Because Engagement pathways and associated improvement initiatives address environmental conditions at jurisdictional or seascape levels (i.e., beyond the sole responsibility of a company), additional data are required to establish baselines against which reductions in overexploitation and/or contributions to conservation outcomes are measured. Improvement initiatives selected for Engagement pathways can include those that promote positive management practices, good governance, restoration, and/or material improvements in the regions where the company has impacts on the health of wild seafood stocks. This will depend on the trajectory of stock recovery at the beginning of the target’s timeline relative to stock recovery as outlined in Section 2.1.1.

Companies that set Engagement pathway targets *must* provide baseline data and indicators relevant to the initiative’s goals (see Annex). For example, if an initiative’s goal is to improve the health of a particular stock, the initiative may need to provide data on the:

- Current and desired health (state of nature) of that stock;
- Status of conservation measures in the jurisdiction (e.g., marine protected areas or seasonal fishery closures);
- Fisheries management measures in the jurisdiction.

While indicator selection is required at the time of target submission for Engagement initiatives, baselines for those indicators are not required at the time of target submission; they may be submitted up to 12 months after successful target submission. See the Annex: Section 5.4 for further information.



Silmaril Seafoods processes North Sea herring that it sources from a third party. It has determined it needs to set a Cap and Engage target for this stock due to its recent history of overfishing. The cap component of the target is addressed in Section 2.5, and the engage component will be addressed in this section.

North Sea herring is managed collectively by the European Union, United Kingdom and Norway, which have set a 2025 Total Allowable Catch (TAC) across fleets of 425,710 tons—above the ICES advice of 410,707 tons in line with maximum sustainable yield. As parts of the North Sea herring populations are already MSC certified, there is limited scope for Silmaril Seafoods to engage with jurisdictional initiatives for improvement, beyond joining calls for negotiating parties to set TACs in alignment with scientific advice. In that context, Silmaril's improvement initiative for North Sea herring is specifically geared towards this objective: to bring existing management in line with scientific advice. To that effect, it will communicate as part of its validation for this target the challenges in establishing new improvement or jurisdictional initiatives in a region like the North Sea, which is already extensively governed and MSC certified, and will share scientific advice provided by ICES on North Sea herring as well as decisions made by negotiating parties on annual TACs that support Silmaril's position of engagement.

Photo Credit: Google Earth 2025





2.6.2 DETERMINE COMPANY-SPECIFIC ENGAGEMENT TARGETS

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 in Step 2. These may vary from other pathway spatial scales or between Engagement targets. The spatial scale will often correspond to the biological scale of the fish or invertebrate stock; however, engagements may occur at a broader scale. More information can be found in the Annex.

*For Silmaril, the engagement on North Sea herring will follow the scale of application of the TAC and ICES advice for this population.*

Engagement targets are designed to improve operations and environmental conditions in the jurisdictions from where seafood originates, thus facilitating stock recovery. They include external improvement initiatives that a company supports or builds to effect change. 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<sup>35</sup> and Seascope Approaches<sup>36</sup> are both examples of improvement initiatives but are not the only types of initiatives in which companies can engage. For this target, engagement **must** directly relate to the health of the relevant fish stocks or improve management and policy that will reduce overexploitation and facilitate recovery as seen in Section 2.1.1. Eligible improvement initiatives are characterized by the following requirements:

Criteria 1	Criteria 2	Criteria 3	Criteria 4
Every seascope or jurisdictional initiative must operate at the scale of a recognized ecological or administrative area	The vision and needs of relevant stakeholder groups must be included in the design, implementation, and monitoring of an initiative.	There are collective goals and actions for nature and people based on science that are tied to the pressures and ambition of the target.	There is transparent reporting on actions/ investments made in the seascope or jurisdictional

Figure 12 — The criteria for improvement initiatives that qualify for Engagement targets. Further details: Criteria 1: The seascope/ jurisdictional boundary may be defined by local stakeholders and include ecological areas such as Large Marine Ecosystems or administrative areas such as state, provinces, municipalities, or districts; Criteria 2: At least three stakeholder groups participate(d) in the initiative; Criteria 3: Goals for nature and people must be defined collectively by relevant stakeholders and have a direct connection to initiative actions or investment; and Criteria 4: Transparency must include reporting to stakeholders involved in the initiative.

35 WWF, 2023, “Developing Jurisdictional Initiatives for the Seafood Sector.”  
36 Murphy et al., 2021, “Fifteen years of lessons from the Seascope approach: A framework for improving ocean management at scale.”

2.6.3 ESTABLISHING ENGAGEMENT TARGET TIMELINES

Companies **must** establish timelines upon which they will develop, 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 **must** embody both an ambitious and achievable period within which to meet the target, and no later than five years from the start date. In addition, there are several considerations to target timelines as part of the SBTN process:

- Target end dates for Engagement targets will be set at least three 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 SBTN’s Stakeholder Engagement Guidance, when determining timelines for Engagement targets.

Existing initiatives **must** meet the first two criteria at the time of target submission. Companies **must** also submit 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. For new initiatives started by the company, it **must** submit documentation of plans to meet all four criteria within one year of target submission. See the Annex, Section 5.4 for further information on seascope initiative maturity and how to develop an Engagement Roadmap to fulfill this target.

*As this is a new, company-specific initiative established by Silmaril, the company needs to outline its plans for engagement in line with Criteria 1–4 illustrated above. This should include a clear articulation of what its engagement intends to achieve, how it intends to work with other stakeholders on this topic, a plan for how Silmaril will advocate for sustainable management of North Sea herring through existing governance, and how it will report annually on its efforts in this regard.*

Companies are encouraged to submit Engagement pathway targets for existing initiatives that meet the above criteria and 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 the required targets via the Prioritization process and will only be validated after Prioritized location targets are submitted and approved.

*For Silmaril’s engagement on North Sea herring, the approach will center on whether annual TAC decisions are made in line with annual ICES advice. Silmaril, in consultation with ICES and other industry stakeholders, determines that the fairest approach (which is communicated for SBTN validation) is that TACs should be set in line with ICES advice by Year 3 of engagement. This corresponds approximately to 1 GT for herring (this also reflects the cap element of the Cap and Engage pathway that Silmaril is following for North Sea herring, which is set at three years in line with herring GT).*



2.6.4 ENGAGEMENT TARGET TEMPLATE LANGUAGE

Avoid and Reduce Overexploitation 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.*

*Silmaril's Engagement target for herring looks as follows:*

Silmaril will engage on sustainable exploitation of North Sea herring by 2025, to reduce overexploitation in North Sea herring by 2028, as compared to a 2025 baseline.

*To learn more about Silmaril's Cap and Engage target and work on North Sea herring after 2030, please proceed to Section 2.7.*

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.

ENGAGEMENT PATHWAY CHECKLIST

Have you sourced data that relates to your company's pressures as well as from initiatives in which you will engage?	2.6.1.1
Does the engagement you will participate in relate directly to the reduction of overexploitation of relevant fish or invertebrate stocks, or their improved management?	2.6.2
Does the seascape or jurisdictional initiative meet the outlined requirements?	2.6.2
Is your target achievable within five years?	2.6.3
Is your target end date at least three years after your start date?	2.6.3
Have you consulted the SBTN Stakeholder Engagement Guidance to develop your target?	2.6.3
Have you consulted with relevant stakeholders to determine your timeline?	2.6.3
Have you submitted all the required elements for validation?	2.6.5

Photo Credit: Teryll KerrDouglas





## 2.7 Cease to Source Pathway

### 2.7.1 ESTABLISH BASELINE VALUES FOR RELEVANT PRESSURES

The data needs and spatial scale for this pathway are the same as for the Reduce and Engage pathway. Refer to Section 2.4.1. Note that due to the iterative nature of the Cease to Source pathway, data needs refresh for every reassessment of pressures (e.g., the latest stock assessment data *must* be used for every new round of target setting).

*It is now 2030, and Silmaril has completed its work both to Reduce and Engage on Atlantic blue marlin and Cap Sourcing and Engage on North Sea herring.*

### 2.7.2 DETERMINE COMPANY-SPECIFIC CEASE TO SOURCE TARGETS

Unlike the other pathways in this target, the Cease to Source pathway occurs as a result of other targets not achieving the series of management and stock health outcomes necessary for stock recovery by the target end date (see Section 2.1.1). This means companies come to this pathway differently than the others in the Avoid and Reduce Overexploitation target, as seen in the figure below.

According to Figure 10 (right), companies determine their Cease to Source targets when:

- Previous Reduce and Engage targets failed to facilitate stock recovery;
- The wild-capture seafood source is still overexploited ( $F/F_{msy} > 1$  and/or  $B/B_{msy} < 1$ ) at the end of the time period set for the previous target.

If these conditions are met, the company *must* set a Cease to Source target. If they are not met, companies will typically set new Reduce & Engage targets for another time period determined by overexploitation status—note that, at this stage, a company’s production may reduce further, remain the same, or increase slightly compared to the prior target period, depending on new data on pressures and state of nature.

Companies should also communicate to fisheries managers their reasons for disengaging with the fishery when this target is set and should consider the value of a public statement beyond the target template language below. These public statements ensure managers and other stakeholders in the fishery understand the status of the fishery is considered a significant risk to nature and business.

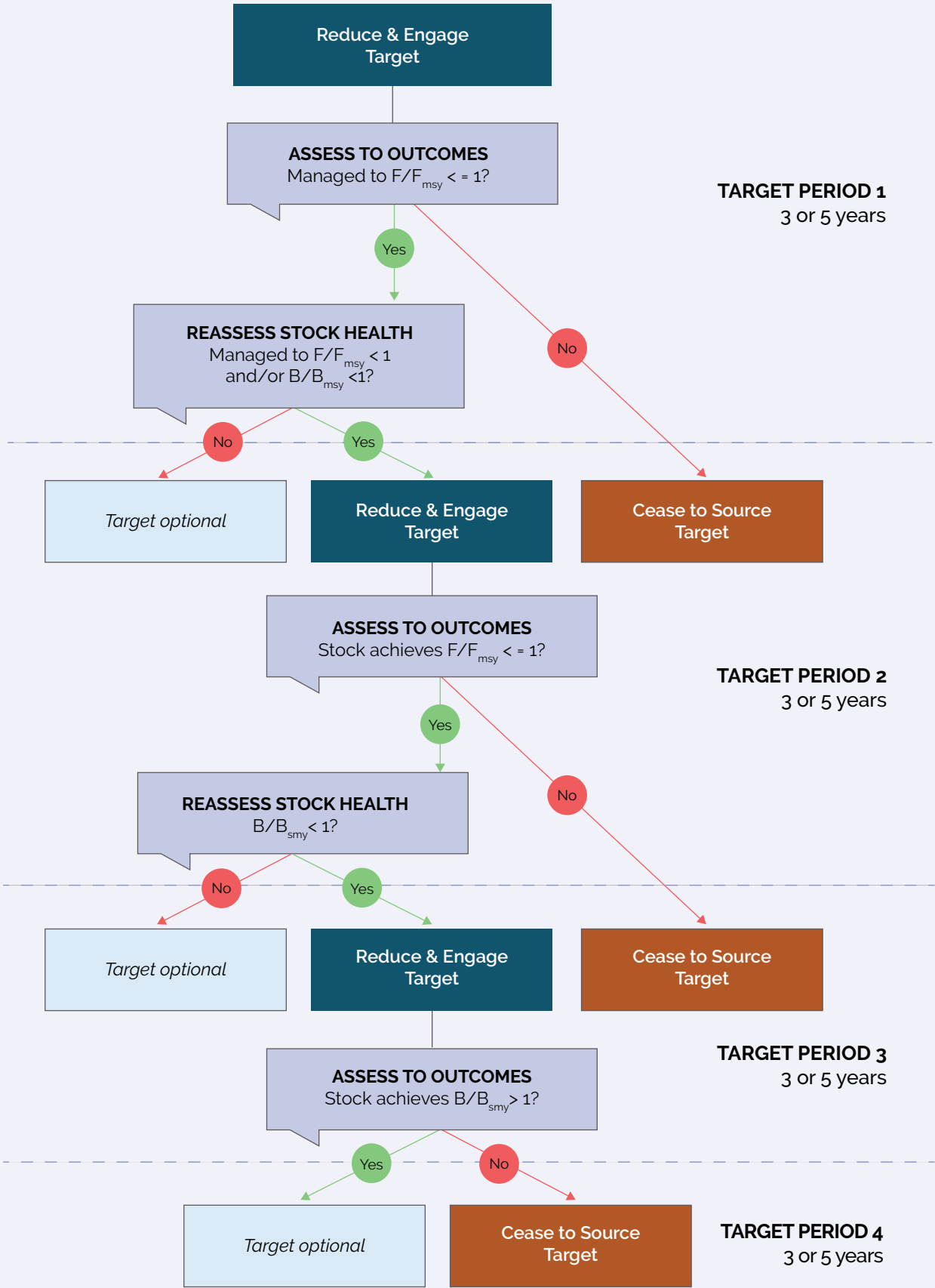
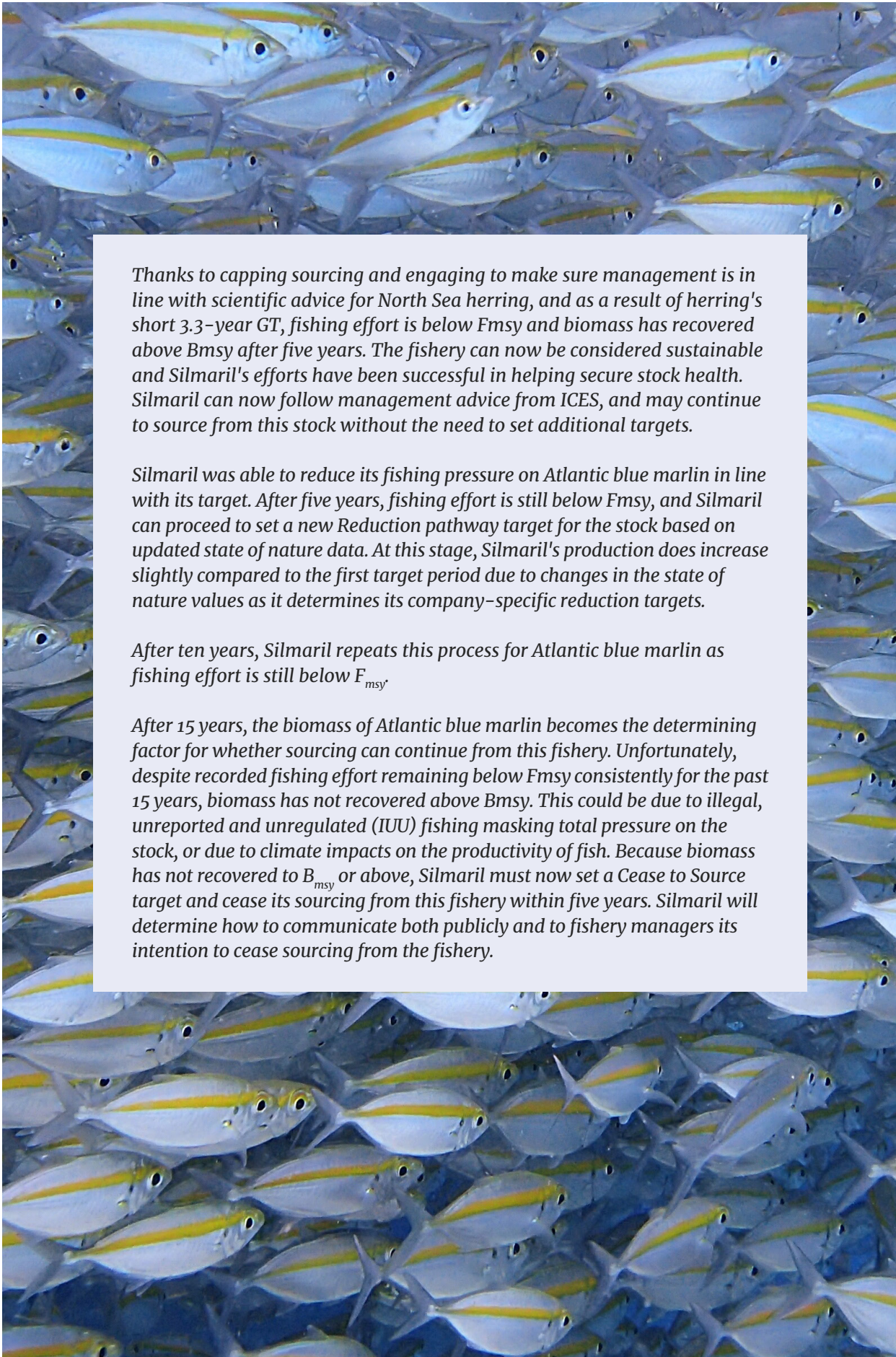


Figure 13—Flowchart describing the sequence of target setting for stock recovery and how the Cease to Source pathway may apply. Note that both fishing pressure and stock health are reassessed for every iteration to determine whether and what kind of pathway is appropriate.



Thanks to capping sourcing and engaging to make sure management is in line with scientific advice for North Sea herring, and as a result of herring's short 3.3-year GT, fishing effort is below  $F_{msy}$  and biomass has recovered above  $B_{msy}$  after five years. The fishery can now be considered sustainable and Silmaril's efforts have been successful in helping secure stock health. Silmaril can now follow management advice from ICES, and may continue to source from this stock without the need to set additional targets.

Silmaril was able to reduce its fishing pressure on Atlantic blue marlin in line with its target. After five years, fishing effort is still below  $F_{msy}$ , and Silmaril can proceed to set a new Reduction pathway target for the stock based on updated state of nature data. At this stage, Silmaril's production does increase slightly compared to the first target period due to changes in the state of nature values as it determines its company-specific reduction targets.

After ten years, Silmaril repeats this process for Atlantic blue marlin as fishing effort is still below  $F_{msy}$ .

After 15 years, the biomass of Atlantic blue marlin becomes the determining factor for whether sourcing can continue from this fishery. Unfortunately, despite recorded fishing effort remaining below  $F_{msy}$  consistently for the past 15 years, biomass has not recovered above  $B_{msy}$ . This could be due to illegal, unreported and unregulated (IUU) fishing masking total pressure on the stock, or due to climate impacts on the productivity of fish. Because biomass has not recovered to  $B_{msy}$  or above, Silmaril must now set a Cease to Source target and cease its sourcing from this fishery within five years. Silmaril will determine how to communicate both publicly and to fishery managers its intention to cease sourcing from the fishery.

### 2.7.3 ESTABLISHING CEASE TO SOURCE PATHWAY TIMELINES

Companies **must** establish timelines upon which they will develop, 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. For a Cease to Source pathway, the target end date **must** be no later than five years from the start date.

### 2.7.4 CEASE TO SOURCE TARGET TEMPLATE LANGUAGE

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

*[Company X] will cease sourcing [stock name] from [location] by [target end date] due to continued overexploitation despite efforts for improvement since [original Reduce and/or Cap Sourcing and Engage target start date].*

Due to its decision in 2040, after multiple rounds of Reduction targets since 2025, Silmaril's Cease to Source target looks as follows:

Silmaril Seafoods will cease sourcing Atlantic blue marlin from West Africa by 2045 due to continued overexploitation despite efforts for improvement since 2025.

### 2.7.5 CEASE TO SOURCE TARGET VALIDATION

To ensure a Cease to Source pathway target is validated, a company **must** submit:

- International Standard Industrial Classification (ISIC) sector classification(s) describing their direct operations and indirect activities;
- Demonstration of legal status of commercial fishing sources;
- Activity amounts (i.e., quantities of seafood-based products produced or purchased) for the most recent year or other relevant reporting period;
- Data used to establish assessment points (see Figure 10);
- A narrative description of its strategy and potential response options for achieving the Avoid and Reduce Overexploitation target, including the proposed approach to reducing sourcing to zero (e.g., switching sourcing to an alternative, healthy stock, changes to production).

## CEASE TO SOURCE PATHWAY CHECKLIST

Have you sourced new data that relates to your company's pressures for each target iteration?	2.7.1
Does the seafood source qualify for the Cease to Source pathway?	2.7.2
Is your target end date no more than five years after your start date?	2.7.3
Have you submitted all the required elements for validation?	2.7.5



## **TARGET 2: PROTECT STRUCTURAL HABITATS**



### 3.1 Introduction to Protect Structural Habitats Target

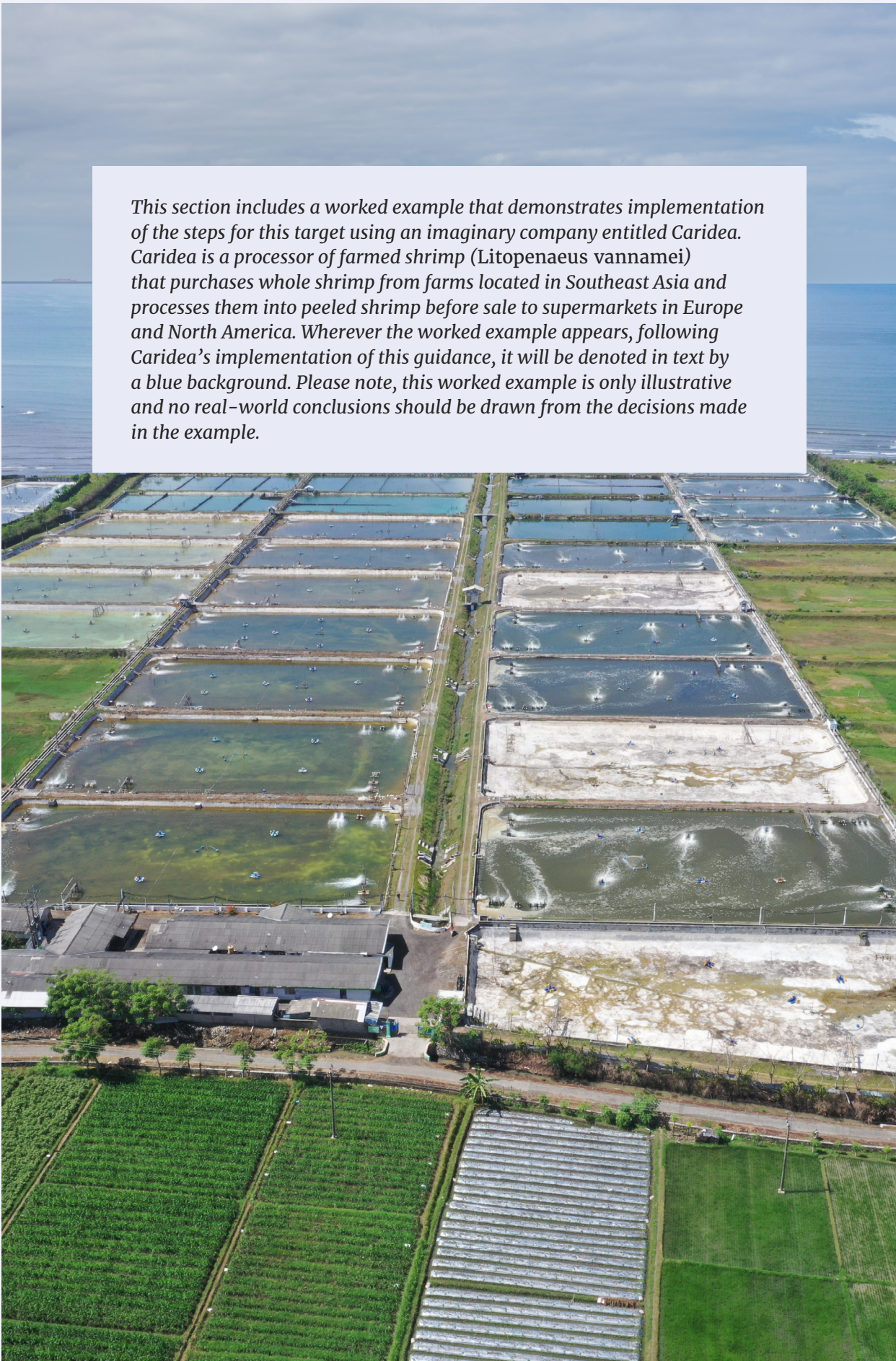
#### 3.1.1 TARGET RATIONALE AND APPROACH

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.<sup>37, 38</sup> 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.<sup>39</sup> This target supports Goals A and B of the Kunming–Montreal Global Biodiversity Framework (GBF) 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 GBF targets 3 and 10.<sup>40</sup> Due to its focus on habitats, this SBTN Ocean target is suitable for both fishing and aquaculture companies. Please note that where habitat-forming species that are listed as ETP (e.g., coral) are present, these **must** be addressed under Target 3: Reduce Risk to ETP Marine Wildlife (See Section 4), rather than Target 2.

This target is approached by two pathways which will be discussed in more detail later in the guidance, acknowledging 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 GBF, 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 they use in their corporate social responsibility commitments<sup>41</sup>, 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 via improvement initiatives and advocacy for improved management and governance of marine and transitional habitats.



This section includes a worked example that demonstrates implementation of the steps for this target using an imaginary company entitled Caridea. Caridea is a processor of farmed shrimp (*Litopenaeus vannamei*) that purchases whole shrimp from farms located in Southeast Asia and processes them into peeled shrimp before sale to supermarkets in Europe and North America. Wherever the worked example appears, following Caridea’s implementation of this guidance, it will be denoted in text by a blue background. Please note, this worked example is only illustrative and no real-world conclusions should be drawn from the decisions made in the example.

37 Thrush and Dayton, 2002, “[Disturbance to Marine Benthic Habitats by Trawling and Dredging.](#)”  
38 Diana, 2009 “[Aquaculture Production and Biodiversity Conservation.](#)”  
39 Airoidi, Balata, and Beck, 2008, “[The Gray Zone: Relationships between habitat loss and marine diversity and their applications in conservation.](#)”  
40 Kunming–Montreal Global Biodiversity Framework.  
41 Packer et al., 2019, “[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 its operations from wild-capture or aquaculture practices, it 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<sup>42</sup>

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 their supply chain to meet standards of best practice for wild-capture fisheries or aquaculture.



**Engagement pathway:** Companies commit to improvements in direct operations or operations within their supply chain to meet standards of best practice for wild-capture fisheries or aquaculture.

Companies with impacts from 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 ILK sources to determine baseline values of habitat impacts and pressures as detailed in Section 3.3, in the [Ocean Hub Data Resources spreadsheet available on the SBTN website](#), and the Annex.



#### 3. Companies commit to improving operations to standards of best practice

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.

<sup>42</sup> Please note that unlike the order of operations for Target 1 which begins with data sources, Target 2 begins with pathway selection.





## 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 supply chain operations, or if they will be engaging in initiatives in their areas of impact, as described below.

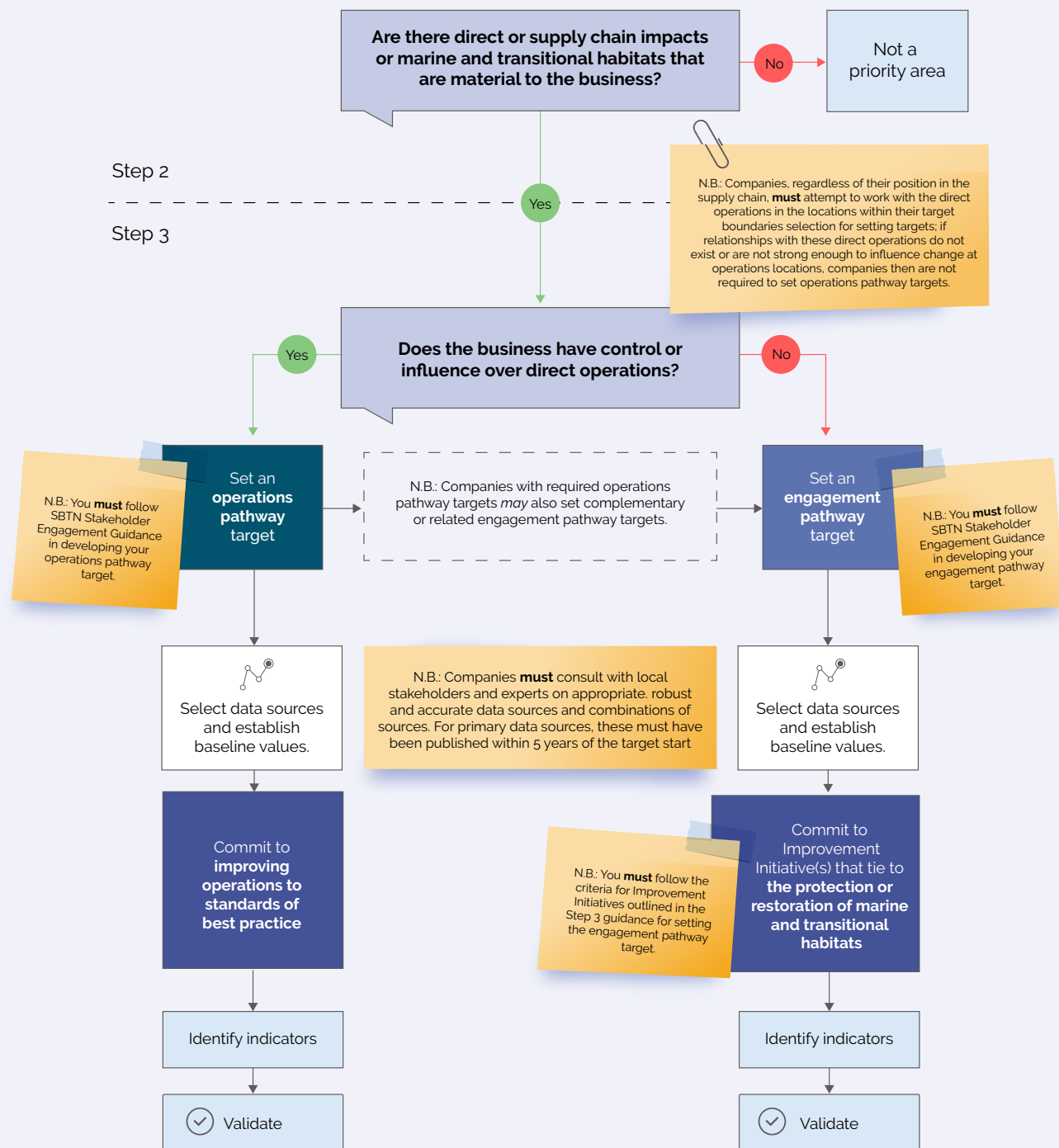
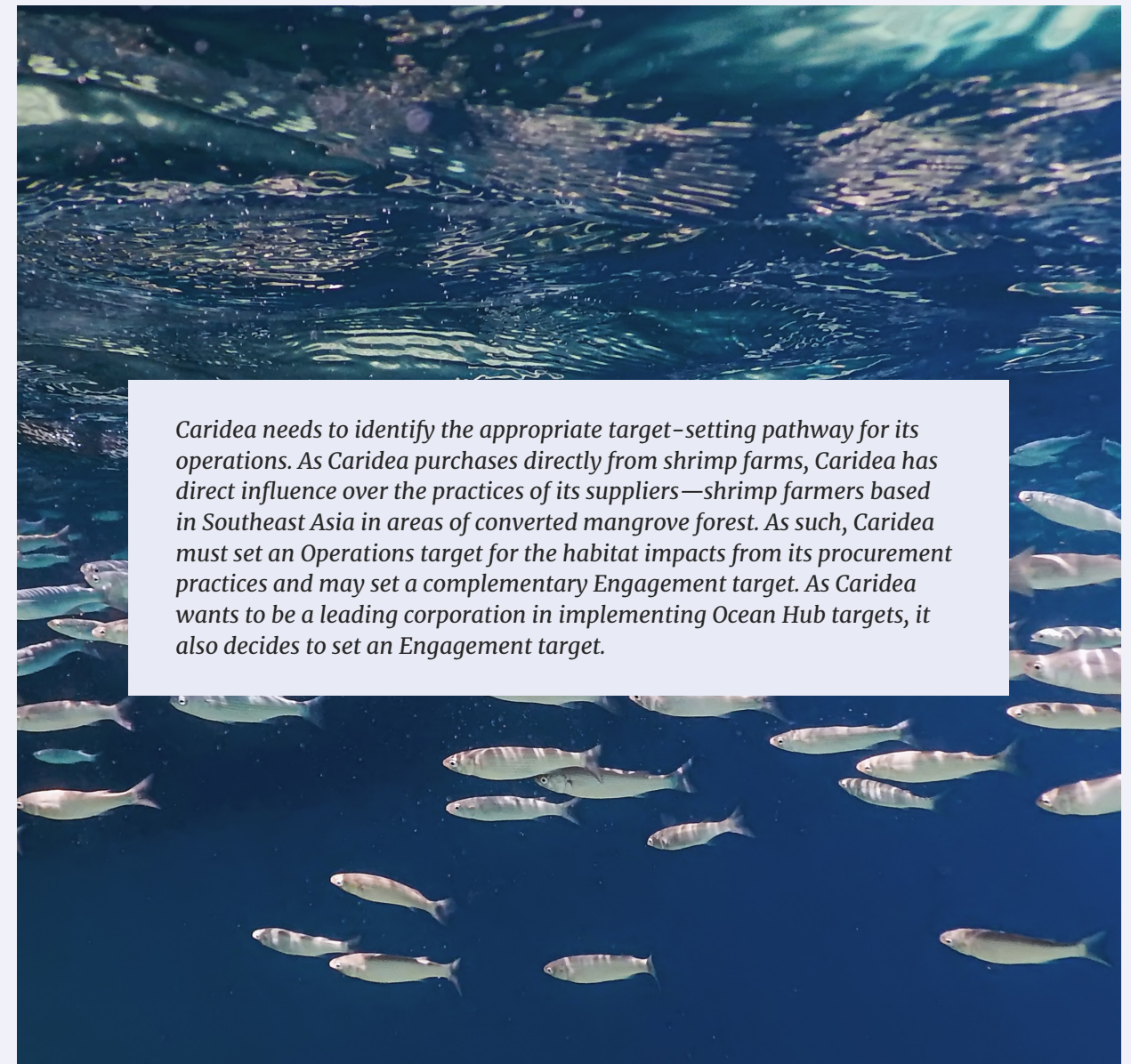


Figure 14 — Process for determining pathways and setting targets in Target 2.



*Caridea needs to identify the appropriate target-setting pathway for its operations. As Caridea purchases directly from shrimp farms, Caridea has direct influence over the practices of its suppliers—shrimp farmers based in Southeast Asia in areas of converted mangrove forest. As such, Caridea must set an Operations target for the habitat impacts from its procurement practices and may set a complementary Engagement target. As Caridea wants to be a leading corporation in implementing Ocean Hub targets, it also decides to set an Engagement target.*

### 3.2.1 OPERATIONS PATHWAY

Companies that take the Operations pathway to set targets commit to improvements in their own practices and operations or those of suppliers on which they can exert influence and work with to facilitate change. Operations pathways are required for companies with pressures from direct operations.

Operations pathways will primarily establish and ensure standards of best practice for a company's operations, as described below, at operation locations. If standards of best practice for impact reduction and habitat recovery are not already in place, these **must** be implemented first in target setting as they are the foundation for ensuring habitat protection and restoration. These best practices are outlined in Section 3.2.1.1.

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 practices.



### 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, area-based management plans, 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 several relevant standard-setting resources. These include the FAO Code of Conduct for Responsible Fisheries (CCRF)<sup>43</sup>, the Marine Stewardship Council (MSC) Fisheries Standard, and the Monterey Bay Aquarium Seafood Watch's Standards for Fisheries, providing general standards of best practice for fisheries, as follows:

- All critical fisheries habitats in marine and transitional ecosystems, such as wetlands, mangroves, reefs, lagoons, nursery, and spawning areas, should be protected and restored 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 (e.g., 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.

*Caridea sources farmed shrimp that relies on marine feed ingredients. However, because those feed ingredients are sourced from fisheries using midwater trawls, which do not impact bottom habitats, the company can disregard the elements of Target 2 that are directed towards fisheries. Note that if these feed fisheries are a priority stock for Caridea, as outlined in Step 2, the company will need to follow Target 1 to Avoid and Reduce Overexploitation of the stock.*

<sup>43</sup> While directed towards a public sector audience, the CCRF forms the basis of fisheries certifications recognized by the Global Seafood Sustainability Initiative (GSSI).

### 3.2.1.2 Best Practices for Aquaculture Farms

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, area-based management plans, 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), Aquaculture Stewardship Council (ASC) Farm Standards, and the Monterey Bay Aquarium Seafood Watch's Standards for Aquaculture<sup>44</sup> as general standards of best practice for aquaculture, as follows:

1. Effluent discharge, while difficult to assess, should be managed by risk assessment and monitored not only for 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 water body.<sup>45</sup>
2. Use of therapeutants, hormones, drugs, antibiotics, and other disease control chemicals should be kept to minimal levels that are considered safe and effective.
3. Aquaculture facilities should not cause the loss of any functionality or ecosystem services in the habitats (particularly wetlands) where the company operates compared to the historic or recent past (after 1999, according to the Ramsar Convention).<sup>46</sup>
4. Aquaculture facilities should be based in jurisdictions where there are area-based, cumulative management systems.
5. Employ farm-level and industry-wide best practices that measure and monitor performance, and reduce specific threats to nature and people in the industry.
6. Use of verified, transparent farm-level reporting and disclosure to local stakeholders and the public.
7. Participation in area-based or producer organization agreements, Area Management Agreements (AMA) 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.) and the sharing of farm data regarding chemicals, treatments, and water quality.

*Caridea needs to understand what best practices for habitat and restoration look like at a supplier level. The farms in scope for its assessment are located within the same geographic area. As they are not certified, nor are they found in Aquaculture Improvement Projects, Caridea decides it must manually determine best practices with input from local stakeholders. For Caridea, this means setting up a working group with its suppliers, local community representatives, and local academics to understand what local regulations and commitments exist, and how to interpret the FAO Code of Conduct for Responsible Fisheries and the Seafood Watch Standards for Aquaculture for its suppliers' unique situations.*

<sup>44</sup> Monterey Bay Aquarium Seafood Watch, "[Standards for Aquaculture V4](#)."

<sup>45</sup> For an example, see the Freshwater Hub Guidance: Freshwater Quality Target guidance for an example of carrying capacity guidance in freshwater bodies of water.

<sup>46</sup> [Ramsar Convention, 1999](#).



Caridea’s suppliers built their farms in a coastal mangrove forest and cleared parts of the forest to build their farms. The suppliers received lawful permits from the government to do so and continue to operate legally. Since their development, however, government policy has changed, and no new development is allowed within the mangrove forest. Through the working group and with input from local stakeholders who know the ecosystem well, Caridea learned that the area immediately surrounding the farms is intact, though degraded, and includes coral reefs. As mangroves and coral reefs are determined to be especially important ecosystems that also feature within the National Biodiversity Strategy and Action Plan (NBSAP) of the country the farms are in, Caridea will need to work closely with its suppliers to protect, and where appropriate, restore these structural habitats and act on each of the general standards of best practice for aquaculture. This information will also become relevant for section 3.3.1.2 (see below).

### 3.2.2 ENGAGEMENT PATHWAY

An Engagement pathway target will lead to improvements in seascapes or jurisdictions relevant to a company’s direct operations or seafood sourcing, resulting in protection or restoration of marine and transitional water habitats. These pathways are **required** for companies with impacts in marine and transitional habitats that are unable to work through their supply chains with direct operators to influence adoption of standards of best practice. They are also recommended for companies that are using Operations pathways.

Engagement targets are designed to improve operations and habitat conditions in the jurisdictions where seafood is sourced and therefore are focused on external activities that a company can support to effect change. This framework focuses on improvement initiatives; further information on specific actions companies can take within improvement initiatives is detailed in the Annex. Improvement initiatives selected for Engagement pathways can include those 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 MPAs and OECMs, particularly to protect habitat from the impacts of fishing or aquaculture.

Companies **must** follow the SBTN Stakeholder Engagement Guidance in developing their Engagement pathway 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. Jurisdictional Initiatives<sup>47</sup> and Seascape Approaches<sup>48</sup> 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 for improvement initiatives:

Criteria 1	Criteria 2	Criteria 3	Criteria 4
Every seascape or jurisdictional initiative must operate at the scale of a recognized ecological or administrative area	The vision and needs of relevant stakeholder groups must be included in the design, implementation, and monitoring of an initiative	There are collective goals and actions for nature and people based on science that are tied to the pressures and ambition of the target	There is transparent reporting on actions/ investments made in the seascape or jurisdictional initiative

Figure 15 — The criteria for improvement initiatives that qualify for Engagement targets. Criteria 1: The seascape/jurisdictional boundary may be defined by local stakeholders and include ecological areas such as Large Marine Ecosystems or administrative areas such as state, provinces, municipalities, or districts; Criteria 2: At least three stakeholder groups participate(d) in the initiative; Criteria 3: Goals for nature and people must be defined collectively by relevant stakeholders and have a direct connection to initiative actions or investment; and Criteria 4: Transparency must include reporting to stakeholders involved in the initiative.

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. For new initiatives started by the company, it **must** submit documentation of plans to meet all four criteria within one year of target submission. See the Annex and Section 5.4 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 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 can be validated but they will not substitute for the targets required via the Prioritization process and will only be validated after Prioritized location targets are submitted and approved.



Caridea has experience with improvement initiatives, having participated in Aquaculture Improvement Projects and supported certification for suppliers in other geographies (not in scope for the SBTN process). The company is keen to participate in improvement initiatives for the segment of its supply chain in scope for the SBTN process. Unfortunately, no existing improvement initiatives currently exist for this geography; Caridea will need to establish a new initiative in partnership with its suppliers and local stakeholders.

<sup>47</sup> WWF, 2023, [Guidelines for Developing Jurisdictional Initiatives for the Seafood Sector: Overview](#)

<sup>48</sup> Conservation International, [Seascapes Program](#)





### 3.3 Data Selection & Establishing 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.



Photo © Jessica Scranton

The data needs for each seafood commodity are distinct depending on whether 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 following:

- The presence of highly damaging fishing practices within the geographic area of the fishery;
- The marine and/or coastal habitats within the geographic area of the fishery;
- The presence of protected areas (e.g., MPAs and OECMs), Key Biodiversity Areas<sup>49</sup>, Vulnerable Marine Ecosystems<sup>50</sup>, and Ecologically or Biologically Significant Marine Areas<sup>51</sup> 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); and
- Where available, the historic extent (prior to 2020) or quality of marine and/or coastal habitat within the geographic area of the fishery.

While data on ecosystem linkages and dependencies (e.g., upstream conditions) associated with wild-caught seafood are welcomed for inclusion in this assessment, these linkages and dependencies are highly complex and not mandatory to include in order to determine the 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 marine and/or coastal habitats within 5 km of the farm site;
- The zoning and permitting for aquaculture farms in the region;
- Environmental Impact Assessments (EIAs) or Environmental Risk Assessments (ERAs) from establishing the site (new and existing sites);
- The presence of damaging practices at the farm site;
- The operational outputs of the farm-verified data (antibiotic usage, feed ingredient practices, escapes, nutrient release, mortality, etc.);
- Habitat or output monitoring data, if available;
- Infrastructure development and maintenance impacts (e.g., car or vessel traffic);
- Where possible, if the farm operates to standards of best practice for habitat protection (see Section 3.2.1.2); and
- Where available, the historic extent (prior to 2020) or quality of marine and/or coastal habitat within 5 km of the farm area.

Resources for finding these data sources are available in the Ocean Hub Data Resources spreadsheet available on [the SBTN website](#).

49 Key Biodiversity Areas (KBAs) are the most important places in the world for species and their habitats. Faced with a global environmental crisis, we need to focus our collective efforts on conserving the places that matter most. The KBA Program supports the identification, mapping, monitoring, and conservation of KBAs to help safeguard the most critical sites for nature on our planet—from rainforests to reefs, mountains to marshes, deserts to grasslands, and to the deepest parts of the oceans (<https://www.keybiodiversityareas.org/>).

50 The vulnerable marine ecosystem (VME) concept emerged from discussions at the United Nations General Assembly (UNGA) and gained momentum after UNGA Resolution 61/105. VMEs constitute areas that may be vulnerable to impacts from fishing activities (<https://www.fao.org/in-action/vulnerable-marine-ecosystems/en/>).

51 The EBSAs are special areas in the ocean that serve important purposes, in one way or another, to support the healthy functioning of oceans and the many benefits that it provides (<https://www.cbd.int/ebsa/about>).





Caridea will continue to partner with the working group it has established among its suppliers, local communities, and academics to identify and gather the farmed seafood data it will need. For one of the farms, there is no documented information available about ERAs that took place at the time of construction. Caridea will need to rely more on other data sources such as up-to-date monitoring for this farm and will need to communicate the lack of ERA information to SBTN when they submit their targets.

To determine the presence of damaging practices at the farm sites as well as the habitats within 5 km of the farms, Caridea will rely on the input from its working group. Operational outputs from all farms, such as pollution, will need to be determined by direct input from suppliers. Additional information is sourced from consultation with local officials, community members, and academics in the region. The sourcing of these data is a labor-intensive and lengthy process for Caridea.

### 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 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 Ocean Hub Data Resources spreadsheet available on the SBTN website.

#### 3.3.2.1 Expert and Stakeholder Consultation

The first stage of the consultation process consists of checking the Ocean Hub Data Resources spreadsheet available on [the SBTN website](#) 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 science-based targets for wild seafood, or have been identified and approved through research efforts by the SBTN Ocean Hub.

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 farm, or within the corresponding management jurisdiction of the fishery or farm. They should have specialized knowledge and insights relevant to the given fishery, farm or farm practices, or the area in question. For example, companies may create a multi-stakeholder working group to support their development of SBTN targets, consulting with them according to Ocean Hub and Stakeholder Engagement Guidance. (See [SBTN's Stakeholder Engagement Guidance](#) for more information on how companies **must** work with their stakeholders.)

### 3.3.3 BASELINE DATA AND CORRESPONDING METRICS

Companies **must** consult at least one of the following on the existence of appropriate data sources for the fish or invertebrate stock or farm of interest, and interpretation of those 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 **must** identify all relevant seafood sources that fall within the same jurisdiction to expedite this process. Throughout this consultation, companies **must** 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; and
- Endorse thresholds identified by the company.

Companies **must** provide this documentation as part of their validation submission.

*Caridea, by virtue of the working group it established to help set its targets, is well equipped to consult with local stakeholders on the data sources it will use. Due to this approach, Caridea is able to undertake this consultation with stakeholders while identifying relevant data sources.*

Companies will establish a baseline of marine habitat impact at each site location at the time of setting their targets. 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. Stakeholder engagement **must** inform a company's selection of baseline indicators, which **must** directly relate to the issue(s) that the company will address through its targets and subsequent action.

For new sites, companies should use habitat impact and extent data available through Environmental Risk Assessment (ERA) or similar processes, wherever possible. Companies can also rely on ERAs for existing sites, if available. If assessments do not exist, the baseline may be established using up-to-date monitoring of relevant habitats. Baselines against which companies measure progress toward targets may be based on impacts and habitat health at the time of target setting **only if** historical habitat health or extent data are not available. In cases of limited or absent habitat impact or extent data, Engagement targets can be used by companies to establish baseline ecological or social metrics that are relevant to the stated goals of the initiative (Table 4).

Due to the complexity of these indicators, it is not required to submit a baseline value for Engagement targets at the time of target submission if appropriate indicators have been selected (see the Annex for further information). Baseline data can be submitted up to 12 months after successful target submission to allow time for companies and initiatives to properly establish data collection.



Table 2 — List of potential indicators for Target 2.

Pathway	Dimension		Metric
Operations	Outputs	Nutrient output at site	
Operations	Outputs	Fallow and rest schedule	
Operations	Outputs	Adoption (%) of non-damaging gear	
Operations	Outputs	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 and non-siting in Marine Protected Areas, Conserved Areas, Other Effective Conservation Measures (OECMs), and other protected areas, such as wetlands or mangroves	
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 in place	
Engagement	Governance	Co-management systems and areas established in the area	
Engagement	Social	Gender equity in the fishery and/or farm	
Engagement	Social	Markers of human health and well-being	

Caridea selects indicators based on the data it has available. Due to its suppliers' impacts on mangroves and coral reefs, it uses the Nutrient output at site Operational indicator and Implementation of Marine Protected Areas, Conserved Areas, and OECMs as its Engagement indicators. For both of these indicators, Caridea will again partner with its working group to determine appropriate baselines, particularly for its







3.4 Determine Company-Specific Protect Structural Habitat Targets

At this stage, Caridea is able to determine Operational and Engagement targets. For the former, data indicates that the farms in Caridea’s supply chains contribute significant output of nutrients into the surrounding environment, which impacts the integrity of adjacent mangroves and coral reefs. Nutrient output exceeds the carrying capacity of the body of water and is not in line with best practices for aquaculture farms based on available science. Therefore, the Operational target should focus on reducing nutrient output to a level below the carrying capacity of the local environment.

For the Engagement target, data shows that the coral reef located within 5 km of the farm sites is not suitably protected from potentially harmful impacts associated with aquaculture activity, reducing the functionality of the ecosystem. The goal of the Engagement target should focus on protecting the coral reef to safeguard its ecosystem services.

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 may 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.

- Companies **must** provide data about habitat types that occur within 5km of their aquaculture operations. Where evidence exists of impact beyond 5km from their operations, this should be accounted for in the spatial scale of the Operations target.
- Companies **must** provide data about habitat types that occur within relevant fishing grounds that may be impacted by bottom-contact fishing gear.

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.

3.4.2 ESTABLISHING TARGET TIMELINES

Companies **must** establish timelines upon which they will develop, 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 **must** be both an ambitious and achievable period within which to meet the target, and no later than five 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 three 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 five years, with incremental changes each year of the target period or with an overall change for the target period. End dates for Operations targets **must** 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 farm and the state of the habitats in question. Companies **must** consider what is achievable in the five-year period of the target and ensure outcomes reflect what is achievable in that period with an intent to continue progress in subsequent, iterative targets.

Companies **must** consult with relevant stakeholders, according to SBTN’s Stakeholder Engagement Guidance, when determining timelines for the Protect Structural Habitats targets. This reflects the requirement that targets establish meaningful change.

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 **must** ensure their data and roadmap reflects what is expected to be achievable in the target timeline, with an intent to continue progress in subsequent, iterative targets.

Caridea once again consults with its working group in determining both ambitious but achievable timelines for its targets. For the Operations pathway, dialogue with its suppliers is especially important in ensuring the target is achievable within the timeframe set.

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].

Caridea’s Operations target is as follows:

By 2030 (five years from the 2025 start date), Caridea’s suppliers will implement improvement efforts to reduce nutrient discharge into waters surrounding its shrimp farms in Southeast Asia, in line with their carrying capacity, to reduce harmful impacts to local mangroves and coral reefs.

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.

Caridea’s Engagement target is as follows:

Caridea has established and is engaged in a new improvement initiative for coral reef conservation in the areas surrounding its suppliers’ farms to improve ecosystem health by 2035, compared to a 2025 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 the baseline of habitat condition;
- Current fishing or aquaculture practices that do not meet standards of best practice;
- Selection of indicators; and
- If the company is not the direct operator, documentation of the working relationship with the direct operator.

#### 3.5.2 VALIDATION FOR ENGAGEMENT PATHWAYS

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 the baseline of habitat condition; and
- Roadmap of Improvement Initiative, as laid out in the Annex.

If an Engagement Pathway target is submitted without an Operations pathway target, Companies **must also** submit one of:

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

### TARGET 2 CHECKLIST

Have you identified which pathway to follow?	3.2
Have standards of best practice for impact reduction for the operations pathway been implemented?	3.2.1
Have you consulted the SBTN Stakeholder Engagement Guidance to develop your target?	3.2.1 & 3.2.2
Have the criteria for eligible improvement initiatives for the engagement pathway been met?	3.2.2.1
Have you collected fishery and/or farm-specific data to develop your target(s)?	3.3.2
Have you used the most recent available data, published within the last five years?	3.3.2
Have you consulted with local experts and stakeholders to determine the appropriate data sources/ combination of sources?	3.3.2
Have you worked with local experts and stakeholders to ensure secondary data are robust and accurate?	3.3.2.1
Have you consulted the appropriate data sources for the stock?	3.3.2.1
Have you identified all relevant stocks that fall within the same jurisdiction for stakeholder consultation in 3.3.2.1?	3.3.2.1
Have you documented whether your stakeholders were able to complete all outlined tasks in 3.3.2.1?	3.3.2.1
Have you collected habitat data for your aquaculture operations?	3.4.1
Is your target at the appropriate spatial scale?	3.4.1
Is your target achievable within five years?	3.4.2
Is your target achievable within the capacity of your operations, the biological characteristics of the fishery or aquaculture stock, and the habitat(s) in question?	3.4.2
Have you consulted with relevant stakeholders to determine your timeline?	3.4.2
Have you submitted all the required elements for validation?	3.5.1 & 3.5.2



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





## 4.1 Introduction to the Reduce Risk to Endangered, Threatened, and Protected Marine Wildlife Populations Target

### 4.1.1 TARGET RATIONALE AND APPROACH

This methodology is designed to create a pathway for companies to reduce the risk to Endangered, Threatened and Protected (ETP) marine wildlife populations generated by wild-capture fishing and aquaculture while engaging initiatives that protect marine wildlife. Due to the lack of data directly connecting supply chains and end products with ETP marine wildlife interactions, there are limited opportunities for companies to act in order to directly reduce observed fisheries interactions with those species. Therefore, risk of interaction to populations is used as an indicator for this target. The primary goal of this target is to lead companies to engage in improvements that reduce the risk of interaction and harm, protect, rebuild, and support healthy marine wildlife populations, as well as increase the level and quality of available data about the impacts of fishing and aquaculture on marine wildlife populations.

### 4.1.2 ETP MARINE WILDLIFE COVERAGE AND EXCEPTIONS

For this target, the term ‘ETP marine wildlife’ covers marine flora and fauna that are endangered, threatened, and/or protected according to international, regional, or national registries. This commonly includes megafauna such as seabirds, sea turtles and other reptiles, cetaceans, pinnipeds, elasmobranchs, fish, amphibians, and benthic invertebrates. Risk to endangered, threatened, or protected habitat-forming species (e.g., corals) **must** be addressed under this target, rather than in Target 2: Protect Structural Habitats. Risk to any ETP species, including mammals, fish, and invertebrates, **must** be addressed by companies with farmed seafood in their supply chains. For companies with wild-capture seafood supply chains, including fish and aquaculture feed companies, risk to listed ETP fish and invertebrates that are commercially harvested and managed may be addressed through Target 1: Avoid and Reduce Overexploitation.

Starfoods Group is a premium European supermarket offering an extensive range of seafood sourced globally from both wild fisheries and aquaculture. It operates primarily as a franchise but maintains 20 flagship supermarkets in high-value locations across the country. Starfoods purchases its frozen, packaged, and processed (high-volume) seafood primarily from large-scale aggregators and processors, as well as directly from larger, vertically integrated producers. Per its Group Sustainability Policy, all high-volume seafood sold by Starfoods Group is MSC or ASC certified, or in improvement projects. In addition to these high-volume sources of seafood, Starfoods maintains fresh fish counters in each of its directly-owned locations, and this seafood (‘counter seafood’) is more diffuse in its sourcing—some from wholesalers, some from local aggregators and, in some rare cases, directly from local markets. Seafood sold through its fish counters is not subject to the Group Sustainability Policy and some of it is not certified.

To close this sustainability loophole, Starfoods Group seeks out SBTN validation for its entire seafood offering, and needs to understand its exposure to ETP species for its counter seafood in order to implement Target 3. Dr. Kathryn Janeway, Starfoods Group’s head seafood buyer, who is responsible for both high-volume and counter seafood, is tasked with investigating counter seafood sourcing and exposure to ETP species, as this segment is in scope for Starfoods Group’s SBTN process (since certified seafood already manages for exposure to ETP marine wildlife).



### 4.1.3 PROCESS FOR SETTING REDUCE RISK TO ETP MARINE WILDLIFE POPULATIONS TARGETS

When a company finds evidence of material impacts or risk to ETP marine wildlife populations from wild-capture or aquaculture practices in its direct operations or generated by its suppliers, it **must** set targets in alignment with the prioritization process in Step 2. The company **must** follow the summarized steps below to set targets and prepare materials for target validation:

- 1

**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

**2. Determine the baseline risk to ETP marine wildlife from wild fisheries and aquaculture 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/aquaculture activities and listed marine wildlife that can be impacted by specific gear types or practices.
- 3

**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):
  - **Operations pathway:** Companies commit to improvements in direct operations or operations within supply chains to meet standards of best practice that reduce risk to ETP marine wildlife (Section 4.4.1.1).
  - **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 and aquaculture seafood (Section 4.4.1.2). Engagement can occur at the fishery, regional, seascape, jurisdictional, or global level.
  - **Cessation pathway:** Companies commit to ceasing their sourcing of wild-capture or aquaculture seafood known, through observation (by human observers or electronic monitoring), to have interactions (such as human-wildlife conflicts as incidental catch and gear entanglement, noise and/or habitat pollution, or vessel strikes) with species listed as critically endangered without appropriate fisheries or aquaculture site management plans addressing risk of human-wildlife interactions. This pathway is reserved only for specific sourcing cases (Section 4.4.1.3).
- 4

**4. Target statements**  
Using the appropriate pathway, develop target statements for each relevant seafood source.
- 5

**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

Rather than relying solely on known interactions between fishing or fish farming and marine wildlife, this target primarily uses an assessment of risk to determine if companies **must** set this target, which target pathway they will use (Section 4.3), and to establish a target baseline against which they will measure progress.<sup>52</sup>

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 (see Section 4.2.2 Exert and Stakeholder Consultation). Companies **must** use a combination of data sources to determine if fisheries or aquaculture operations pose a high risk to ETP populations or, in limited cases, have evidence of such interactions.

#### Identifying 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 on 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. Production Data

- **Wild-Capture Fishing:** Fisheries data are critical to understanding the spatial, temporal, and operational 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 can include:
  - Potential species affected by the given gear (**required**);
  - Gear types associated (**required**);
  - Spatial extent of fishing operations (as specific/granular as possible—e.g., exclusive economic zones, areas on the high seas managed by Regional Fisheries Management Organization);
  - Seasonality of fishing activities (by month);
  - Record of monitoring, recording (and public disclosure) of ETP species;
  - Rates and intensity of incidental catch;
  - Type of interactions (incidental catch, entanglement, etc.);
  - Incidental catch/interaction mitigation measures; and
  - Fisheries management plan.
- **Aquaculture:** Farm/site-level data and assessment are critical to understanding the spatial, temporal, and operational risks to marine wildlife from fishing activities. To understand risk, companies **must** know when and from where their seafood was farmed, as well as the methods used. This data may come from the farm's ERA, seafood traceability and supply chain reporting, or certification reporting, such as from Aquaculture Stewardship Council's Farm Standards. Data used to set targets can include:
  - Site-specific Environmental Impact Assessments (EIAs) or Environmental Risk Assessments (ERAs) and Risk Management Plan;
  - Potential species affected by the farming practice (**required**);
  - Operation types associated (**required**);
  - Spatial extent of farming operations;
  - Carrying capacity;
  - Seasonality of farming activities (by month);
  - Record of monitoring, recording (and public disclosure) of ETP species;
  - Rates and intensity of incidental interactions including mortalities/lethal incidents of ETP species;
  - Types of interactions (entanglement, pollution, disease, use of aquatic acoustic deterrence, etc.); and
  - Incidental interaction mitigation measures.
  - Root cause analysis of all wildlife mortality incidents, including corrective actions to prevent reoccurrence.

<sup>52</sup> 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% of longline tuna vessels have an observer on board to independently verify activity and RFMOs rarely achieve observer coverage levels above 5%. Therefore, the ability of companies and their suppliers to use observed interactions between seafood commodities and ETP marine wildlife to set targets is limited.





2. **ETP species status:** Companies *must* identify the status of species that may be at risk from fishing or aquaculture. The status of species is determined at national and international levels. During this process, companies *must* acknowledge local population-level dynamics of ETP species, with special consideration for marine mammals. As such, companies *must* seek out both local/national and international status guidance. Examples include:

- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) appendices;
- International Union for Conservation of Nature's (IUCN) Red List of Threatened Species;
- Convention on the Conservation of Migratory Species of Wild Animals (CMS);
- 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 (NGOs), 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 either a national or international 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 or aquaculture, they *must* establish the baseline level of risk generated by the relevant fishing or aquaculture practices. Data needed for this determination includes:

- Spatial extent of relevant ETP marine wildlife (on a similar scale to fishing or aquaculture activity, where possible);
- Seasonality of relevant ETP marine wildlife in relevant areas (monthly and/or behavioral cycles, e.g., mating, nursing, nesting, migration);
- Types of threats to the species (e.g., incidental catch, entanglement, disease, pollution, etc.);
- Intensity of interaction (e.g., mortality, altered migration patterns, health impacts).

Resources for finding these data sources are available in the Ocean Hub Data Resources spreadsheet available on the SBTN website.<sup>53</sup>

#### 4.2.2 EXPERT AND STAKEHOLDER CONSULTATION

The first stage of the consultation process consists of checking the Ocean Hub Data Resources spreadsheet available on the SBTN website 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 science-based targets for wild seafood, or have been identified and approved through research efforts by the SBTN Ocean Hub.

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 marine wildlife populations, or relevant local considerations. See SBTN's Stakeholder Engagement Guidance<sup>54</sup> for more information on how companies should work with stakeholders.

Companies *must* consult at least one of the following on the existence of appropriate data sources for the fishery or farming practice with ETP risk, and interpretation of that data:

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

*Dr. Janeway leans on the ETP Expert Group for this consultation, as well as the evaluation and endorsement of the data that's been collected.*

Companies *must* identify all relevant fisheries or aquaculture sites with risks to ETP marine wildlife that fall within the same jurisdiction in order to expedite this process. Through this consultation, companies *must* document whether the stakeholders were able to do the following:

- Identify the scientific data source;
- Identify risks to ETP species; and
- Provide/share data sources and/or data.

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

First, Dr. Janeway needs to understand the risk to ETP marine wildlife posed by the sourcing of species that are in scope. For Starfoods Group, this includes eight species of wild caught fish and 12 farmed species of fish, sourced from 18 different locations that are to be sold on seafood counters. Dr. Janeway works with her regional and store-specific seafood buyers to accumulate fisheries data, aquaculture data, as well as marine wildlife data for the identified species and locations, acquiring as many of the production and ETP status data sources highlighted above as possible. Due to the varied locations of the stores with fish counters for which Dr. Janeway needs to set a target, special care is taken to ensure local data sources are considered to determine threats to different marine species.

As a next step, she tasks a member of her team with mapping the extent of ETP species that may be negatively impacted by the production sources identified by collecting the spatial extent and seasonality of relevant species. To determine the type of threat to the species and the intensity of the interaction, Dr. Janeway sets up an ETP Expert Group for Starfoods Group that includes her team of buyers, the sustainability team, and a representation of local fishery stakeholders, scientists, and NGOs with expertise in the relevant species, production methods and locations to help understand Starfoods Group's risk exposure.

<sup>53</sup> Data needed for this determination can be found at: <https://sciencebasedtargetsnetwork.org/resources/>

<sup>54</sup> SBTN, 2023 "Stakeholder Engagement Guidance Vo.1."



## 4.3 Establish Indicators and Baselines for ETP Populations Interaction Risk and Mitigation

### 4.3.1 INDICATORS OF RISK TO ETP POPULATIONS

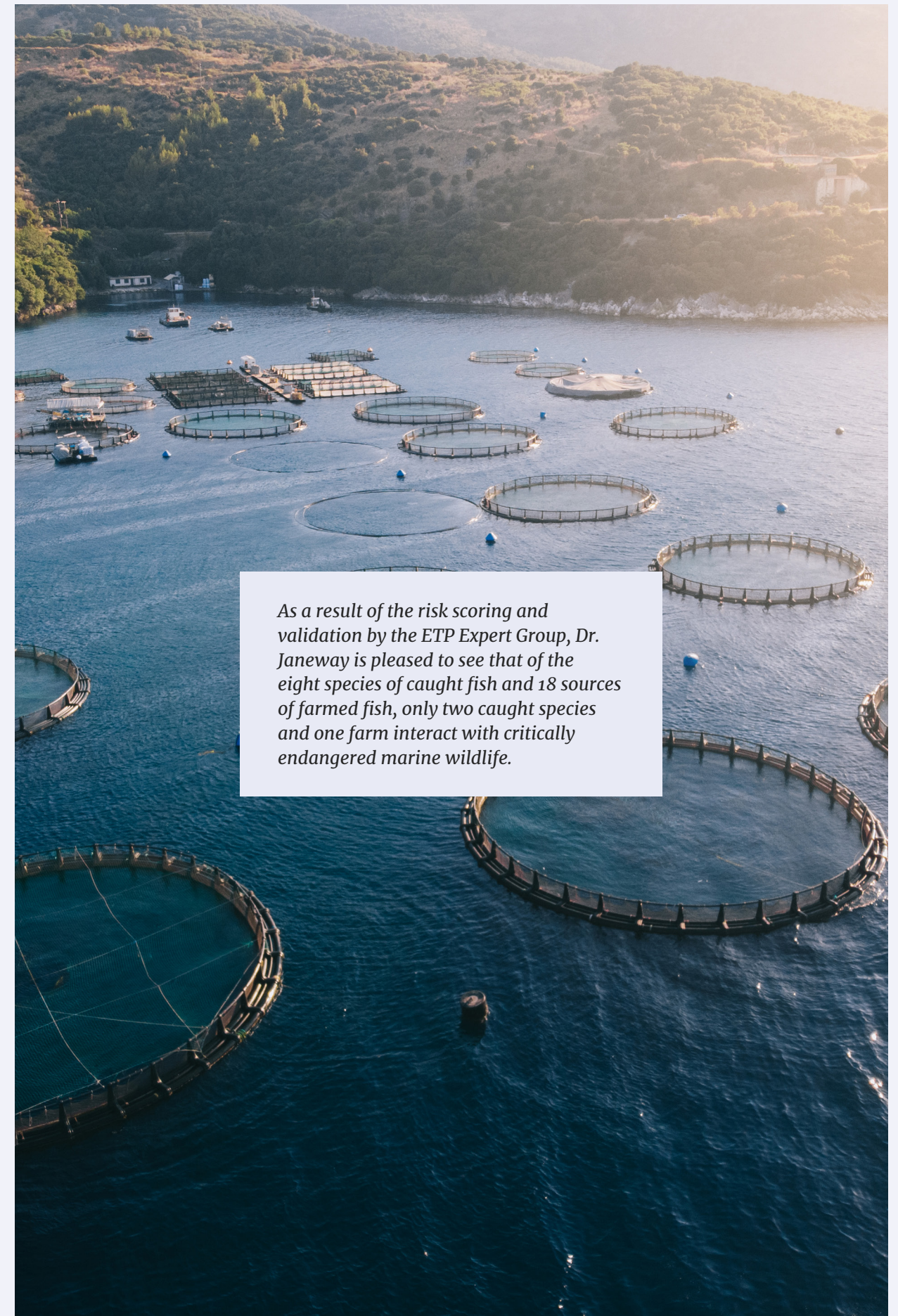
Ocean science-based targets rely on biologically, spatially, and temporally relevant information to indicate the risks that aquaculture or fishing pose to ETP marine wildlife populations via entanglements, incidental catch, vessel strikes, pollution, and more. As previously discussed, known or observed interactions with ETP wildlife that are traceable to specific seafood products are uncommon. Therefore, this methodology uses risk as an indicator of pressure on ETP marine wildlife populations, using metrics of gear/farm type, as well as spatial or temporal overlap between seafood production and ETP populations.

Seasonality, spatial extent of the fishery or farm, and gear/farm type are three key pressure-based metrics (see Section 4.2.1.1). When assessed together, they help companies better understand the risk that the seafood in their value chains poses to marine wildlife.

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 the fishing season, etc.
- The presence or absence of electronic monitoring or observer coverage for monitoring fishing activity against fisheries, as well as aquaculture management and regulation.

State of nature data are 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 as indicators of the health of relevant species negatively impacted by seafood production. 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 4.4.1.3).



*As a result of the risk scoring and validation by the ETP Expert Group, Dr. Janeway is pleased to see that of the eight species of caught fish and 18 sources of farmed fish, only two caught species and one farm interact with critically endangered marine wildlife.*



4.3.2 ESTABLISHING BASELINES

To set this target, companies *must* establish a baseline of risk to ETP species, generated by their operations or supply chains, against which they can measure progress toward targets. To establish this baseline of risk, companies *must* work with stakeholders to complete a risk assessment for relevant operations and supply chains. Companies evaluate risk using seafood production and ETP population data and other relevant tools, such as the Bycatch Solutions Hub<sup>55</sup>, marine STAR<sup>56</sup>, the Ocean Health Index<sup>57</sup>, Seafood Watch, and more. This helps them understand and identify areas and times where there is overlap between fishing or aquaculture activity and ETP marine species—essentially, the likelihood of negative interactions. This is done with input and verification from relevant stakeholders. Data requirements for this risk assessment are described above in Sections 4.2.1.2 and 4.2.2.

Companies *must* complete a risk assessment, such as those listed above, or the SBTN Ocean Hub ETP species risk assessment (available on [the SBTN website](#)), as determined through the stakeholder engagement process (e.g., Marine Stewardship Council’s Fisheries Standard 3.0 Risk Assessment Framework or Aquaculture Stewardship Council’s Environmental Risk Assessments). The output of the SBTN Ocean Hub risk assessment is a baseline risk score that is generated by combining proportional risk associated with gear/farm type and operational overlap between fisheries or aquaculture operations and ETP species. In the SBTN Ocean Hub ETP species risk assessment, companies score the level of risk, and their confidence in that score, using indicators based on best available qualitative and quantitative data, as well as stakeholder input.

This score provides a reference baseline for companies by which they can measure progress against targets using pressure-based indicators. This score *does not* determine if a company sets targets. Companies may also use state-of-nature indicators (Section 4.3.1) to measure and monitor progress.



Starfoods Group is exposed to ETP marine wildlife risk from three sources. For wild-caught fisheries, one source of Indian Ocean tuna relies on longlining with incidental bycatch of critically endangered Hawksbill turtles. Another source of Atlantic hake occasionally causes bycatch of the critically endangered common blue skate (which is often mistaken for other skate species). The farmed source of seafood cultivates shrimp from the Eastern Central Pacific, with risk to the critically endangered Scoophead shark due to mangrove conversion for new shrimp farms. The table below indicates the baseline risks to these three sources of seafood and has been developed by Dr. Janeway and her team, with input and validation from the ETP Expert Group.

Table 3 — Example of baseline risk assessment, Starfoods Group.

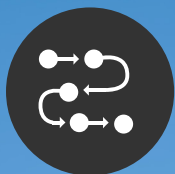
Species	Gear Type/ Farm operation	Spatial overlap	Temporal overlap
Hawksbill turtle	4 (high, longline hooks)	5 (high, strong overlap with tuna fishing areas)	5 (high, longlines persist in the water for an extended duration)
Common blue skate	5 (high, trawling non-selective)	5 (high, strong overlap with hake fishing grounds)	5 (high, skates are active during both daytime and nighttime)
Scoophead shark	1 (low, as farms are already in operation and no new conversion occurs)	5 (high, sharks are reliant on converted mangroves as nurseries)	5 (high, sharks are particularly affected during the breeding season)

55 [Bycatch Solutions Hub](#).

56 Turner, J.A., Starkey, M., Dulvy, N.K. *et al.*, 2024, “[Targeting ocean conservation outcomes through threat reduction](#).”

57 [Ocean Health Index](#).





# 4.4 Reduce Risk to ETP Marine Wildlife Target Pathways

## 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. Companies may set the Reduce Risks to ETP Species target through three pathways, depending on the characteristics of risk to ETP marine wildlife, as described below.

*Based on Dr. Janeway and her team’s work, exposure to the three critically endangered species must be managed. Fortunately, all three species are monitored and mitigation measures are available. In this case, there is no need to implement a Cessation pathway target for Starfoods Group.*

### 4.4.1.1 Operations Pathway

Companies that find risk of interactions with ETP marine wildlife in their seafood sources, but do not trigger the Cessation pathway, **must** take the Operations pathway in order 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 a recommendation that changes their fishing strategy and/ or gear, or farm practices (or other operational practices) would best reduce risk to ETP marine wildlife. See Section 4.2.2 for a list of required and recommended stakeholders to consult for this target.



Target Pathway Decision Tree

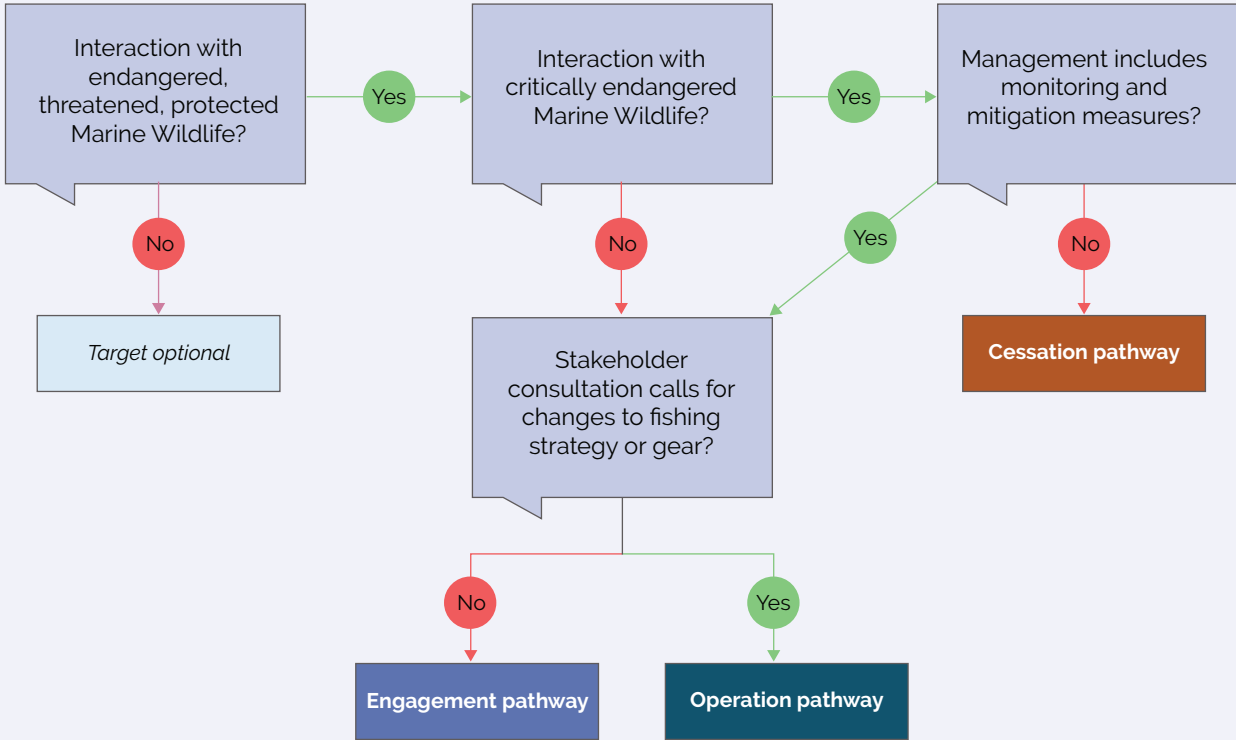


Figure 16 — The process for determining pathways in Target 3.

If companies are unable to make changes to fishing strategy, gear, or farming practices (e.g., they are unable to work with suppliers or struggle with management restrictions), they **must** submit justification for an exception along with their target submission.

The Operations pathway includes changes to fishing strategies, gear types, and farming practices 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.

*For Starfoods Group’s wild-caught sources of ETP risk, the ETP Expert Group has called for changes to fishing strategy, and therefore the Operations Pathway is relevant to address both the Hawksbill turtle and common blue skate bycatch.*



#### 4.4.1.2 Engagement Pathway

An Engagement pathway target will lead to improvements in seascapes or jurisdictions relevant to a company's direct operations or seafood sourcing, thereby resulting in a reduction of risk to ETP marine wildlife or the recovery, conservation, or protection of ETP marine wildlife. If interactions with critically endangered species exist but are managed, and stakeholder consultation does not result in a recommendation of changes to fishing or farming strategy, or other operational practices, companies **must** set Engagement pathway targets.

Improvement initiatives selected for Engagement pathways can include those that promote fisheries management, changes to aquaculture permitting practices, ETP marine wildlife habitat restoration, and other material improvements in the fisheries, farms, or regions where the company has impacts on ETP marine wildlife. They may also include engagement at local or regional levels to improve policy and management, increase protections for ETPs, and to establish MPAs and OECMs, particularly to protect ETPs from the impacts of fishing and aquaculture. Improvement initiatives must still include measurable outcomes at the seascape or jurisdictional level for target setting. This

could be done either through changes in policy that contribute toward stated goals for ETP marine wildlife risk reductions and protections, or via outcomes in the seascape or jurisdiction. Engagement targets **must** have measurable outcomes directly related to the cause of risk (pressure) to ETP species or the state of nature of relevant species. Improving the risk score from the SBTN ETP species risk assessment may not be used as an outcome, but may be used to track progress toward outcomes. 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.

*For Starfoods Group's farmed species ETP risk to Scoophead sharks, the ETP Expert Group determines the greatest risk stems from ongoing conversion of mangroves, rather than the impact from operations of existing farms. As a result, the Engagement pathway should be followed to address this source of risk and shift focus toward habitat restoration. Criteria for Improvement Initiatives*

#### 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 relevant to the population status and recovery of ETP marine wildlife in the jurisdictions where that company has operations that fall within the target boundary. Jurisdictional Initiatives<sup>58</sup> and Seascape Approaches<sup>59</sup> 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:

Criteria 1	Criteria 2	Criteria 3	Criteria 4
Every seascape or jurisdictional initiative must operate at the scale of a recognized ecological or administrative area	The vision and needs of relevant stakeholder groups must be included in the design, implementation, and monitoring of an initiative	There are collective goals and actions for nature and people based on science that are tied to the pressures and ambition of the target	There is transparent reporting on actions/investments made in the seascape or jurisdictional initiative

Figure 17 — The criteria for improvement initiatives that qualify for Engagement targets. Criteria 1: The seascape/jurisdictional boundary may be defined by local stakeholders and include ecological areas such as Large Marine Ecosystems or administrative areas, such as states, provinces, municipalities, or districts; Criteria 2: At least three stakeholder groups participate(d) in the initiative; Criteria 3: The stated goals for nature and people must be defined collectively by relevant stakeholders and have a direct connection to initiative actions or investment; and Criteria 4: Transparency must include reporting to stakeholders involved in the initiative.

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. For new initiatives started by the company, it **must** submit documentation of plans to meet all four criteria within one year of target submission. See the Annex and Section 5.4 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 that meet the above criteria but may not follow from 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.



Photo © Rodolphe Holler

58 WWF, 2023, "[Developing Jurisdictional Initiatives for the Seafood Sector.](#)"

59 Murphy et al., 2021, "[Fifteen Years of Lessons from the Seascape Approach.](#)"





#### 4.4.1.3 Cessation Pathway

Companies that take the Cessation pathway commit to cease sourcing from relevant farmed and wild-capture seafood sources according to timelines described in Section 4.4.3. The Cessation pathway is the least common pathway in the Reduce Risks to ETP Species target.

To determine Cessation commitments, the pathway relies on observed, fishery-dependent or farm-level data, or stakeholder input related to interactions (such as incidental catch from a commercial fishery or entanglement with aquaculture equipment) between fishing or aquaculture activities and **critically endangered** marine wildlife, as well as information on management and mitigation measures relevant to the fishery or farm.

Cessation pathways are **required** when seafood production (aquaculture or wild-capture) poses a risk to critically endangered marine wildlife populations and meets both of the following criteria:

1. There is evidence of interactions with critically endangered<sup>60</sup> (or similarly rated, compared to the [definition provided by IUCN](#)) marine wildlife, according to fishery-dependent or farm-level data, or determined by local stakeholders and identified during the stakeholder engagement process.
2. There are no required or voluntary incidental catch/interaction mitigation measures in place to reduce risk to critically endangered populations (such as modifications to fishing gear or aquaculture equipment, spatial or temporal closures/fallow periods, or other modifications to operations) **and** the management plan does not include adequate monitoring for the critically endangered marine wildlife interactions (such as electronic monitoring, observer coverage, or surveying) and the health of the critically endangered population.

<sup>60</sup> A primary goal of this guidance is to encourage engagement by companies in initiatives that improve conditions in nature and biodiversity. The status of “critically endangered” is used as a threshold for the Cessation pathway because when a population reaches that threshold, its best pathway to recovery requires a cessation of commercial activities that are causing it harm.

#### 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 based on the footprint of a specific fishery or farm and thus will have a smaller spatial scale as they are tied to sourcing from fisheries or farms 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 or farm operates in cases where an initiative’s actions may materially benefit an ETP marine wildlife species with habitats that extend beyond the operational locations of a fishery or farm. Companies are encouraged to first seek out initiatives that improve on pressures from their direct operations or sourcing within the jurisdiction and to set targets with as small and relevant a spatial scale to their operations as possible.

*Based on the collected data and the nature of the threat to the critically endangered species in question, Dr. Janeway can determine that the spatial scale for the Hawksbill turtle and common blue skate bycatch should be at the level of the relevant fisheries.*

*For the Scoophead shark and challenges related to mangrove conversion, the spatial scale is more complex and will depend on the improvement initiatives that Starfoods Group will need to join or establish (see Annex). Regardless, the scale will be most closely related to the range of the Scoophead shark.*

#### 4.4.3 ESTABLISHING TARGET TIMELINES

##### 4.4.3.1 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 three years from the start date of the target, and no more than five years from the start date. This reflects the requirement that targets establish ambitious, meaningful, time-bound change, while 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 target.

Companies **must** consider what is achievable in the five-year period of the target and ensure outcomes reflect what is achievable in that period with an intent to continue progress in subsequent, iterative targets.

Many initiatives and projects are likely to have a timeline that extends beyond a company’s ETP risk Reduction target—nevertheless, when submitting a target for validation, companies **must** ensure their data and roadmap reflect what is expected to be achievable within the target timeline.

##### 4.4.3.2 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 while allowing for time horizons in cancelling 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, along with evidence to justify the need for an extension.

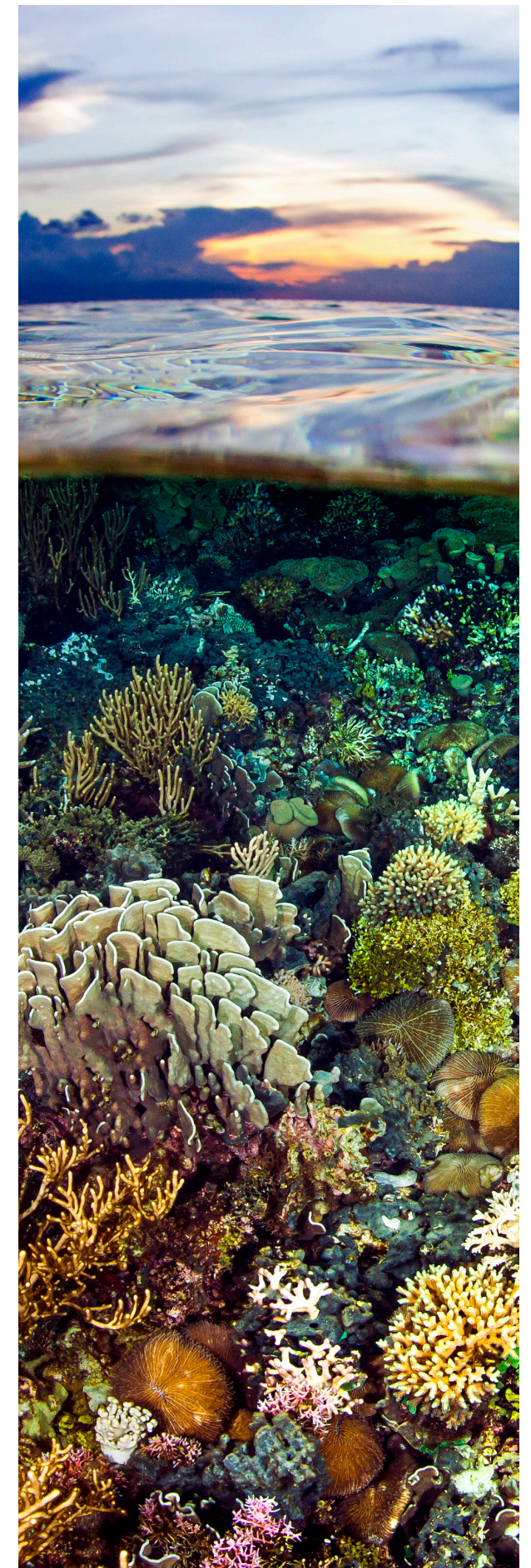


Photo © Paul Hilton for Conservation International





## 4.5 Determine Company-Specific Reduce Risk to ETP Populations Targets

### 4.5.1 OPERATIONS TARGET PATHWAY

Reduce Risk to ETP populations 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/aquaculture operations].*

*For the Hawksbill turtle in the Indian Ocean tuna longline fishery, Dr. Janeway has determined with the ETP expert group that the best course of action is to work to implement bycatch-reducing gear improvements in the relevant tuna longline fishery from which they source. The Operations target set here is as follows:*

By 2030, Starfoods Group has reduced the risk of negative impacts to Hawksbill turtles in the Southwest Indian Ocean from longline fishing activity by introducing bycatch-reducing gear improvements.

*For the common blue skate in the European hake fishery, which is already subject to extensive EU regulations in relation to bycatch and discarding of common skates, Starfoods Group opts to prioritize gear improvements that reduce incidental catch of skates. Given the complex European regulatory landscape surrounding gear types, the target focuses on leveraging Starfoods' position as a buyer:*

By 2035, Starfoods Group has reduced the risk of negative impacts to common blue skates in the European hake fishery by encouraging an uptake of innovation in gear selectivity in order to reduce the bycatch of common skates.

### 4.5.2 ENGAGEMENT TARGET PATHWAY

Reduce Risks to ETP populations 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], compared to a [target set date] baseline.*

*For the Scoophead shark in the Eastern Tropical Pacific, whose nursery grounds are severely impacted by conversion to shrimp farms, Starfoods Group will engage with local initiatives to restore mangroves and reduce mangrove conversion to shrimp farms to zero.*

Starfoods Group is engaged in local improvement initiatives for mangrove conservation and restoration in the Eastern Tropical Pacific to reduce risks to Scoophead sharks by 2030, compared to a 2025 baseline.

### 4.5.3 CESSATION TARGET PATHWAY

Reduce Risks to ETP populations 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].*



## 4.6 Target Validation

### 4.6.1 VALIDATION FOR OPERATIONS PATHWAYS

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

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

### 4.6.2 VALIDATION FOR ENGAGEMENT PATHWAYS

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

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

### 4.6.3 VALIDATION FOR CESSATION PATHWAYS

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

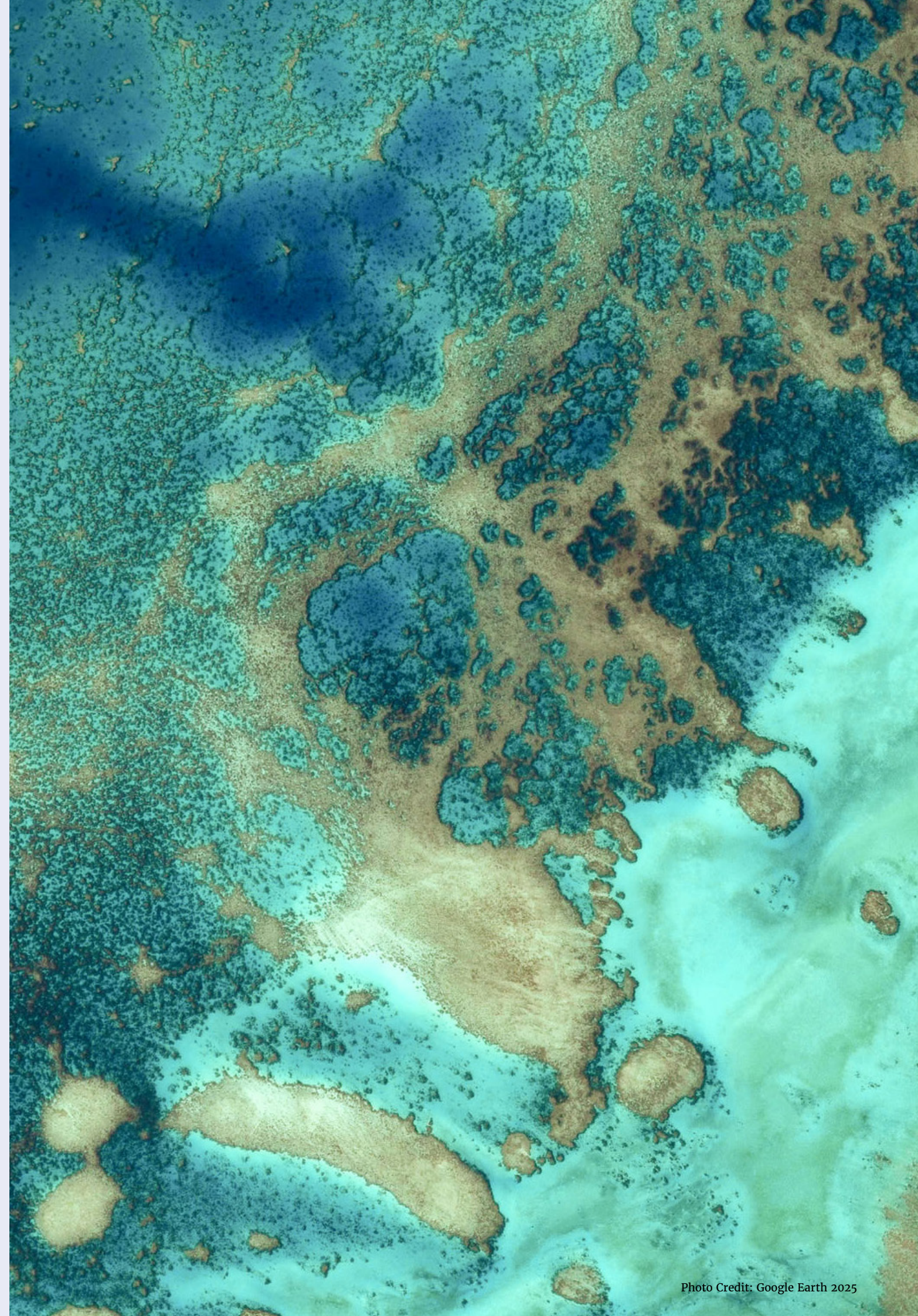
- Data Submission Template for the target;
  - Data used to establish the baseline of risks to ETP marine wildlife;
- Current seafood portfolio which meets the criteria for the Cessation pathway.

### TARGET 3 CHECKLIST

Have you used several types of data sources to determine baseline values of pressure and risk?	4.2.1
Have the outlined data types described in 4.2.1.2 been used to determine if a target needs to be set?	4.2.1.2
Have you undertaken an internal consultation within your own company, as well as with relevant stakeholders to inform data selection?	4.2.2
Have you consulted the listed stakeholder groups on appropriate data sources?	4.2.2
Have you identified all relevant stocks that fall within the same jurisdiction for stakeholder consultation in 4.2.2?	4.2.2
Have you documented whether your stakeholders were able to complete all outlined tasks in 4.2.2?	4.2.2
Have you used known or estimated interaction data for risk baselining?	4.3.2
Have you rated the level of risk posed by each indicator?	4.3.2
Have you included any justifications for not changing fishing strategy or gear with your target submission?	4.4.1.1
Do relevant improvement initiatives include measurable outcomes?	4.4.1.2
Have you consulted the SBTN Stakeholder Engagement Guidance to develop your target?	4.4.1.2
Have the relevant improvement initiatives met the criteria outlined in 4.4.1.3?	4.4.1.3
Has the target timeline been set for no more than five years?	4.4.3
Have you considered what is achievable in the time period of the target?	4.4.3
Does your submission reflect what is achievable?	4.4.3
Have you submitted all the required elements for validation?	4.6



# Annex





5.1 Step 3 Guidance in Context: The SBTN Process for Setting Science-Based Targets

There is a five-step process to set science-based targets for nature:

Step 1: Assess—screen and estimate impacts

Step 2: Interpret & Prioritize—set target boundary and prioritize

Step 3: Measure, Set, and Disclose—set and validate targets

(Step 4) Act—develop action strategy; and

(Step 5) Track—Measurement, Reporting, and Verification (MRV)

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

These steps are shown at the top of Figure 2. In areas where a company’s **seafood production (wild-capture or aquaculture)** or **seafood procurement** indicates that they **must** set the relevant ocean science-based targets for a given practice or type of product, companies **must** use the guidance within the Step 3 Ocean method document. This guidance covers a company’s existing portfolio of seafood, as determined by the

Step 1 materiality assessment at the beginning of the process. New seafood sources that are introduced to a company’s supply chain or portfolio during the target period will be incorporated into the process when a company reviews its materiality assessment and associated targets—at least every five years. These new sources **must** follow the same criteria and methodology as the company’s existing portfolio of seafood.

Companies **must** set Ocean science-based targets for their direct operations and sourcing/purchasing 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 science-based targets. If companies do apply the prioritization methodology, the process to set Ocean science-based targets will be the following:

- 1. Identify the top 10% of highest priority seafood sources by volume and state of nature (e.g., the status of a seafood stock) or, at minimum, the top ten highest priority seafood sources. See Step 2: Interpret & Prioritize for information on how to prioritize seafood sources. In the simplest of terms, companies prioritize where their pressures and/or environmental urgency is at its 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 the next set of priority sources.

In the target-setting process, companies setting an Ocean science-based target will use a combination of company and external data. The remainder of this document 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 and transitional water habitats, and ETP marine wildlife populations, as well as the tools that can be used to help companies find the necessary data.

This document 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.

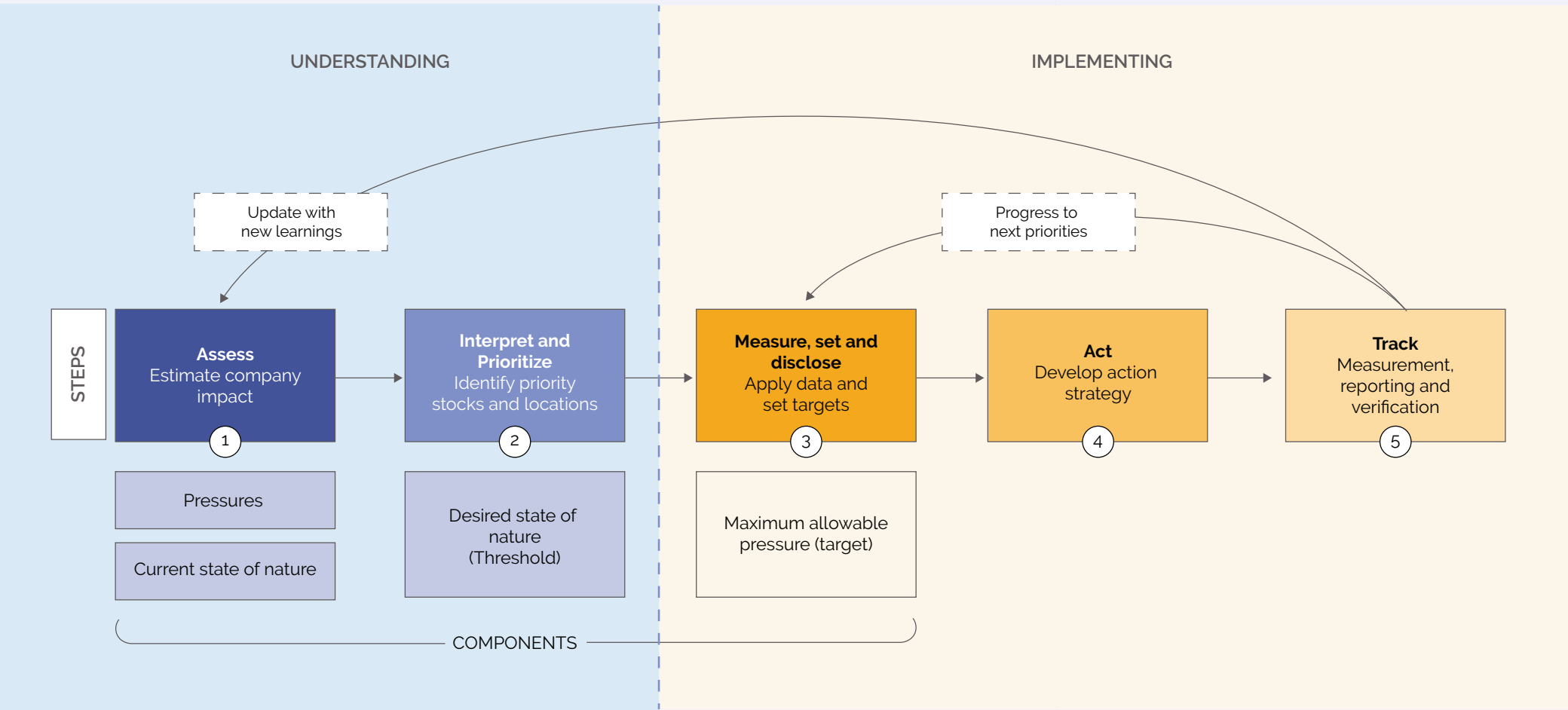


Figure 18—Steps of the SBTN Process



## 5.2 Social Responsibility Annex

### 5.2.1 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 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.<sup>61</sup> This lack of HRDD commitments, along with the lack of worker-led supply chain monitoring and verification processes, enables and contributes to human and labor rights abuses in the seafood industry.

The increase in HRDD 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 HRDD 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), this is 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.

### 5.2.2 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 tons of seafood is lost each year to illegal, unreported, and unregulated (IUU) fishing (representing a mean loss of 18% across all fisheries)<sup>62</sup>, leading to significant global impacts on fisheries and a 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. 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.<sup>63</sup> Human rights abuses in industrial fisheries include forced labor, human trafficking, debt bondage, and sexual and labor exploitation; 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<sup>64</sup>, weather patterns will change and the number of climate refugees and migrants will increase globally. Among fishworkers, the need for access to decent work, alternative livelihoods, and/or adaptation support (e.g., education, capital, etc.) will only grow. Understanding the ramifications of climate change on certain species and supply chains will be critical to ensure the long-term socio-economic and environmental sustainability of local communities, as well as the long-term surety of supply for seafood buyers.

### 5.2.3 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 within the company's direct or indirect supply chains. 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 *must* also be considered when setting science-based targets for the ocean.



61 World Benchmarking Alliance, 2021, [Food and Agriculture Benchmark](#).  
62 Agnew et al., 2009 [Estimating the Worldwide Extent of Illegal Fishing](#).  
63 FAO, 2022, "[Safety and Working Conditions in the Fisheries Sector and Protection of the Marine Environment](#)."

64 Bell et al., 2021, "[Pathways to sustaining tuna-dependent Pacific Island economies during climate change](#)."  
Photo Credit: Arno Senoner



5.2.4 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 Business Conduct](#)
- [Accountability Framework](#)
- [Human rights impact assessment guidance and toolbox \(Danish Institute for Human Rights\)](#)
- [United Nations Global Compact Guide on How to Develop a Human Rights Policy](#)

5.1.4.2 Conventions, Protocols, and Guidance

1. International Labour Organization Conventions (ILO):
  - a) Freedom of Association and Protection of the Right to Organize Convention, 1948 (No. 87)
  - b) Right to Organize and Non-Discrimination of Unions, 1949 (No. 98)
  - c) Collective Bargaining Convention (No. 154)
  - d) Forced Labor Convention, 1930 (No. 29)
  - e) Abolition of Forced Labor Convention, 1957 (No. 105)
  - f) Minimum Age Convention, 1973 (No. 138)
  - g) Worst Forms of Child Labor 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
  3. ILO General principles and operational guidelines for fair recruitment & Definition of recruitment fees and related costs. International Labor Office—Fundamental Principles and Rights at Work Branch, Labor Migration Branch, Geneva, 2019
  4. ILO Work in Fishing Convention, 2007 (No. 188)
  5. ILO Maritime Labor 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 Labor, 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](http://www.somo.nl/human-rights-and-grievancemechanisms)
35. United Nations Office of Drugs and Crime (UNODC, 2013). “Human Trafficking.”



5.3 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.

5.4 Seascape Engagement Initiative Roadmap Information

5.4.1 THE MINIMUM CRITERIA OF A SEASCAPE INITIATIVE

In addition to the context provided in the main text, this annex serves to expand on the minimum criteria and necessary documentation for submitting 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 sit within. Not all criteria need to be met at the time of target submission to allow for companies and initiatives to progress on their target submission and improvements in a timely manner. The four criteria are as follows:

- At the time of target submission:
- Within one year of target submission:
1. Every seascape or jurisdictional approach **must operate at the scale of a recognized ecological area** (such as a Large Marine Ecosystem) or **administrative area** (such as states, provinces, municipalities, districts).

2. The vision and needs of relevant stakeholder groups **must be included in the design, implementation, and monitoring of an initiative**.

• 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 ambitions of the target**.

4. There are **transparent reporting and presentation/information systems sharing the actions/investments made in the initiative**.

• Actions are reported to relevant stakeholders.
- Nature and people goals have been defined collectively (i.e., by three or more stakeholder groups).

• There is a link between initiative actions/ investment and one or more of the seascape goals on nature and people.

If a company is engaging in an existing initiative that meets all four criteria, or is establishing a 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, as well as a 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, up to jurisdictional or 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 because there must be an indicator selected for baseline measurement that is connected to the pressures addressed by the target, and that progress on the advocacy undertaken by the initiative and the company is possible. 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 will have meaningful outcomes within the target boundary, or where advocacy will lead to actual closures or protections for marine species or habitats, means that the indicator can be appropriate for target setting if 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 participating 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 individual criterion:

- 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 the 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 the time of submission are met within 12 months and re-submit their 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 Seascope Initiative Roadmap. The information below is required for each seascope initiative—though they are not all required at the time of target submission.

Companies *must* submit a Seascope Initiative Roadmap Template along with their Target Submission Templates to facilitate implementation and, in the future, enable audits.

5.4.2 ROADMAP FOR SEASCOPE INITIATIVES IN ENGAGEMENT PATHWAYS

A full roadmap template which companies may fill out for target submission is available online via SBTN’s website.<sup>65</sup> This is a modified roadmap only intended to provide documentation details.

Table 4 — Freshwater quality nutrient threshold and model-predicted flows by month and season for a single hypothetical example year.

	Documentation	Criteria	Description	Desired Content
Required at target submission	Action plan and timeline	Minimum Requirement	Collective action plan showing how the initiative intends to improve ecological and social conditions in the seascope.	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	Minimum Requirement	Detailed financial plan for the seascope/initiative.	Explanation and quantification of investments and funding supporting the implementation of any investments the company is making in improving the seascope 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 seascope collective action plan.
	Memorandum of Understanding (MOU) of initiative, 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 seascope or jurisdiction related to the target objective.	Selection of an indicator or set of metrics that is suitable to measure progress and impact of planned actions, and improvement in ecological and social conditions at seascope 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 seascope.
	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 seascope initiative, has in place data governance systems and protocols to credibly gather, store, analyze, and use the data collected in the seascope initiative.
	Clear reporting framework and strategy for communicating accessible information about results, partners, and future actions on a regular and recurring basis.	4	Demonstration that the company is prepared to transparently report on its participation in the initiative and the progress for the duration.	Documentation of company’s reporting structure historically, or a strategy moving forward for public communication.

65 The seascope 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.



Table 6—Freshwater quality nutrient threshold and model-predicted flows by month and season for a single hypothetical example year.

	Documentation	Criteria	Description	Desired Content
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.

## ANNEX CHECKLIST

Have you considered Indigenous Peoples and local communities that depend on marine resources as part of your targets?	5.1.3
Does your seascape initiative meet all four criteria?	5.3.1
Do the seascape initiative's outcomes tie back to the seafood source for which the target is being set?	5.3.1
Have you completed the seascape initiative self-assessment?	5.3.1
Have you submitted a completed Seascape Initiative Roadmap Template?	5.3.1



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