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NATURE AND CLIMATE ACTION

A Resource Navigator for Companies and Financial Institutions

Created by the Global Commons Alliance's Accountability Accelerator, the Climate Champions Team, and AccountAbility

START

ACCOUNTABILITY ACCELERATOR | GLOBAL COMMONS ALLIANCE

RACE TO ZERO

AccountAbility
Setting the Standard for Sustainability

ACKNOWLEDGEMENTS

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BUSINESS FOR NATURE

CAPITALS COALITION

SCIENCE BASED TARGETS NETWORK
GLOBAL COMMONS ALLIANCE

Finance for Biodiversity Foundation

TNFD Taskforce on Nature-related Financial Disclosures

WBCSD World Business Council for Sustainable Development

World Benchmarking Alliance

Environmental Defense Fund

CDP
Ceres
Children's Investment Fund Foundation (CIFF)
Consumer Goods Forum
EU Business and Biodiversity Platform
Global Canopy
Global Reporting Initiative
The Institutional Investors Group on Climate Change
Impact Management Platform
Open Earth Foundation
Porticus Foundation
Principles for Responsible Investment
Science Based Targets initiative
Society of Entrepreneurs and Ecology (SEE) Foundation
Systemiq
UN Global Compact
UN Environment Programme
World Economic Forum

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ACRONYMS

ACT-D	Assess, Commit, Transform, and Disclose: High-level Business Actions on Nature
AfN	Accounting for Nature
CapsCo	Capitals Coalition
CCT	Climate Champions Team
CDP	Formerly “Carbon Disclosure Project” and became “CDP” in 2013
CSRD	Corporate Sustainability Reporting Directive
EFRAG	European Financial Reporting Advisory Group
EMS	Environmental Management System
ENCORE	Exploring Natural Capital Opportunities, Risks, and Exposure
ESG	Environmental, Social, Governance
ESRS	European Sustainability Reporting Standards
FfB	Finance for Biodiversity Foundation
FI	Financial Institution
FLAG	(SBTi) Forest, Land, and Agriculture
GBF	Kunming-Montreal Global Biodiversity Framework
GCA	Global Commons Alliance
GCAAA	Global Commons Alliance's Accountability Accelerator
GHG	Greenhouse Gas
GFANZ	The Glasgow Financial Alliance for Net Zero
GRI	Global Reporting Initiative
HLEG	High Level Expert Group (UN Secretary General)
IBAT	Integrated Biodiversity Assessment Tool
ICGN	International Corporate Governance Network
IFRS	International Financial Reporting Standards
InVEST	Integrated Valuation of Ecosystem Services and Trade-Offs
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change

ISO	International Organization for Standardization
ISSB	International Sustainability Standards Board
IUCN	International Union for Conservation of Nature
LOE	Level of Effort
MRV	Monitoring [Measurement], Reporting, and Verification
PBAF	Partnership for Biodiversity Accounting Financials
SASB	Sustainability Accounting Standards Board
SBT	Science-Based Targets
SBTi	Science Based Targets initiative
SBTN	Science Based Targets Network
SDG	United Nations Sustainable Development Goals
SEEA	UN System of Environmental-Economic Accounting
SFDR	Sustainable Finance Disclosure Regulation
TCFD	Task Force on Climate-related Financial Disclosures
TNFD	Taskforce on Nature-related Financial Disclosures
UNEP FI	United Nations Environment Programme Finance Initiative
UNEP-WCMC	UN Environment Programme World Conservation Monitoring Centre
UNGC	United Nations Global Compact
WBCSD	World Business Council for Sustainable Development
WEF	World Economic Forum
WWF	World Wildlife Fund

Section 01

INTRODUCTION

Sub-sections

ACCOUNTABILITY ACCELERATOR | GLOBAL COMMONS ALLIANCE RACE TO ZERO AccountAbility Setting the Standard for Sustainability

THE GLOBAL COMMONS ALLIANCE

The Global Commons Alliance is a growing coalition of scientists, philanthropists, civil society groups, businesses and innovators, enabling collective action to safeguard the global commons.

There are five key components to the Alliance - all of which are deeply collaborative efforts in of themselves - including the Accountability Accelerator (a co-author of this navigator), the Science Based Targets Network, the Earth Commission, Systems Change Lab and Earth HQ.

The collective mission of the Global Commons Alliance is to mobilize citizens, companies, cities and countries to accelerate systems change, and become better guardians of the global commons.

Fig. 01

THE UN CLIMATE CHANGE HIGH-LEVEL CHAMPIONS AND RACE TO ZERO

The UN Climate Change High-Level Champions for COP27 and COP28 – Dr. Mahmoud Mohieldin and H.E. Razan Al Mubarak – drive real world momentum into the UN Climate Change negotiations. This is done by mobilizing climate action amongst non-state actors (companies, cities, regions, financial, educational and healthcare institutions) to achieve the goals of the Paris Agreement, in close collaboration with the UNFCCC, the Marrakech Partnership and the COP Presidencies.

The Climate Champions Team is the technical and delivery team supporting the High-Level Champions, helping non-State actors take rigorous and immediate action to halve global emissions by 2030 and deliver a healthier, fairer, zero carbon world. This is done via the Race to Zero campaign. Membership has doubled from 7,760 to 12,566 over the past 18 months and continues to grow. The campaign represents nearly ⅓ of the Fortune 500, 40% of global financial assets and covers more than 12% of the global population.

Fig. 02

BUSINESS ACTION IS NEEDED TO ADDRESS THE NATURE AND CLIMATE CRISES

The need for collective action on nature and climate has never been more urgent to ensure a sustainable future for our planet. A 2019 Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) report detailing human impact on biodiversity and ecosystems concluded that over 25% of plant and animal species are at risk of irreversible loss.[1] Nature loss is a key driver of climate change. The Intergovernmental Panel on Climate Change (IPCC) found in 2020 that 11% of annual global greenhouse gas emissions are attributed to deforestation driven primarily by expanding agriculture and infrastructure development.[2] The deep linkages between the nature and climate crises require both to be addressed simultaneously.

Natural systems also play a critical role in our economy. More than US $58 trillion of total global economic value (almost 55% of global GDP in 2019) was found to be moderately or highly dependent on ecosystem services.[i, 3] The World Bank also estimates that the collapse of natural systems could erase US $2.7 trillion per year from the global economy by 2030.[4]

Moving towards a nature positive and net zero global economy presents an opportunity to safeguard and create a more just planet. It also presents an opportunity for businesses to create value and competitive advantage through increased resilience, as well as through product and brand differentiation. However, halting ecological destruction and facilitating conditions that lead to the regeneration and restoration of natural and climate systems will require urgent, coordinated action from both the public and private sectors.

11%

of annual global greenhouse gas emissions are attributed to deforestation

The 2022 Kunming-Montreal Global Biodiversity Framework, often referred to as “the Paris Agreement for nature,” commits the world to halting and reversing nature and biodiversity loss by 2030 and provides directives for businesses on how to contribute.[ii] Nature is also a central part of the solutions outlined in the COP 27 Sharm-el-Sheikh Adaptation Agenda, which provides the 30 global adaptation targets by 2030, and the 2030 Nature Breakthroughs. In addition to these country-level climate commitments, voluntary global campaigns like the UN Climate Change High-Level Champions-led “Race to Zero” and “Race to Resilience” Campaigns rally businesses, investors, cities and regions, and other non-state actors to build momentum around the shift to a resilient net zero and nature positive economy.

i For definitions of critical terms used in this navigator, please refer to “Navigator Key Terminology Definitions and Additional Glossary Resources” in Annex 1.

ii Most notably Target 15, which encourages legal, administrative, or policy measures to enable and ensure that companies and financial institutions regularly monitor, assess, and transparently disclose their biodiversity-related risks and impacts, with the overarching goals of 1) progressively reducing negative impacts on biodiversity and increasing positive impacts, 2) reducing biodiversity-related risks to business and financial institutions, and 3) promoting business action to ensure sustainable production.

Companies and financial institutions are a vital part of this global movement. They can deliver the transformative change required through adopting business models and supporting initiatives that center the protection and restoration of natural systems and reduce emissions in line with a 1.5°C pathway. To be credible and achievable, these efforts should be informed by science-based targets and associated with clear, time-bound strategies. Nature offers multiple avenues of opportunity, not only for mitigation, but also adaptation and resilience. Recognizing the relationship between the degradation of nature and climate – including desertification, land degradation, food supply insecurity, and other systems level risks[5] – organizations should strive to take simultaneous action across their core businesses, subsidiaries, portfolios, and supply chains. Initiatives that help organizations to develop and publish credible transition plans, set targets, manage and disclose nature-related impacts, dependencies, risks, and opportunities, and align their advocacy are all helping to guide businesses towards contributions to the resilient net zero and nature positive future that is urgently needed for people and planet.

GCAAA, CCT, and AccountAbility developed this navigator to orient companies and financial institutions within the landscape of business guidance, management tools, methodologies, and disclosure frameworks that address nature and climate action and transparency.

iii GCAAA defines the global commons as biodiversity, land, climate, freshwater, and ocean.

NAVIGATING RESOURCES FOR MANAGEMENT DECISION-MAKING ON NATURE AND CLIMATE

The Global Commons Alliance's Accountability Accelerator (GCAAA) works to strengthen the accountability of businesses and financial institutions when it comes to their impact on nature and climate. GCAAA also supports organizations in delivering on their respective nature commitments to mitigate harms, restore, sustainably access, and safeguard the regenerative capabilities of the global commons.[iii] Its aim is to keep the world within safe and just planetary boundaries[6] for humans and nature alike. The UN Climate Change High-Level Champions, established following COP 21 and mandated by the Paris Agreement, drive real world momentum into the UN Climate Change negotiations by mobilizing climate action amongst non-state actors (companies, cities, regions, financial, educational and healthcare institutions) to achieve climate and nature goals.

GCAAA, CCT, and AccountAbility, a global specialist sustainability advisory, standards, and research firm, developed this navigator to orient companies and financial institutions within the landscape of business guidance, management tools, methodologies, and disclosure frameworks that address nature and climate action and transparency. The resources included in this navigator support organizational decision-making with respect to business impacts, dependencies, and pressures on natural systems.

GCAAA and CCT understand how the rapid proliferation of frameworks, business guidance, and disclosure demands can represent challenges for companies and financial institutions in understanding where to start, what resources are most relevant to their operations, and how to engage as strong stewards for nature and climate. This navigator seeks to equip users with a more streamlined path to approaching the tools, measurement systems, action steps, and disclosure instruments that facilitate effective management of nature- and climate-related impacts, dependencies, risks, and opportunities as well as enable informed selection and utilization of resources most applicable to their business' operations.

JUMP TO SECTION

Section 02

THE SCOPE OF THIS NAVIGATOR

Sub-sections

NATURE AND CLIMATE RESOURCES

The business guidance, management frameworks and tools, and disclosure instruments aggregated and profiled in this navigator focus primarily on nature, inclusive of its land, freshwater, atmospheric, and ocean realms as well as its biodiversity. As the Intergovernmental Panel on Climate Change (IPCC) notes significant established science-backed linkages between climate change and nature loss,[7] businesses should begin to assess the level of interconnected and compounding risk across their operations, portfolios, and supply chains. Due to the vast interrelatedness of these challenges, this navigator also includes key decarbonization-focused management resources for companies and financial institutions, and where available in the evolving resource landscape, transition planning resources that support simultaneous consideration of nature and climate action.

Widening organizational risk aperture to be inclusive of both nature and climate will create opportunities to better safeguard natural systems and improve business resilience and competitive advantages. Businesses can assess their value chains to leverage nature-based solutions,[iv] for example, which can help drive the global climate change mitigation efforts required by 2030 and also build resilience in landscapes and communities already experiencing climate change impacts. Simultaneous action on nature and climate may also present chances for organizations to realize efficiencies in the collection and management of the data needed to support disclosures and decision-making, and to build the necessary internal capacity and expertise.

SELECTION OF NAVIGATOR RESOURCES

This navigator does not express preferences for nature or climate guidance, frameworks, tools, or resources and does not advise organizations on the optimal path towards comprehensive management, mitigation, and disclosure of nature- and climate-related risks. This navigator aggregates high-impact resources that meet thresholds of credibility and industry usefulness, defined as

1. Measurement methodologies and frameworks for impact, dependency, risk, and opportunity assessment that have all undergone significant public consultation and inform disclosure standard setting, such as the Science Based Targets Network (SBTN), the Science Based Targets initiative (SBTi), and the Taskforce on Nature-related Financial Disclosures (TNFD);
2. Resources most frequently in use by companies and financial institutions, where similar resource application would likely place a company in good standing with industry peers; and/or
3. Resources that were produced by leading organizations for nature and climate, such as Business for Nature, the World Economic Forum (WEF), and the UN Environment Programme Finance Initiative (UNEP FI), or by industry associations with specific knowledge of leading practices for nature and climate management, such as Finance for Biodiversity and Partnership for Biodiversity Accounting Financials (PBAF).

This navigator is not exhaustive as the landscape of tools is rapidly evolving. Multiple resources profiled in this navigator are currently undergoing or planning significant version updates and this has been noted where applicable (as of October 13, 2023, when this version of this navigator was completed).

iv Restorative and protective actions that safeguard the functioning of ecosystems and ecosystem services to benefit nature and climate systems, as well as society and the economy, such as restoring natural carbon sinks like forests or peatlands that have been damaged by business activity (see Annex 1 for terminology definitions and resources).

POLICY AND ADVOCACY

This navigator is focused on identifying tools and information that can support business management actions to avoid, mitigate, and reverse harmful impacts on nature and climate systems. While it is critical that organizations take part in advocacy efforts to support policy that protects, sustainably manages, or restores nature and climate systems, this is not an express focus of this navigator.

In recognition of this critical area, however, and the UN Climate Change High-Level Champions' leading work with the Race to Zero Campaign, summaries of several frameworks that call for organizational engagement and advocacy in the nature and climate policy arena are referenced under "Summaries of Holistic Guidance and Advocacy Frameworks." Organizations that are positioned to take actions such as making public pledge commitments, joining industry coalitions to coordinate advancements for nature and climate action, and contributing to policy and advocacy discussions, are encouraged to familiarize themselves with these initiatives.

OPPORTUNITY AREAS IN THE LANDSCAPE OF MANAGEMENT RESOURCES AND NEXT STEPS FOR THIS WORK

As resources were aggregated for this navigator, certain opportunity areas were identified in the landscape of available management resources for businesses. Pathways should continue to be explored to empower companies and financial institutions to accelerate urgent action for nature and climate simultaneously, ultimately enabling greater accountability for nature positive and net zero outcomes. The Global Commons Alliance's Accountability Accelerator (GCAAA) and Climate Champions Team (CCT) intend for this navigator to be the first version of a resource that evolves with the landscape of management tools available for companies and financial institutions, and hope it continues to be periodically updated to support organizations in the implementation of responsive management systems.

To further evolve the usefulness of this navigator to an even greater audience pool, and to address other facets of this dynamic global challenge, the following opportunities could be considered, especially as the resource set continues to develop:

- Content or companion pieces with more region-specific tools, resources, initiatives, and disclosure considerations.
- Additional resources and frameworks for planning simultaneous and comprehensive business action on nature and climate, such as incorporating nature into transition planning and leveraging nature-based solutions to further mitigate climate change effects. These resources are beginning to emerge and evolve, with the World Wildlife Fund (WWF), Science Based Targets initiative (SBTi) (through its FLAG work), and the UN Climate Change High-Level Champions already conducting important work in this space.
- Resources for adaptation and resilience that help businesses account for natural systems changes already underway (e.g., to advance responsive food production, freshwater availability, or infrastructure construction approaches) and improve businesses' level of preparedness. These resources can also support the reduction of additional harms to communities already experiencing the effects of nature and climate systems change. COP 27's Sharm-el-Sheikh Adaptation Agenda[8] and the UN Climate Change High-Level Champions and the Marrakech Partnership's "Race to Resilience" Campaign are important ways to engage with adaptation and resilience efforts now.

Section 03

HOW TO ENGAGE WITH THIS NAVIGATOR

Sub-sections

This navigator is presented in a downloadable format that is interactive and contains direct links to external resources referenced in the content. Users can access the document navigation pane as well as select linked content to move directly to descriptive sections more efficiently, depending on what content is most individually relevant or useful.

The information contained in this navigator does not constitute formal advisement on courses of appropriate action for organizations nor does it make recommendations on disclosure instruments that should be utilized. Businesses should take into consideration the legal and regulatory requirements that apply in the jurisdictions where they operate as well as the information that is most important to communicate to their stakeholders and prepare accordingly. Each disclosure instrument will carry its own procedural requirements that preparers must follow.

BY USER JOURNEY

This navigator presents management resources for nature and climate, aggregated as a User Journey of sequential stages (Tables 1-5). The management framework step is listed at the top of each table, with corresponding supportive resources for companies in the left column and for financial institutions in the right column. Cross-cutting resources that support all stages of the User Journey are located below in Table 6.

BY SUMMARY OF HIGH-IMPACT NATURE AND CLIMATE GUIDANCE AND FRAMEWORKS

As some users may benefit from first establishing an understanding of key resources and frameworks for nature and climate, this navigator also enables users to directly navigate to summary content. High-impact resources are defined in this navigator as leading resources created by important actors, such as the Capitals Coalition, the SBTN, and the SBTi, as well as prominent market-led initiatives, such as the TNFD and the TCFD. These resources and frameworks have emerged as the preeminent approaches for nature and climate target-setting, impact, dependency, risk, and opportunity assessment, and decarbonization pathway-setting methodologies available today for business use. They have helped inform the evolutions of many voluntary disclosure instruments in use today and may closely inform future mandatory reporting.

BY SUMMARY OF NATURE AND CLIMATE DISCLOSURE INSTRUMENTS

While managing for nature and climate goes beyond an orientation towards information disclosure, this is undeniably an important part of businesses' responsibilities and enables wider accountability for progress towards targets. Because the landscape of voluntary disclosure instruments is dynamic and the scope of required nature- and climate-related disclosures is growing, disclosure is given special weight and focus in this navigator.

A disclosure instrument in this navigator is defined as a resource that facilitates business communication of its position, targets, assessment of progress, and management plans for nature and climate action. This could take the form of frameworks that include disclosure guidance, such as the TNFD's Recommendations and guidance, CDP's environmental disclosure system, or standards for non-financial disclosure such as GRI or IFRS/ISSB. This navigator includes short summaries of key disclosure instruments and highlights version histories, information on disclosure considerations for users, the level of planned linkage or interoperability with other frameworks, and the anticipated level of effort required for organizational implementation. An aggregated summary of distinguishing features across the body of key disclosure instruments is also presented in tabular format in Annex 3.

For Foundational Content

- Key navigator terminology definitions and links to comprehensive glossary sources are located in Annex 1
- Key navigator terminology related specifically to disclosure instruments is located in Annex 2
- Key distinguishing features of several disclosure instruments are located in Annex 3
- Current treatment of and outlook on third-party data verification for several key disclosure instruments is located in Annex 4

Section 04

MAPPING GLOBAL FRAMEWORKS, STANDARDS, METHODOLOGIES, AND DECISION-MAKING TOOLS

Sub-sections

FOR NATURE

The graphic below provides some stratification of well-known nature-focused resources, frameworks, methodologies, standards, and global goals, and an orientation on how this landscape fits together.

GLOBAL GOALS AND FRAMEWORKS

Convention on Biological Diversity

Kunming-Montreal Global Biodiversity Framework

SUSTAINABLE DEVELOPMENT GOALS

United Nations Framework Convention on Climate Change

Paris Agreement

ACCOUNTS

DISCLOSURE STANDARDS

MANDATORY

European Commission

(ESRS; SFDR)

VOLUNTARY*

IFRS Foundation

(IFRS S1; IFRS S2)

SASB STANDARDS
Now part of IFRS Foundation

GRI

(GRI 303: Water and Effluents; GRI 304: Biodiversity)

INFORMS

FRAMEWORK METHODOLOGIES

TNFD Taskforce on Nature-related Financial Disclosures

SCIENCE BASED TARGETS NETWORK
GLOBAL COMMONS ALLIANCE

Act-D

Business for Nature

World Business Council for Sustainable Development

Capitals Coalition

World Economic Forum

Science Based Targets Network

TNFD

WWF

Note: Some frameworks may also include disclosure recommendations

SUPPORTS

CREATORS OF DECISION-MAKING BENCHMARKS, RESOURCES, AND TOOLS (NOT EXHAUSTIVE)

BENCHMARKS

CDP DISCLOSURE INSIGHT ACTION

World Benchmarking Alliance

ShareAction»

INITIATIVES, PROJECTS, AND RESOURCES

PBAF Partnership for Biodiversity Accounting Financials

Finance for Biodiversity Foundation

CAPITALS COALITION

UN environment programme finance initiative

Nature Action 100

TOOLS

ENCORE

IBAT

Field to Market FIELDPRINT PLATFORM

** Note: in some jurisdictions, voluntary frameworks may be mandatory*

FOR CLIMATE

The graphic below provides some stratification of well-known climate-focused resources, frameworks, methodologies, standards, and global goals, and an orientation on how this landscape fits together.

GLOBAL GOALS AND FRAMEWORKS

United Nations Framework Convention on Climate Change

Paris Agreement

SUSTAINABLE DEVELOPMENT GOALS

Convention on Biological Diversity

Kunming-Montreal Global Biodiversity Framework

ACCOUNTS

DISCLOSURE STANDARDS

MANDATORY

U.S. Securities and Exchange Commission

European Commission

(ESRS; SFDR)

VOLUNTARY*

IFRS Foundation

(IFRS S1; IFRS S2)

SASB STANDARDS
Now part of IFRS Foundation

GRI

(GRI 201: Economic Performance; GRI 302: Energy; GRI 305: Emissions)

ISO

INFORMS

FRAMEWORK METHODOLOGIES

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

(IFRS Foundation will assume monitoring responsibility from TCFD in 2024)

Greenhouse Gas Protocol

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

RACE TO ZERO

Note: Some frameworks may also include disclosure recommendations

SUPPORTS

CREATORS OF DECISION-MAKING BENCHMARKS, RESOURCES, AND TOOLS (NOT EXHAUSTIVE)

BENCHMARKS

CDP DISCLOSURE INSIGHT ACTION

World Benchmarking Alliance

ShareAction»

A proud participant of: Climate Action 100+

INITIATIVES, PROJECTS, AND RESOURCES

EXPONENTIAL ROADMAP INITIATIVE

Accountability Framework initiative

UN environment programme finance initiative

SME Climate Hub

TOOLS

Environmental Defense Fund

NET ZERO ACTION ACCELERATOR

Field to Market FIELDPRINT PLATFORM

PACT

** Note: in some jurisdictions, voluntary frameworks may be mandatory*

Section 05

THE USER JOURNEY INTRODUCTION

ACCOUNTABILITY ACCELERATOR | GLOBAL COMMONS ALLIANCE RACE TO ZERO AccountAbility Setting the Standard for Sustainability

CONCEPTUALIZING HOLISTIC, CONTINUOUS, AND TRANSPARENT MANAGEMENT ACTION

The linear structuring of Tables 1-5 below (the "User Journey") may suggest that management actions for nature and climate are linear. However, because management steps build upon each other and require monitoring, assessment, and recalibration, these management action steps should be understood as part of a cyclical and continuous process of commitment. Managing for nature and climate outcomes goes beyond target setting and should be looked at holistically. For instance, organizations can look to maximize opportunities for synergistic management of nature and climate impact, such as developing comprehensive transition plans (see Table 6, Topic D) that consider interim and longer-term goals. They can also look to join industry coalitions that coordinate efforts to advance nature and climate action and even contribute to policy and advocacy discussions (see "Summaries of Holistic Guidance and Advocacy Frameworks" below).

Users of this navigator should prepare their respective organizations for continuous cycles of assessment, monitoring, transformational action, adaptation, and progress evaluation and disclosure.

Users of this navigator should prepare their respective organizations for continuous cycles of assessment, monitoring, transformational action, adaptation, and progress evaluation and disclosure that requires dedicated organizational resources. They should also consider when their organizations may be positioned to take a more dynamic, leadership-oriented posture to act as change agents in bringing about positive paradigm shifts in business management and advocacy actions for nature and climate.

The ACT-D and Race to Zero Campaign frameworks described below can position companies and financial institutions to consider a holistic series of actions to enable collective progress for nature and climate.

The ACT-D High-level Business Actions on Nature Framework

The Assess-Commit-Transform-Disclose High-level Business Actions on Nature Framework[9] (known as "ACT-D") was developed by Business for Nature and their partners.[v] ACT-D represents the stages of a company's journey in considering nature dependencies, pressures, and impacts central to its operations and decision-making processes. ACT-D demonstrates how continuous cycles of assessment, commitment to target setting, and adapted business actions are necessary and highlights that transparent disclosure to stakeholders is a critical part of each stage.

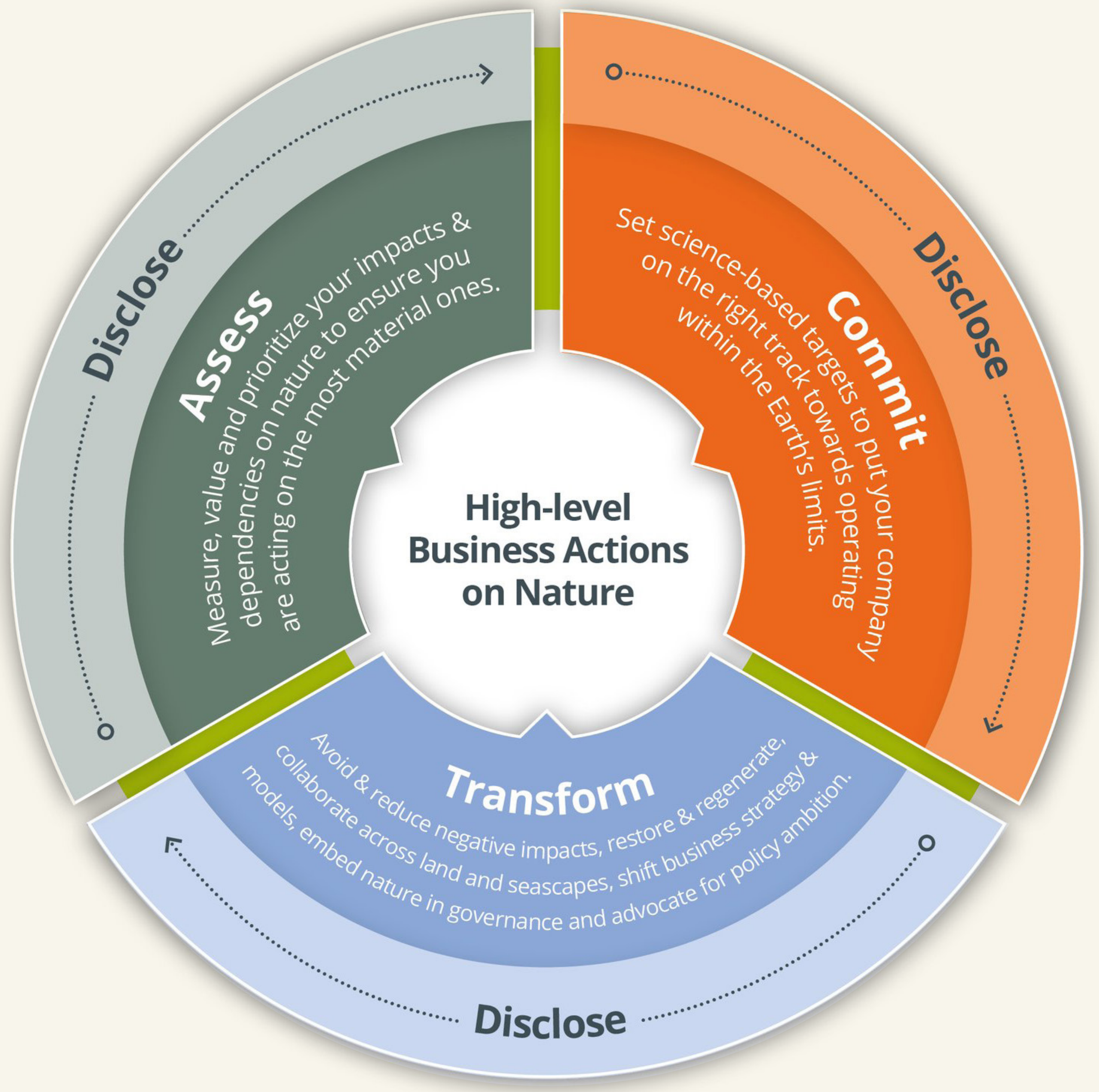


Fig. 03 The ACT-D Framework

v Including the Capitals Coalition, World Business Council for Sustainable Development (WBCSD), Taskforce on Nature-related Financial Disclosures (TNFD), Science Based Targets Network (SBTN), World Economic Forum (WEF), and World Wildlife Fund (WWF).

The Race to Zero Campaign

The Race to Zero Campaign[10] (Race to Zero) was developed by the UN Climate Change High-Level Champions to ensure the integrity and acceleration of meaningful progress towards halving global emissions by 2030. Race to Zero sets out required criteria for its members as well as leadership-oriented criteria under its 5 Ps: Pledge, Plan, Proceed, Publish and Persuade. The framework underscores the importance of target setting and transparent disclosure through its required criteria for members but goes beyond this to also emphasize the need for holistic business action. This involves more robust business citizenship, such as considering climate and nature systems simultaneously, enabling a just transition that is inclusive of local communities, advocating for policy measures consistent with the goals of the 5 Ps, and more (see "Summaries of Holistic Guidance and Advocacy Frameworks").

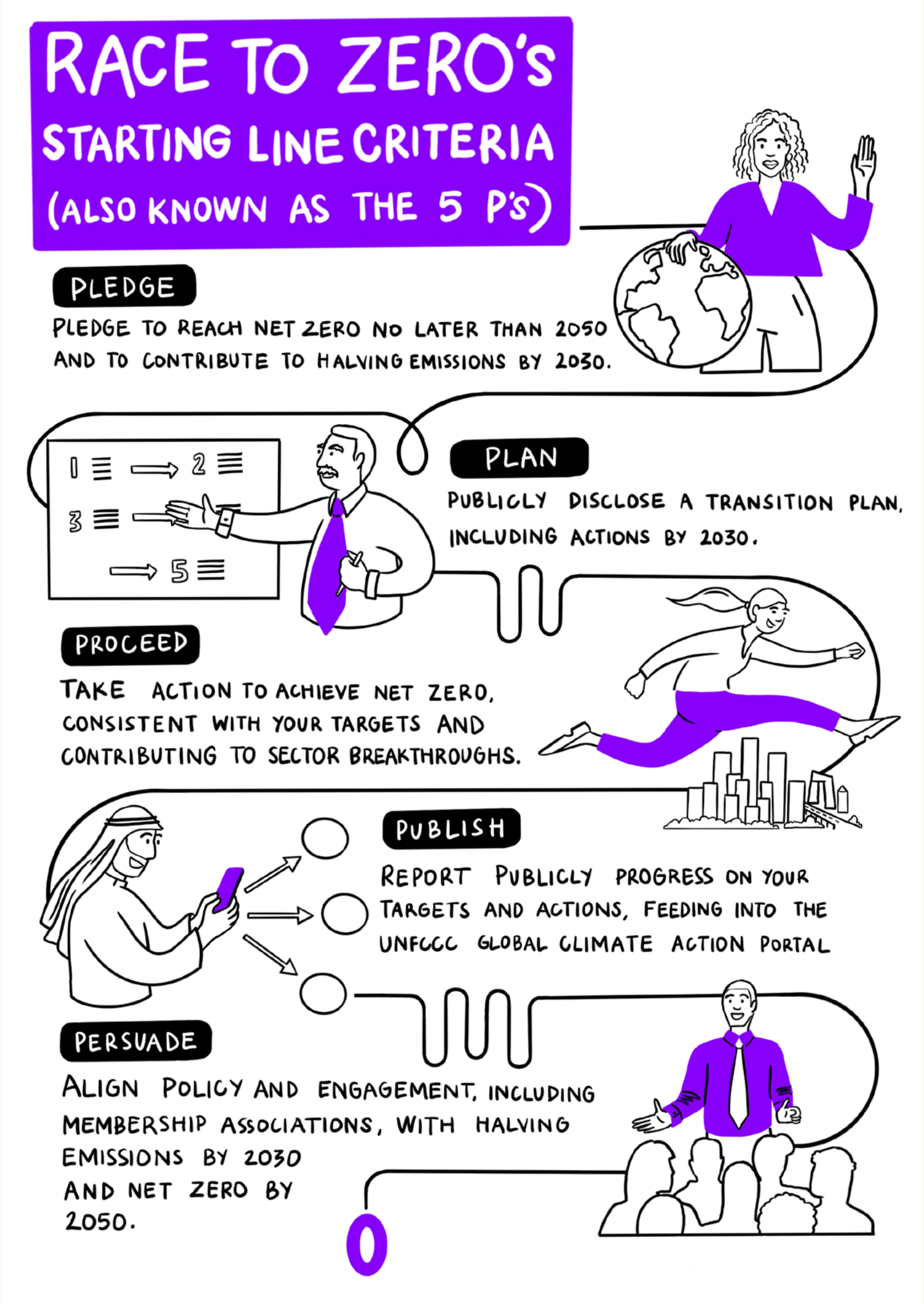


Figure 4: The Race to Zero Campaign's 5 Ps Framework

GROUPING NATURE AND CLIMATE RESOURCES BY A SEQUENCE OF MANAGEMENT ACTION STEPS

The intent to set targets for nature and/or climate in the near-term is not essential to use this navigator – many of the resources and tools included in the User Journey can help businesses at all stages of nature and climate management action. Target setting is an important tool for businesses, however, and can serve as the basis for developing responsive business action plans to manage for nature and climate. The SBTN and SBTi five-step target setting and action[vi] frameworks can support businesses in setting credible nature and net zero targets, which are a foundational element of the holistic ACT-D and Race to Zero Campaign frameworks, respectively, as described above.

Resources that can support nature and climate target setting and delivery are aggregated and organized into Tables 1-5 (User Journey) in this navigator. The Science Based Targets Network (SBTN) is a coalition member of the Global Commons Alliance along with the Accountability Accelerator (GCAAA) co-authoring this navigator, and the SBTN's 5-Step Framework[11] for science-based target setting is used as a categorization mechanism for the nature landscape of resources and tools. The SBTN's framework builds on and complements the Science Based Targets initiative's climate target setting framework. Therefore, SBTi's 5-Step Framework[12] is used to categorize climate resources and tools.

The resources and tools included in the User Journey can help businesses at all stages of nature and climate management action.

It is important to note that some variation exists between leading frameworks in terms of the scope of activities prescribed in each management action step of the User Journey towards nature- and climate-informed target setting and decision-making. The resources included in this navigator are grouped with the SBTN or SBTi framework activity step that they most closely support, but there may be instances of partial misalignment between the resources grouped with an SBTN or SBTi framework step (e.g., resources related to the TNFD that recommends organizations use their preferred materiality approach, and resources related to the SBTN that recommends a double-materiality approach).[vii]

The intention, however, is to group resources according to a sequence of steps that an organization can follow to build action on nature and climate and enable them to revisit the steps for additional resources and tools that may accelerate and/or deepen their progress as part of this continuous management process. As frameworks that unify business actions for simultaneous action on nature and climate emerge and evolve,[viii] they may eventually serve as comprehensive and singular organizing mechanisms for aggregating resources in future versions of this navigator.

vi Step 4 of the SBTN Framework includes the AR3T Action Framework that outlines actions for businesses to consider as they work to mitigate and transform pressures their operationsand investments have on nature (see Table 4 below).

vii Organizations must ensure that their materiality approach will support the preparation of reporting that adheres to procedural requirements of the disclosure instruments necessary for use in the jurisdictions where they operate. Each disclosure instrument, including voluntary disclosure standards selected for use, will have their own procedural requirements.

viii WWF, SBTi (through FLAG), and the UN Climate Change High-Level Champions are already conducting important work in this space.

JUMP TO SECTION

Nature Resources: Grouped to Support a Sequence of Management Actions, Organized Under Steps of the SBTN 5-Step Framework for Science-based Target Setting

The resources for target setting, action, and disclosure related to nature are grouped to support a sequence of management actions, organized under the Science Based Targets Network's (SBTN) five-step process (see Figure 5 below), color shaded green in the User Journey Tables 1-5.[ix] The SBTN's framework activity steps include 1) assessment of environmental pressures; 2) interpretation of pressures and prioritization of locations for management action; 3) baseline data collection, target setting, and disclosure; 4) action to meet targets; and 5) monitoring, verifying, and reporting on progress over time.

As noted above under "Grouping Nature and Climate Resources by a Sequence of Management Action Steps", there may be instances of variation between the content of the grouped resources and the scope of activities called for by SBTN in that step of its target setting framework. The steps of the User Journey are not meant to signify complete alignment or interoperability between approaches but instead suggest a logical sequence to utilize relevant resources as businesses build action and contribute to wider nature positive gains.

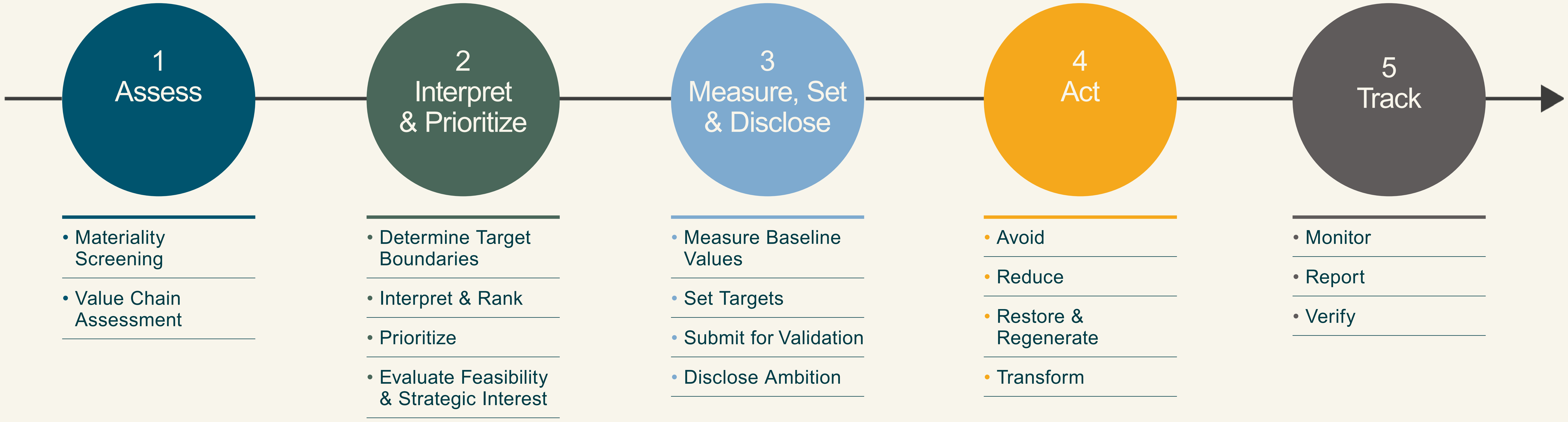


Figure 5: SBTN 5-Step Framework for Science-Based Target Setting

ix SBTN released updated guidance for Steps 1-3 of its target-setting process in May 2023, with updated guidance for Steps 4-5 still in development. Users can refer to SBTN's Initial Guidance for more detailed information on Steps 4-5.

JUMP TO SECTION

Climate Resources: Grouped to Support a Sequence of Management Actions, Organized Under Steps of the SBTi 5-Step Framework for Science-based Target Setting

The resources for target setting, action, and disclosure related to climate are grouped to support a sequence of management actions, organized under the Science Based Targets initiative's (SBTi's) five-step process (see Figure 6 below), color shaded orange in the User Journey Tables 1-5. The SBTi's framework activity steps include 1) committing to setting science-based targets; 2) developing targets in line with SBTi's criteria; 3) presenting targets to SBTi for validation; 4) publicly announcing targets to stakeholders; and 5) releasing transparent disclosures on progress annually over time.

As noted above under "Grouping Nature and Climate Resources by a Sequence of Management Action Steps", there may be instances of variation between the content of the grouped resources and the scope of activities called for by SBTi in that step of its target setting framework. The steps of the User Journey are not meant to signify complete alignment or interoperability between approaches but instead suggest a logical sequence to utilize relevant resources as businesses build action and contribute to wider nature positive gains.

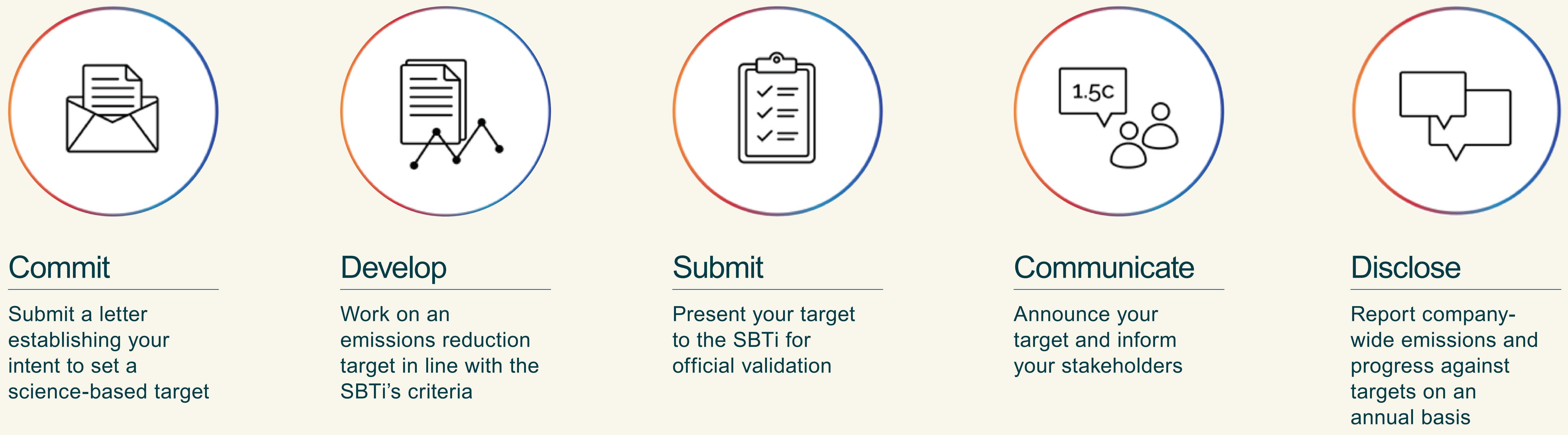


Figure 6: SBTi 5-Step Process for Science-Based Target Setting

VITAL CROSS-CUTTING RESOURCES FOR NATURE AND CLIMATE THAT SERVE EACH MANAGEMENT STEP OF THE USER JOURNEY

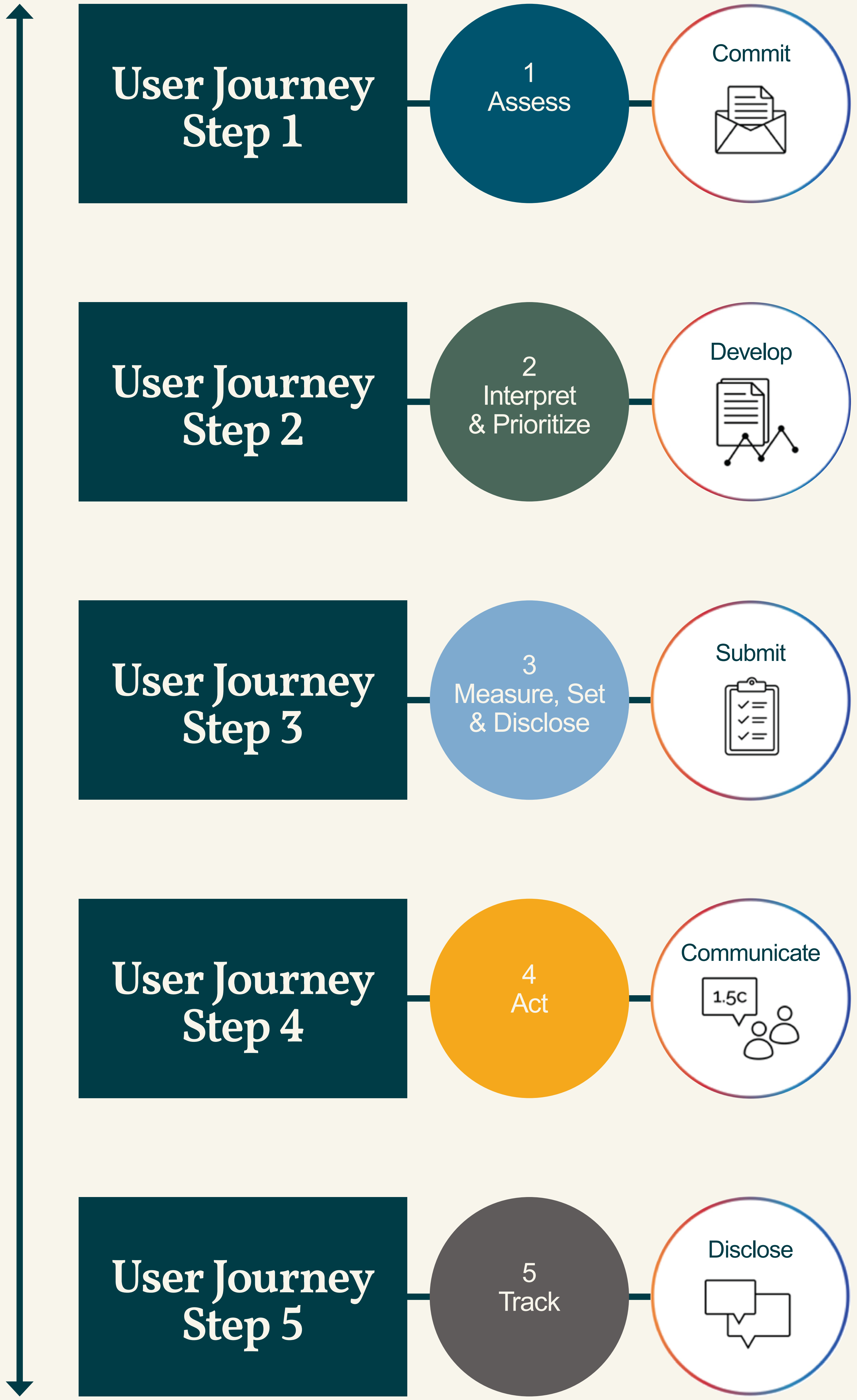
Cross-cutting resources, such as guides for obtaining organizational buy-in for nature and climate action, conducting stakeholder engagement, assessing placement in industry benchmarks, developing credible transition plans, and more, are located below the User Journey in Table 6. These are cross-thematic complements to the target-setting focused resources in Tables 1-5 and can be thought of as important tools for operationalizing responsive management of business pressures on natural and climactic systems that are inclusive of internal and external stakeholder groups.

VISUALIZING THE USER JOURNEY: A PROGRESSION OF TARGET SETTING AND ACTION STEPS

The User Journey tables follow the SBTN and SBTi's respective five-step frameworks for nature and climate target setting (see Figure 7). While the User Journey may appear linear in presentation, it describes a set of management actions that are part of a dynamic, continuous, and cyclical process of assessment and recalibration to ensure intended effects for nature and climate are realized (see "Conceptualizing Holistic, Continuous, and Transparent Management Action" above).

Resources are grouped under each listed framework activity step for companies in the left column and for financial institutions in the right column. To avoid repetition in the User Journey, resources are generally listed under the "Company Actors" or "Financial Institution Actors" columns according to the perceived higher prevalence or likelihood of use, or as noted in the resource itself.

Right – Figure 7: User Journey Tables 1-5 – Sequencing of the SBTN and SBTi Framework Activity Steps



Users of this navigator should familiarize themselves with both sets of resources listed for companies and financial institutions...

Users of this navigator should familiarize themselves with both sets of resources listed for companies and financial institutions, as many will apply to both, either broadly or in specific use cases (see Figure 8). Users may also be able to use certain resources grouped under a framework activity step to support a span of nature and climate actions across multiple framework activity steps.

The information contained in this navigator, and in the following User Journey tables, does not constitute formal advisement on courses of appropriate action for organizations nor does it make recommendations on disclosure instruments that should be utilized. Businesses should take into consideration the legal and regulatory requirements that apply in the jurisdictions where they operate, as well as the information that is most important to communicate to their stakeholders and select disclosure instruments accordingly. Each disclosure instrument will carry its own procedural requirements that preparers must follow.

SBTN Step 1: Assess	
Company Actors	**Financial Institution Actors**
Guidance for Companies to Assess Their Impact on Nature: The Science Based Targets Network's (SBTN) Technical Guidance for Step 1 – Assess[8] provides companies with a detailed method for conducting a materiality screening and estimating the pressures on nature associated with their business activities. Currently, companies seeking to align with the SBTN guidance are only required to assess business pressures associated with their direct operations and upstream activities. SBTN's guidance includes a Data Needs Summary[9] and a Toolbox[10] to use when completing Step 1. **Resources for Materiality, Impact, and Location Analysis Prior to Setting Science-Based Targets for Nature:** Companies can use the Science Based Targets Network's (SBTN) Materiality Screening Tool[11] to understand issues that they will most likely need to set targets (e.g., land use change, water use, climate change, soil pollution, etc.). This tool will also give companies an indication of which of their activities may have the greatest impact on nature (e.g., packaging, distribution, retail, primary production, etc.). If companies want to align with the SBTN guidance, but use a different tool, they can do so and reference SBTN's approach to evaluating materiality (SBTN Step 1 Method[8], Section 2.5). To understand which corporate activities will require management through science-based targets (SBTs), the SBTN also provides a High Impact Commodity List.[12] This list identifies over 40 commodities that are the most significant drivers of environmental impacts (covered by SBTs for nature) globally. ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure)[13] is a web-based tool that helps users link business activities to impactful changes in nature at the sector and sub-sector levels following the Global Industry Classification Standard. ENCORE users identify relevant nature dependencies and impacts across 21 ecosystem services relating to the production processes of 11 sectors and 157 sub-sectors. It also identifies potential drivers of environmental change that could materially affect business performance over time.	**TNFD's LEAP Approach for Assessment of Nature-related Impacts, Dependencies, Risks, and Opportunities:** The Taskforce on Nature-related Financial Disclosures' (TNFD) LEAP guidance[???] ("Locate," "Evaluate," "Assess," "Prepare") includes recommended resources for financial institutions to analyze their portfolios and identify exposure to nature-related issues, as well as guidance on methods for assessing risks including scenario analysis and heatmapping. Users of this navigator should also refer to the "Company Actors" column on the left of this document for more details. **Overview Resources on the Importance of Biodiversity Factors to Financial Institutions and Their Investment Practices:** The International Network for Sustainable Financial Policy Insights, Research, and Exchange (INSPIRE) and the Network for Greening the Financial System (NGFS) published Central banking and supervision in the biosphere: An agenda for action on biodiversity loss, financial risk and system stability,[14] which can help orient financial institutions to biodiversity factors that affect financial performance expectations. This resource also provides an overview of assessment questions and tools for considering biodiversity action. The NGFS also published Nature-related Financial Risks: a Conceptual Framework to Guide Action by Central Banks and Supervisors[15] in September 2023. It supports central banks and supervisors develop a common understanding of the macroeconomic implications of the degradation of nature as well as actions that can be taken to preserve and restore it. It also serves as a starting point for considering integrated assessment of climate and broader nature-related risks to avoid analyzing or addressing both in isolation.

SBTi Step 1: Commit	
Company Actors	**Financial Institution Actors**
Overview of the Science-Based Target-Setting Process: The Science Based Targets initiative (SBTi) has released numerous guidance materials, including the Getting Started Guide[42] and the Corporate Manual[43] which provide overviews of the SBTi's target-setting process. Companies can refer to these materials to support their decision-making to set science-based targets. **Sign and Submit the Commitment Letter to the SBTi:** After registering online, organizations can submit a letter to commit[44] to setting a near-term or long-term science-based emissions reduction target in line with SBTi's target-setting criteria within 24 months. Companies and financial institutions are urged to aim for the highest level of ambition in their target setting, and the SBTi encourages them to commit to set a long-term science-based target to reach net zero value chain GHGs emissions by no later than 2050. Organizations that commit to setting these long-term science-based targets and align their business with a 1.5°C future will be eligible to automatically join the Race to Zero Campaign. Small or Medium-Sized Enterprises (SME)[xii] must submit commitments for both near-term *or* long-term science-based targets through a streamlined process using the SBTi Target Validation Application for SMEs. Users can refer to SBTi's SMEs Frequently Asked Questions[45] for further information on the process and eligibility. **Understanding Corporate Greenhouse Gas (GHG) Inventories to Inform SBTi Commitment Decision-making:** Greenhouse Gas Protocol (GHG Protocol) publishes comprehensive global standards for businesses to measure and manage their GHG emissions. The GHG Protocol Corporate Accounting and Reporting Standard,[46] the GHG Protocol Scope 2 Guidance,[47] and the Corporate Value Chain (Scope 3) Standard[48] allow companies to assess their value chain emissions, which can help inform science-based target-setting commitment decisions.	**Training Modules to Kickstart Target Setting:** The SBTi has nine training modules,[49] tailored specifically for financial institutions, each covering a different aspect of the science-based target-setting process. With a range of content from making the business case for decarbonizing to completing target calculations, financial institutions may refer to these modules as they work towards receiving official validation by the SBTi. **Financed Emissions Accounting to Inform SBTi Commitment Decision-making:** Partnership for Carbon Accounting Financials (PCAF), a global partnership of financial institutions, developed the Global GHG Accounting and Reporting Standard for the Financial Industry[50] as a response to demand for a global, standardized approach to measuring and reporting on financed, facilitated, and insured emissions associated with multiple asset classes. Financial institutions can use the standard to equip themselves with robust methods for measuring financed emissions (in line with the Taskforce on Nature-related Financial Disclosures (TCFD) methods), assessing climate-related risks, setting science-based targets, and reporting externally. **Considerations for the Financial Sector when Assessing Climate-related Risks and Opportunities:** Given the important role of the financial sector as preparers of climate-related financial disclosures, the TCFD identified specific areas (strategy, risk management, and metrics and targets) where supplemental guidance[51] (section D) is required to provide additional context when preparing disclosures consistent with the TCFD Recommendations. In 2024, the IFRS Foundation will assume monitoring responsibilities for climate-related disclosures through TCFD and have incorporated the recommendations into its foundational S1 and S2 standards (see "Summaries of Key Disclosure Instruments" below). The TCFD Recommendations remain available for business use and are a good entry point for companies that may begin to use the ISSB Standards for future disclosures.

Figure 8: Structure of the User Journey Tables 1-5, Grouping Resources for Companies and Financial Institutions

Section 06

THE USER JOURNEY

Sub-sections

TABLE 1: USER JOURNEY

SBTN Step 1 "Assess"; SBTi Step 1 "Commit"

Step 1: Start here if your organization is beginning to manage for nature and climate and is considering science-based target setting, is assessing its material factors, and/or engaging in value chain mapping for nature.

The information contained in this navigator, and in the following User Journey tables, does not constitute formal advisement on courses of appropriate action for organizations nor does it make recommendations on disclosure instruments that should be utilized. Businesses should take into consideration the legal and regulatory requirements that apply in the jurisdictions where they operate, as well as the information that is most important to communicate to their stakeholders and select disclosure instruments accordingly. Each disclosure instrument will carry its own procedural requirements that preparers must follow.

SBTN Step 1: Assess

1
Assess

- **Materiality Screening**
- **Value Chain Assessment**

Businesses seeking to set science-based targets for nature using the SBTN's methodology[x] can refer to its detailed Step 1 guidance here

Navigator Notes:

Management for nature action for companies and financial institutions **begins with materiality screenings and assessments of the business value chain.**

Companies and financial institutions should **conduct a nature-focused materiality screening** to understand how business operations or financial investments/ ownership specifically intersect with, impact, and depend on inputs from nature and ecosystem services. In this initial step, the screening should include as much of the business as possible to get a comprehensive view of materiality. Organizations should also begin considering industry attributes that may present material pressures for nature and are most likely to require **target setting**. Materiality screenings and value chain assessments **should be undertaken repeatedly** at defined intervals to maintain relevance to the scope of business activities and to accurately support transparent disclosures to stakeholders.

Organizations must **map the pressures on nature in their value chains** to consider the full scope of business operations, including networks of suppliers (upstream) and partners critical to delivering their product across geographic locations (downstream – not yet included in Version 1.0 of SBTN's guidance). This is key to understanding the **biomes** business operations intersect and **contextualizing the business pressures** on those ecosystems (as well as the effects on **surrounding communities** that depend on those ecosystems) (see Table 6, Topic E for stakeholder engagement resources).

During this process, businesses should **take note of data gaps** that may present challenges to taking action on nature across prioritized areas of their value chains. If required, **data can be supplemented** with projections, proxy data, or various secondary sources (see resources grouped under SBTN Step 3, below). Businesses may also begin planning to enable the collection of data that will be needed to both set science-based targets and assess progress towards nature goals.

x Note that SBTN has not yet completed its specific target-setting guidance for financial institutions but encourages preparation in accordance with its 5-Step Framework to be positioned to act for nature and to set up all management controls and internal monitoring and data collection processes.

SBTN Step 1: Assess

Company Actors

Guidance for Companies to Assess Their Impact on Nature:

The Science Based Targets Network's (SBTN) Technical Guidance for Step 1 – Assess[13] provides companies with a detailed method for conducting a materiality screening and estimating the pressures on nature associated with their business activities. Currently, companies seeking to align with the SBTN guidance are only required to assess business pressures associated with their direct operations and upstream activities.

SBTN's guidance includes a Data Needs Summary[14] and a Toolbox[15] to use when completing Step 1.

Resources for Materiality, Impact, and Location Analysis Prior to Setting Science-Based Targets for Nature:

Companies can use the Science Based Targets Network's (SBTN) Materiality Screening Tool[16] to understand issues that they will most likely need to set targets (e.g., land use change, water use, climate change, soil pollution, etc.). This tool will also give companies an indication of which of their activities may have the greatest impact on nature (e.g., packaging, distribution, retail, primary production, etc.). If companies want to align with the SBTN guidance, but use a different tool, they can do so and reference SBTN's approach to evaluating materiality (SBTN Step 1 Method,[17] Section 2.5).

To understand which corporate activities will require management through science-based targets (SBTs), the SBTN also provides a High Impact Commodity List.[18] This list identifies over 40 commodities that are the most significant drivers of environmental impacts (covered by SBTs for nature) globally.

ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure)[19] is a web-based tool that helps users link business activities to impactful changes in nature at the sector and sub-sector levels following the Global Industry Classification Standard. ENCORE users identify relevant nature dependencies and impacts across 21 ecosystem services relating to the production processes of 11 sectors and 157 sub-sectors. It also identifies potential drivers of environmental change that could materially affect business performance over time.

Financial Institution Actors

TNFD's LEAP Approach for Assessment of Nature-related Impacts, Dependencies, Risks, and Opportunities:

The Taskforce on Nature-related Financial Disclosures' (TNFD) LEAP guidance[20] ("Locate," "Evaluate," "Assess," "Prepare") includes recommended resources for financial institutions to analyze their portfolios and identify exposure to nature-related issues, as well as guidance on methods for assessing risks including scenario analysis[21] and heatmapping. Users of this navigator should also refer to the "Company Actors" column on the left of this document for more details.

Overview Resources on the Importance of Biodiversity Factors to Financial Institutions and Their Investment Practices:

The International Network for Sustainable Financial Policy Insights, Research, and Exchange (INSPIRE) and the Network for Greening the Financial System (NGFS) published Central banking and supervision in the biosphere: An agenda for action on biodiversity loss, financial risk and system stability,[22] which can help orient financial institutions to biodiversity factors that affect financial performance expectations. This resource also provides an overview of assessment questions and tools for considering biodiversity action.

The NGFS also published Nature-related Financial Risks: a Conceptual Framework to Guide Action by Central Banks and Supervisors[23] in September 2023. It supports central banks and supervisors develop a common understanding of the macroeconomic implications of the degradation of nature as well as actions that can be taken to preserve and restore it. It also serves as a starting point for considering integrated assessment of climate and broader nature-related risks to avoid analyzing or addressing both in isolation.

SBTN Step 1: Assess (continued)

Company Actors

Companies can also use the SBTN's guidance for conducting a Value Chain Assessment[24] (SBTN Step 1 Method, Section 3), to identify areas of impacts and estimate pressures on nature across the organization's value chain, and to assess the state of nature at each location. This information can then be used to holistically prioritize where to set targets and develop an integrated plan for impact management to take advantage of synergies within supply chains and landscapes.

SBTN Corporate Engagement Program for Continual Improvement:

Companies can work with the Science Based Targets Network (SBTN), through the Corporate Engagement Program,[25] to further develop SBTN's methods, tools, and guidance by providing feedback on their experience conducting Step 1 of the SBTN guidance. As part of the program, companies will receive additional support as they set their targets following SBTN's process through insights from other program members and experts at SBTN.

The TNFD's LEAP Approach for Assessment of Nature-related Impacts, Dependencies, Risks, and Opportunities:

The Taskforce on Nature-related Financial Disclosures (TNFD) released Version 1.0[26] of its risk management and disclosure framework in September 2023. Complementing the TNFD's recommended disclosures is its approach for identifying and assessing nature-related issues, called "LEAP",[27] which is intended to be accessible for all user types. LEAP helps businesses "Locate the interface with nature", "Evaluate nature-related dependencies and impacts", "Assess nature-related risks and opportunities", and "Prepare to respond to nature-related risks and opportunities and report."

Many tailored resources[28] and tools[29] are provided or suggested by the TNFD for cross-cutting aspects of the LEAP approach such as scenario analysis,[30] and engagement with Indigenous Peoples, Local Communities and affected stakeholders.[31] Biome -[32] and sector-specific[33] guidance resources are also provided to support more specific and detailed assessments.

Financial Institution Actors

Biodiversity Footprinting Tools and Databases Relevant to Performance Risks in the Financial Sector at the Sub-sector Level:

Finance for Biodiversity offers a Guide on biodiversity measurement approaches[34] that includes coverage of several tools that are scientifically robust and point to material factors causing biodiversity loss (including at the sub-sector level):

- ENCORE (Exploring Natural Capital Opportunities, Risks, and Exposure)[35] allows financial institutions to identify nature-related risks they are exposed to through their lending, underwriting and investment in high-risk industries and sub-industries. The tool also provides qualitative materiality ratings for dependencies and impacts on nature, which help users understand which might warrant the most immediate attention.
- Global Impact Database (GID) Biodiversity[36] is a web-based tool created by the Impact Institute consisting of a dataset that can be used to assess the biodiversity impact of business-to-business (B2B) interactions, investment portfolios, and funds.
- The Biodiversity Impact Analytics powered by the Global Biodiversity Score™(BIA-GBS)[37] is a tool from Carbon4Finance and CDC Biodiversité that allows users to measure the biodiversity impact of invested companies. Investors can identify biodiversity hotspots in their portfolios and harness biodiversity impact data for decision-making and risk assessment.

The Partnership for Biodiversity Accounting Financials (PBAF), an international partnership of banks, asset managers and investors, created a guide to biodiversity footprinting[38] in the financial sector, which includes basic concepts, steps, and methods for assessing the biodiversity impacts of a portfolio.

In July 2023, PBAF published part of the PBAF Standard v2023 called, "Assessment of Dependencies on Ecosystem Services,"[39] which provides guidance on the steps of a dependency assessment and includes PBAF requirements and recommendations for financial institutions and data providers. In Q4 2023, an update with additional elements of the PBAF Standard v2022 will be launched.

SBTN Step 1: Assess (continued)

Company Actors	Financial Institution Actors
At-a-Glance Understanding of Industry Classifications and Key Materiality Factors of a Company's Intersection with Nature: The Sustainability Account Standards Board's (SASB) Sustainable Industry Classification System[40] groups companies based on the sustainability-related risks and opportunities associated with their sector. The SASB Materiality Finder[41] can point to material factors for businesses according to their sector or industry. Publicly listed companies can also search directly by their name for relevant disclosure topics. **Examining the Biodiversity Impacts of a Company's Supply Chain:** BioScope[42] is a free web-based tool, referenced in the Taskforce on Nature-related Financial Disclosures (TNFD) Tool Catalogue,[43] that assesses the main impacts business supply chains and financial products have on biodiversity. Developed by PRé Sustainability, Arcadis, and CODE, BioScope provides a user-friendly interface, allowing companies and financial institutions to visualize their results on a world map. In addition to this tool, other SBTN-aligned resources for pressure assessment are highlighted in the SBTN Toolbox.[44] **Assessment Tools for Specific Natural Realms (and Estimating the "State of Nature" for SBTN Target-Setting) in Operational or Sourcing Locations:** World Wildlife Fund's (WWF) Risk Filter Suite[45] tool enables companies to assess physical and reputational risks related to biodiversity and water. Global Forest Watch (GFW) created a near real-time forest monitoring dashboard[46] of interactive charts and maps that summarize key statistics about global forests. Created primarily for government policymakers and nonprofits, but useful to many organization types, this resource provides timely and precise updates to forest change statistics and global rankings, including rates of forest change, forest cover extent, and drivers of deforestation.	**Higher Risk Sectors, Specific Considerations on Nature Impacts, Dependencies, and Risks:** The UN Environment Programme (UNEP)'s guidance document, "Prioritising Nature-related Disclosures: Considerations for High-Risk Sectors,"[47] can help financial institutions with investments in higher nature impact sectors to better understand the level of nature risk in their portfolio, including considerations for sectors such as agriculture, energy, mining, chemicals, construction, and more.

SBTN Step 1: Assess (continued)

Company Actors	Financial Institution Actors
The Wastewater Impact Assessment Tool (WIAT)[48] created by the World Business Council for Sustainable Development (WBCSD) enables companies to conduct site-level assessments of the pressures resulting from industrial wastewater. It allows users to visualize the impacts of wastewater per site through three key indicators: water quality, water availability and GHG emissions from wastewater treatment. Therefore, it enables the prioritization of sites within the company, highlighting the impact level and pointing to where action is most needed. The UN Biodiversity Lab[49] provides companies and government actors public access to spatial data and analytic tools to support decision-making, priority-setting, monitoring, and reporting on biodiversity impacts. The Global Biodiversity Information Facility[50] is an international network that provides open access to a repository of datasets detailing where and when species have been recorded globally. Companies may use location-specific biodiversity information to determine the state of nature within their regions of operation. In addition to these tools, other SBTN-aligned resources for state assessment are highlighted in the SBTN Toolbox.[51] **Understanding More About the Classifications of Natural Biomes That Underlie Economic Activity:** The International Union for Conservation of Nature (IUCN) created the Global Ecosystem Typology[52] interactive classification framework geared towards providing a better understanding of ecosystem dynamics including natural realms, biomes, functional groups, and ecological drivers. The framework is supported by maps, infographics, and pictures, as well as in-depth information.	–

SBTN Step 1: Assess (continued)

Company Actors	Financial Institution Actors
Begin Conceptualizing Material Nature-focused Factors for Managing to SDG Goals: The United Nations Global Compact (UNGC) and B Lab United Kingdom (B Lab) have created the SDG Action Manager,[53] a self-assessment tool that helps all businesses take action on the UN Sustainable Development Goals (SDGs). Companies can complete the online questionnaire to understand the SDGs that are most relevant to manage based on the organization's size, sector, and geography. The questionnaire draws from B Lab's B Impact Assessment and the UNGC's 10 Principles. **Prioritization Tool for Sourcing Based on Impact to Land:** The Biodiversity Integrated Assessment and Computation Tool (B-INTACT),[54] created by the Natural Capital Impact Group and referenced in the TNFD Tools Catalogue,[55] assesses and tracks how sourcing affects nature through biodiversity loss as a result of land and habitat transformation. This tool allows a company to undertake rapid risk-screening of its sourcing to identify where the greatest impacts are likely to occur, thereby helping to prioritize locations for further measurement and action.	–

SBTi Step 1: Commit

Businesses seeking to set near-term or long-term science-based targets in line with the SBTi's criteria and process can refer to its detailed Corporate Manual here.

Navigator Notes:

By signing the **SBTi Commitment Letter**, companies and financial institutions **commit to setting a near-term or long-term science-based emissions reduction target(s)** in line with the SBTi's target-setting criteria. Once committed, organizations have 24 months to submit their target(s) to the SBTi.

Near-term science-based targets must cover a minimum of 5 years and a maximum of 10 years from the date the target is submitted to the SBTi for validation. **Long-term** science-based targets cover more than 10 years from the date of submission and must be achieved no later than 2050. [xi]

The SBTi requires a **comprehensive emissions inventory** in line with the Greenhouse Gas Protocol (GHG Protocol). Conducting a full greenhouse gas inventory covering Scopes 1, 2, and 3 creates greater centralized visibility across the business' value chain and allows organizations to identify operational geographies, scopes, and processes that are high emissions sources. While it is not required that the comprehensive inventory be completed before committing to setting science-based targets under the SBTi, it is a necessary step in preparing for its target-setting process.

xi For definitions of critical terms used in this navigator, please refer to "Navigator Key Terminology Definitions and Additional Glossary Resources" in Annex 1.

SBTi Step 1: Commit

Company Actors

Overview of the Science-Based Target-Setting Process:

The Science Based Targets initiative (SBTi) has released numerous guidance materials, including the Getting Started Guide[56] and the Corporate Manual[57] which provide overviews of the SBTi's target-setting process. Companies can refer to these materials to support their decision-making to set science-based targets.

Sign and Submit the Commitment Letter to the SBTi:

After registering online,[58] organizations can submit a letter to commit[59] to setting a near-term or long-term science-based emissions reduction target in line with SBTi's target-setting criteria within 24 months. Companies and financial institutions are urged to aim for the highest level of ambition in their target setting, and the SBTi encourages them to commit to set a long-term science-based target to reach net zero value chain GHGs emissions by no later than 2050. Organizations that commit to setting these long-term science-based targets and align their business with a 1.5°C future will be eligible to automatically join the Race to Zero Campaign.

Small or Medium-Sized Enterprises (SME)[xii] must submit commitments for both near-term *or* long-term science-based targets through a streamlined process using the SBTi Target Validation Application for SMEs.[60] Users can refer to SBTi's SMEs Frequently Asked Questions[61] for further information on the process and eligibility.

Understanding Corporate Greenhouse Gas (GHG) Inventories to Inform SBTi Commitment Decision-making:

Greenhouse Gas Protocol (GHG Protocol) publishes comprehensive global standards for businesses to measure and manage their GHG emissions. The GHG Protocol Corporate Accounting and Reporting Standard,[62] the GHG Protocol Scope 2 Guidance,[63] and the Corporate Value Chain (Scope 3) Standard[64] allow companies to assess their value chain emissions, which can help inform science-based target-setting commitment decisions.

Financial Institution Actors

Training Modules to Kickstart Target Setting:

The SBTi has nine training modules,[65] tailored specifically for financial institutions, each covering a different aspect of the science-based target-setting process. With a range of content from making the business case for decarbonizing to completing target calculations, financial institutions may refer to these modules as they work towards receiving official validation by the SBTi.

Financed Emissions Accounting to Inform SBTi Commitment Decision-making:

Partnership for Carbon Accounting Financials (PCAF), a global partnership of financial institutions, developed the Global GHG Accounting and Reporting Standard for the Financial Industry[66] as a response to demand for a global, standardized approach to measuring and reporting on financed, facilitated, and insured emissions associated with multiple asset classes. Financial institutions can use the standard to equip themselves with robust methods for measuring financed emissions (in line with the Task Force on Climate-related Financial Disclosures (TCFD) methods), assessing climate-related risks, setting science-based targets, and reporting externally.

Considerations for the Financial Sector when Assessing Climate-related Risks and Opportunities:

Given the important role of the financial sector as preparers of climate-related financial disclosures, the TCFD identified specific areas (strategy, risk management, and metrics and targets) where supplemental guidance[67] (section D) is required to provide additional context when preparing disclosures consistent with the TCFD Recommendations. In 2024, the IFRS Foundation will assume monitoring responsibilities for climate-related disclosures through TCFD and have incorporated the recommendations into its foundational S1 and S2 standards (see "Summaries of Key Disclosure Instruments" below). The TCFD Recommendations remain available for business use and are a good entry point for companies that may begin to use the ISSB Standards for future disclosures.

xii For the purposes of target validation by the SBTi, an SME is defined as a non-subsidiary, independent company with fewer than 500 employees. Note that this does not include Financial Institutions (FIs) and Oil & Gas (O&G) companies.

SBTi Step 1: Commit (continued)	
Company Actors	**Financial Institution Actors**
Assessing Climate-related Risks and Opportunities: The Task Force on Climate-related Financial Disclosures (TCFD) Recommendations[68] include four thematic areas (governance, strategy, risk management, and metrics and targets), supported by 11 recommended disclosures, which help companies provide information that is useful for investors regarding the potential financial implications associated with transitioning to a lower-carbon economy. By assessing the landscape of climate-related risks and opportunities for the business, companies can be better-informed when deciding to commit to setting science-based targets. In 2024, the IFRS Foundation will assume monitoring responsibilities for climate-related disclosures through TCFD and have incorporated the recommendations into its foundational S1 and S2 standards (see "Summaries of Key Disclosure Instruments" below). The TCFD Recommendations remain available for companies to use and are a good entry point for companies that may begin to use the ISSB Standards for future disclosures.	–

TABLE 2: USER JOURNEY

SBTN Step 2 “Interpret and Prioritize”; SBTi Step 2 “Develop”

Step 2: Start here if your organization is ready to plan actions for nature, develop its climate science-based targets (SBTs), or if your organization is refreshing its assessment of prioritized locations for action on nature.

If businesses have worked through the set of actions in Step 1 that are relevant to their business and/or corporate strategies, they are ready to interpret results, prioritize locations and activities for nature target setting, and develop their SBTs for climate.

SBTN Step 2: Interpret and Prioritize

2
Interpret
& Prioritize

- **Determine Target Boundaries**
- **Interpret and Rank**
- **Prioritize**
- **Evaluate Feasibility and Strategic Interest**

Businesses seeking to set science-based targets for nature using the SBTN’s methodology[xiii] can refer to its detailed Step 2 guidance here.

Navigator Notes:

In Step 2, businesses will use the information identified from materiality assessments and value chain mapping to **determine which science-based targets to set, which locations and economic activities to include in target setting (defining “target boundaries”), and how to prioritize possible nature actions.** Target boundaries for upstream activities are defined based on the quality of data available (assessed in Step 1), with consideration given to the viability of future data collection and monitoring efforts. Businesses should also consider mitigating the most significant negative impacts on nature that were identified and look for opportunities to increase the potential for positive impacts.

The process of prioritizing locations and activities for action and/or target setting may be further supported by the **valuation and accounting of natural capital material** that is vital to business operations (note that this process is *not required* for target-setting under SBTN’s methodology). Natural capital is the stock of living (wildlife and other living organisms) and non-living (geology, soils, air, water) natural resources that combine to yield ecosystem services (carbon sequestration, freshwater, habitats, spiritual, etc.) that directly and indirectly benefit people.

Accounting and valuing these benefits can help businesses **assess their economic dependence on natural resources** as both a supply of raw materials and feedstocks and as a servicing mechanism for absorbing waste, pollution, and other industrial byproducts. This has **implications for “pricing” nature inputs**; in addition to their intrinsic value, nature and biodiversity degradation and depletion are often hidden costs that obscure the viability and resilience of business operations. Nature valuation is an imperfect science: issues of data availability, measurement, and comparability can limit the utility of outputs.

xiii Note that SBTN has not yet completed its specific target-setting guidance for financial institutions but encourages preparation in accordance with its 5-Step Framework to be positioned to act for nature and to set up all management controls and internal monitoring and data collection processes.

Navigator Notes (continued):

Along with environmental impact prioritization, target setting, and planning for nature action, businesses should also **consider the feasibility** of operationalizing these systems meaningfully alongside their existing corporate strategic objectives. Organizations should also ensure that **financial materiality considerations**, or examination of risk-based perspectives, also remain in view to be mindful of the gravity of these business risks that could lead to financial losses or missed opportunities.

Societal considerations are critical to ensure that science-based targets **contribute to global goals**, including the United Nations Sustainable Development Goals (UN SDGs) and the Kunming-Montreal Global Biodiversity Framework. Businesses can **complement** financial materiality analyses and environmental impact prioritization with **additional societal and human rights considerations.**

Robust, representative, and continuous **stakeholder engagement** is critical to understanding the interests and needs of affected persons and communities (see Table 6, Topic E for stakeholder engagement resources).

SBTN Step 2: Interpret and Prioritize

Company Actors

Guidance for Companies to Prioritize Their Impact on Nature:

The Science Based Targets Network (SBTN)'s Technical Guidance for Step 2 – Prioritize[69] supports companies with a method to determine which locations and economic activities to include within their target boundaries, and where to act first to effectively mitigate their most significant negative impacts on nature.

To satisfy the SBTN requirements for this step, companies use the data collected in Step 1, and introduce new data on financial materiality, strategic interest, and stakeholder needs. The SBTN's guidance provides a Data Needs Summary[70] that includes an overview of the data requirements that companies need to complete Step 2. Where necessary, additional details on the required data are provided in the methodology for each sub-step.

The TNFD's "LEAP" approach offers extensive guidance on the identification, assessment, and prioritization of location-specific nature-related risks and opportunities ("Locate," "Evaluate," "Assess," "Prepare"). Businesses can consult the TNFD's Guidance on the identification and assessment of nature-related issues: the LEAP approach[71] for guidance on its methodology and recommended tools. Identification of business impact drivers and pressures is part of the Evaluate phase of LEAP. Prioritization of locations for action to address and manage nature-related issues occurs throughout the LEAP approach. The LEAP approach is inclusive of other methods and frameworks, such as the SBTN's methods and guidance on assessment as well as the Natural Capital Protocol's valuation of impacts and dependencies.

The TNFD published a Discussion paper on proposed approach to value chains[72] in September 2023 that details how organizations can approach analysis of their upstream and downstream value chains. It includes discussion of when to seek full traceability, and where use of secondary data may be an acceptable alternative to the direct measurement of dependencies and impacts.

Financial Institution Actors

The TNFD Guidance for Financial Institutions:

The TNFD offers extensive guidance on identifying location-specific nature-related impacts, dependencies, risks, and opportunities and prioritizing action for all user types. Financial institutions can consult the TNFD's Guidance on the identification and assessment of nature-related issues: the LEAP approach[73] for guidance on its methodology and recommended tools.

The TNFD's Additional guidance for financial institutions[74] contains guidance, metrics, resources, examples, and references on nature-related issues for banks, asset managers, asset owners, insurance companies, and development finance institutions. Users of this navigator should also refer to the "Company Actors" column on the left for more detail on the TNFD resources.

End-to-end Natural Capital Valuation Guidance for Financial Institutions:

Applying the Natural Capital Protocol[75] (summarized further below in this navigator) can help financial institutions apply a methodology to calculate the value of their material impacts and dependencies on nature and enable greater visibility over exposures related nature in their portfolios and investments. The Finance Sector Supplement[76] offers specific guidance to financial institutions on 1) minimizing their exposure to nature risk across their portfolio, and 2) identifying specific opportunities for investments that will have positive outcomes for nature.

The Natural Capital Toolkit[77] is an interactive database that helps connect users with the right tools for measuring and valuing natural capital as they apply the Natural Capital Protocol. While The Protocol does not recommend specific resources, its Toolkit consolidates a variety of available natural capital measurement and valuation tools for potential use.

SBTN Step 2: Interpret and Prioritize (continued)

Company Actors

The TNFD offers guidance to support the identification and assessment of nature-related dependencies, impacts, risks, and opportunities in specific types of ecosystems (biomes). It currently includes information on tropical and sub-tropical forests, savannahs and grasslands, intensive land-use systems, rivers and streams, and marine shelf ecosystems and this resource will continue to be updated and expanded over time. The TNFD's Biomes Guidance[78] can help businesses with assets or activities located in or near any of these ecosystems to undertake the necessary assessments, and references industry standards, tools, frameworks, and data sources to help organizations understand potential impact drivers and prioritize locations for management.

The TNFD is also developing guidance by sector to support the identification of nature-related dependencies, impacts, risks, and opportunities in specific sectors (guidance for food and agriculture, aquaculture, forestry management, energy, metals and mining, chemicals and biotechnology and pharmaceuticals will be published in late 2023 and in 2024). Currently, the TNFD has published a discussion paper on proposed sector disclosure metrics,[79] which can help businesses consider their data and measurement needs as they assess potential impacts and prioritize locations for nature management.

Natural Capital Valuation Introductory Material:

The Capitals Coalition's Primer for Business on the Natural Capital Protocol[80] provides a high-level introduction to the Protocol for corporate users.

End-to-End Valuation Guidance for Capitals Utilized in Business Operations:

The Capitals Coalition's Natural Capital Protocol (The Protocol)[81] can help businesses apply a methodology to calculate the value of their impacts and dependencies on nature that have been identified through a materiality assessment (e.g., the feedstocks needed for product lines, or the ecosystem services required for business operations). The Protocol can help businesses understand the "true" or "hidden costs" of their operations, inform business decision-making, and further integrate natural capital considerations into key tactical processes such as sourcing, supply chain management, product design, and supplier engagement.

Financial Institution Actors

Incorporating Natural Capital Considerations into Risk Assessments:

The Integrating Natural Capital in Risk Assessments: a step-by-step guide for banks,[82] created by the ENCORE Partners (Global Canopy, the UNEP Finance Initiative and UNEP-WCMC; formerly the Natural Capital Finance Alliance) with support from PwC, leads users through the process of conducting a rapid nature risk assessment of its portfolio and project-level investments that leverages existing risk management infrastructure likely in place.

The UNEP FI supported the development of specific risk assessment tools to support financial institutions with assessing policy exposure to deforestation in the agricultural value chain,[83] and integrating water stress into corporate bond credit analysis in key sectors.[84]

Principles for Responsible Investment (PRI) and UNEP-WCMC created maps that can be accessed through the Exploring Natural Capital Opportunities, Risks, and Exposure (ENCORE) platform. The maps highlight global hotspots of natural capital depletion[85] and can show geographically where financial institutions might encounter higher risks due to the degradation of natural capital assets that provide ecosystem services upon which business activities depend.

Assessing Biodiversity Conservation Opportunities in Geographies of Investments/Ownership:

Launched by the team that created the Integrated Biodiversity Assessment (IBAT) tool in 2021, the Species Threat Abatement and Restoration[86] (STAR), metric measures the contribution investments can make to reducing species' extinction risk. It state and non-state actors, including financial institutions and investors, to target their investments and activities to achieve greater conservation outcomes.

SBTN Step 2: Interpret and Prioritize (continued)	
Company Actors	**Financial Institution Actors**
Specific Biodiversity Guidance[87] accompanies the Natural Capital Protocol and is designed to help businesses better assess the value of material biodiversity considerations into their natural capital assessments. The guidance applies to terrestrial, freshwater, and marine systems, and across business sectors. A high-level, how-to-get-started document[88] also presents a streamlined summary of the process. The Natural Capital Toolkit[89] is an interactive database that helps connect users with the right tools for measuring and valuing natural capital as they apply the Natural Capital Protocol. While The Protocol does not recommend specific resources, its Toolkit consolidates a variety of available natural capital measurement and valuation tools for potential use. For an integrated, multi-capital assessment at the systems level that considers all capitals (i.e., natural, human, social, and produced) and the inter-connections between them, the Capitals Coalition created the Principles of Integrated Capitals Assessments.[90] This resource seeks to address the three interconnected global crises of climate change, nature loss, and rising inequality simultaneously, and enable more responsive business decision-making that is informed by a thorough awareness of the full spectrum of capital resources utilized or accessed in the course of operations. Industry supplements to the Natural Capital Protocol are available that offer additional specific guidance for the Apparel Sector,[91] the Food & Beverage Sector,[92] and the Forest Products Sector.[93] **Aligning Nature Accounting Approaches at the Business and National Levels:** Although originally developed for national-level application, the UN System of Environmental-Economic Accounting's (SEEA) primer for businesses on applying the SEEA Ecosystem Accounting (SEEA EA)[94] was created for company use following high demand. It includes an introduction to the SEEA EA conceptual framework, guidance for applying it in a business context, and helpful case studies. It also highlights elements that are particularly useful in the context of corporate natural capital accounting, such as collecting and structuring natural capital data. Wider corporate use of SEEA EA presents opportunities to 1) move towards closer alignment between natural accounting methodologies at the business and national levels, 2) foster closer collaboration between national statistical offices and the private sector, and 3) encourage greater information consistency and comparability.	–

SBTN Step 2: Interpret and Prioritize (continued)

Company Actors	Financial Institution Actors
Standardized Natural Capital Accounting, Measurement, and Valuation Principles for Businesses: The Transparent Project,[95] a partnership led by the Value Balancing Alliance, the Capitals Coalition, and the World Business Council for Sustainable Development (WBCSD), aims to develop standardized natural capital accounting and valuation principles along with cross-industry and sector-specific guidance for the application of natural capital management accounting. The Aligning accounting approaches for nature project (Align)[96] led by the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), the Capitals Coalition, Arcadis, and ICF with the support of WCMC Europe, is a European Commission funded project that works to establish principles and criteria for biodiversity measurement and valuation for businesses and financial institutions to use. Align released its Recommendations for a Standard on Corporate Biodiversity Measurement and Valuation[97] to support these efforts. Through this guidance, Align provides natural capital measurement (e.g., measuring impacts and dependencies on biodiversity) and valuation (e.g., direct value of biodiversity) recommendations and technical criteria. While the Transparent Project[98] works to develop standardized natural capital accounting and valuation principles for companies, focusing on air, water, and land, the Align Project[99] will build on these principles by developing complementary guidance focused on biodiversity.	–

SBTi Step 2: Develop

Businesses seeking to set near-term or long-term science-based targets in line with the SBTi's criteria and process can refer to its detailed Corporate Manual here.

Navigator Notes:

Companies and financial institutions must set science-based emissions reduction target(s) that **meet all of the SBTi's near-term target-setting criteria**. Before developing a target, it is important for businesses to **review their Scopes 1, 2, and 3 greenhouse gas inventories** (with this stock-taking exercise recommended under Step 1 above) and ensure that they are **aligned** with the GHG Protocol and the SBTi GHG emissions inventory requirements.

The SBTi provides **sector-specific requirements** and tailored guidance for some industries (available resources grouped below). It is important to note that if specific SBTi requirements and guidance are not yet available for a particular sector, those businesses **should use SBTi's core methodologies** and resources to set their targets.

Robust, representative, and continuous **stakeholder engagement** is also critical to understanding the interests and needs of affected persons and communities (see Table 6, Topic E for stakeholder engagement resources).

SBTi Step 2: Develop

Company Actors

Guidance for Corporate GHG Inventories:

A company-wide Scope 1 and 2 emissions inventory must be completed as defined by the Greenhouse Gas Protocol (GHG Protocol) Corporate Standard[100] and the GHG Protocol Scope 2 Guidance.[101] Companies must complete a Scope 3 screening for all relevant categories considering the minimum boundary of each category per the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.[102]

Additional Guidance for Scope 3 Inventory:

The GHG Protocol Scope 3 Calculation Guidance[103] provides additional support for companies to complete their Scope 3 inventory in line with the GHG Protocol methodology.

The GHG Protocol provides a list of available third-party databases[104] that can assist users in collecting data for product life cycle and corporate value chain (Scope 3) greenhouse gas (GHG) inventories.

Review the Requirements and Start Developing Science-Based Targets:

The Science Based Targets initiative's (SBTi) Criteria and Recommendations[105] resource outlines requirements that the near-term targets established by companies must meet certain criteria to be validated by the SBTi. These criteria only apply to companies that are not classified as financial institutions or Small and Medium Enterprises (SMEs). To understand the underlying principles, process, and criteria in greater depth, the Target Validation Protocol for Near-term Targets[106] can be consulted to determine compliance with the SBTi's criteria.

SBTi's Corporate Net-Zero Standard[107] provides guidance, criteria, and recommendations to support businesses in setting net zero targets. The Net-Zero Standard Criteria[108] details the requirements that must be met for net zero targets to be validated by the SBTi.

To begin developing science-based targets, companies can use the target-setting tool[109] and the net-zero tool[110] to model targets in line with SBTi approved criteria and methods.

Financial Institution Actors

Guidance for Developing Science-Based Targets:

The Science Based Targets initiative (SBTi) has released multiple resources focused on supporting financial institutions in the setting of science-based targets and aligning their institutional lending and investment activities with the Paris Agreement. The Financial Sector Science-Based Targets Guidance[111] (the second version[112] of this document has undergone public consultation and is expected to be finalized at the end of 2023), Foundations for Science-based Net Zero Target Setting in the Financial Sector,[113] and Private Equity Sector Science-Based Target Guidance[114] are three helpful examples. These resources provide guidance for using the SBTi's target validation criteria, recommendations, methodologies, and tools to prepare for target submission to the SBTi. Case studies detailing global financial institutions' application of these target setting steps are also included.

The Institutional Investors Group on Climate Change (IIGCC) provides detailed target setting guidance[115] for asset owners and asset managers implementing the Net Zero Investment Framework[116] (NZIF) to develop net zero investment strategies and fulfill the requirements of net zero commitments. The framework covers asset level target setting, portfolio level target setting, and case studies. The IIGCC's target setting approach does offer some variations from SBTi, such as the way Scope 3 emissions are incorporated, but the IIGCC notes that it is openly seeking to increase collaboration and alignment with the SBTi.

The IIGCC also offers complementary guidance documents to NZIF related to net zero target setting for specific financial sector actors and assets, such as the net zero guidance for infrastructure assets,[117] managing whole life carbon in real estate portfolios,[118] a net zero investment framework component for the private equity industry,[119] a net zero standard for banks,[120] and others.

SBTi Step 2: Develop (continued)

Company Actors

Sector-specific Resources:

The SBTi has developed sector-specific methodologies, frameworks, and requirements for some industries. Companies in the Power generation sector,[121] Maritime transport sector,[122] and the Forestry, Land and Agriculture (FLAG) sector[123] are required to set science-based targets using sector-specific pathways.

In addition, the SBTi has published sector-specific guidance documents to help companies through their target-setting process, including Apparel and footwear,[124] Cement,[125] Information and Communication Technology (ICT),[126] and Steel.[127] Organizations should refer to SBTi's sector guidance page[128] to access available sector-specific resources.

The GHG Protocol also has sector-specific guidance documents, including Agriculture Guidance,[129] Land Sector and Removals Guidance,[130] and other Sector-specific Tools.[131]

Data Resources to Facilitate Target Setting:

The Climate Data Steering Committee, established in 2022 to include representatives of international organizations and global standard setters, is currently working to set up the Net Zero Data Public Utility[132] (NZDPU). The NZDPU will be an accessible, centralized data repository for users to access climate-transition-related data to address data gaps, inconsistencies, and inaccessibility that ultimately slow climate action. The NZDPU will initially focus on:

1. aggregating information on standardized direct (Scope 1) and indirect (Scopes 2 and 3) gross and net entity-level GHG emissions data at the company and financial institution-level;
2. conveying transparently reported net zero targets and the specific actions being deployed by businesses to reach net zero; and
3. making openly accessible helpful statistical classification information.

Financial Institution Actors

Standardized Criteria for Science-based Target Setting for Financial Institutions:

The SBTi released version 1.0 of its target validation criteria and recommendations for financial institutions.[133] These sector-specific criteria supersede the general SBTi criteria for companies and outlines the requirements for near-term science-based target setting. The consultation draft of Version 2.0 of the SBTi's Near-term Criteria and Recommendations for Financial Institutions[134] recently completed a public consultation in August 2023.

The SBTi is in the process of developing a Financial Institutions Net-Zero (FINZ) Standard. The objective of the FINZ Standard will be to provide criteria and guidance that will enable financial institutions to set robust near-term and long-term science-based targets consistent with achieving net zero emissions by 2050. Its consultation draft[135] provides the conceptual framework and initial high-level criteria to be incorporated into the standard, which was open for public consultation from June to August 2023. It is planned for release in early 2024.

Tool for Assessing Existing Emissions Reduction Targets:

The SBTi developed a Temperature Scoring and Portfolio Coverage Tool[136] that can be used as a standalone solution or integrated into internal portfolio management systems. It is based on CDP's and World Wildlife Fund's (WWF) temperature rating methodology[137] which translates a financial institution's emissions reduction targets into temperature scores at the target, company, and portfolio levels. Having a single, intuitive metric helps financial institutions assess their current level of ambition relative to global targets and compare their progress with that of industry peers.

Target Modeling Tool for Real Estate Investments:

For financial institutions with real estate investments or related financing activities, the SBTi's Commercial Real Estate and Residential Mortgage Tool[138] uses a sectoral decarbonization approach to model science-based targets for Scopes 1, 2, and 3 for both commercial real estate and residential mortgages in line with current SBTi requirements. Financial institutions may leverage the tool's outputs on absolute emissions and emissions intensity to formulate their targets.

SBTi Step 2: Develop (continued)

Company Actors	Financial Institution Actors
This repository will enable companies to source comparable, high-quality secondary data to supplement their own primary data for target setting, benchmarking, and progress management efforts. It will also be designed to augment transparency and improve coordination with policy-oriented bodies, to allow for harmonization between its data and upcoming reporting regulatory requirements. The NZDPU beta pilot is planned for launch at COP28. The Partnership for Carbon Transparency (PACT), hosted by the World Business Council for Sustainable Development (WBCSD), seeks to create convergence and harmonization on upstream Scope 3 emissions transparency to ensure an integrated and aligned global ecosystem. PACT developed the Pathfinder Framework,[139] which provides methodological guidelines that build on the GHG Protocol and other existing standards to enable consistent, supplier-specific product-level emissions accounting and primary data exchange across the value chain. **Engaging Suppliers on the Decarbonization Journey:** The World Wildlife Fund (WWF), on behalf of the SBTi, developed a guide that outlines how to develop and achieve Scope 3 supplier engagement targets.[140] It supports companies in the evaluation and setting of supplier engagement targets, as well as the implementation of related initiatives to achieve those goals. CDP Supply Chain[141] is a membership program that helps companies to scale their supplier engagement and supplier performance evaluation to both set and achieve their science-based targets, zero-deforestation targets, and water security targets. Through CDP's supplier questionnaires and analytics, companies can streamline their engagements and data collection efforts with their suppliers to better pinpoint value chain risks and opportunities.	–

SBTi Step 2: Develop (continued)	
Company Actors	**Financial Institution Actors**
Exponential Roadmap Initiative's 1.5º C Supplier Engagement Guide[142] provides a framework for companies to commit to reducing their GHG emissions, engage with suppliers, and report on annual progress to achieve the Paris Agreement's 1.5º C goal. ERI's guide is aligned with the Race to Zero Campaign. **Aligning Science-based Targets to the TCFD Recommendations:** When preparing disclosures, companies can refer to the Task Force on Climate-related Financial Disclosures' (TCFD) Metrics and Targets Pillar[143] to ensure TCFD alignment. In 2024, the IFRS Foundation will assume monitoring responsibilities for climate-related disclosures through TCFD and have incorporated the recommendations into its foundational S1 and S2 standards (see "Summaries of Key Disclosure Instruments" below). The TCFD Recommendations remain available for companies to use and are a good entry point for companies that may begin to use the ISSB Standards for future disclosures.	–

TABLE 3: USER JOURNEY

SBTN Step 3 “Measure, Set, and Disclose”; SBTi Step 3 “Submit”

Step 3: Start here if your organization is ready to measure baselines, set, and disclose its science-based targets (SBTs) for nature and climate, or if your organization is setting SBTs for additional material factors, locations, or scopes.

If companies and financial institutions have worked through the set of actions in Steps 1 and 2 that are relevant to their business and/or corporate strategies, they are positioned to formally set and disclose SBTs for nature and climate.

SBTN Step 3: Measure, Set, and Disclose

3
Measure, Set & Disclose

- **Measure Baseline Values**
- **Set Targets**
- **Submit for Validation**[xiv]
- **Disclose Ambition**

Businesses seeking to set science-based targets for nature using the SBTN’s methodology[xv] can refer to its detailed Step 3 guidance here.

Navigator Notes:

When businesses have assessed and prioritized their impacts on nature, they can begin to **measure baselines, set, and disclose their targets.** Science-based targets are measurable, actionable, and time-bound objectives, based on the best available science, that support business alignment with global sustainability goals.

Data collection for baseline setting is a critical precursor to target setting. Businesses will need to combine findings from data stocktaking exercises completed in Steps 1 and 2, with assessments of their data collection and management capabilities, to determine and set replicable steps and processes for monitoring progress against established baselines.

It is important to underscore that **there will never be “perfect data” available.** This should not inhibit action, however, as businesses can gather a combination of primary and secondary data as well as modelled data, and supplement these as needed with available dataset resources for scenario analysis and planning purposes (some helpful resources are included below).

xiv To ensure correct and complete adherence to the target setting methods prior to making any public claims, and in advance of implementation of SBTN Step 4: Act), companies will prepare and submit their targets for validation. SBTN is currently piloting its target validation process to ensure robust, feasible, and clear validation criteria. All companies should begin the target setting journey and prepare their targets ahead of the validation roll-out anticipated in Q1 2024.

xv Note that SBTN has not yet completed its specific target-setting guidance for financial institutions but encourages preparation in accordance with its 5-Step Framework to be positioned to act for nature and to set up all associated management controls and internal monitoring and data collection processes.

SBTN Step 3: Measure, Set, and Disclose

Company Actors

Guidance for Companies to Set Their Science-based Targets for Nature:

The Science Based Targets Network (SBTN) has developed technical guidance on nature for organizations to "Measure, Set, & Disclose Targets" for Freshwater (v1.0) and Land (v0.3).[144] Future SBTN resources are expected to include target-setting technical guidance for Oceans and Biodiversity, as well as guidance for taking action (SBTN Step 4) and tracking impact against targets (SBTN Step 5).[145]

The SBTN's Biodiversity paper[146] explains how biodiversity is included in the first release of SBTN's science-based targets for nature and the next steps for biodiversity target-setting methodology.

Guidance to Set Science-Based Freshwater Targets:

The SBTN's Step 3: Freshwater Technical Guidance (v1.0)[147] details steps on the selection of a locally or globally developed modeling approach, establishing baseline values on relevant pressures, and setting targets focused on freshwater quality and quantity.

Guidance to Set Science-Based Land Targets:

As land use change continues to be one of the most persistent threats to communities and progress on nature and climate, the SBTN introduced Step 3: Land Technical Guidance (v0.3)[148] that provides information on the data requirements and detailed process for establishing science-based targets for land. Land targets aim to address three broad goals, including 1) no conversion of natural ecosystems, 2) land footprint reduction, and 3) landscape engagement (or collaborative action through stakeholder groups to regenerate degraded land).

The first land targets are currently being piloted by an initial group of target-setting companies ahead of a version 1.0 launch anticipated in early 2024.

The SBTN's Step 3: Land Technical Guidance Supplement[149] provides additional information for each land target and highlights how the three targets are built upon and complement internationally recognized frameworks such as the Kunming-Montreal Global Biodiversity Framework.

Financial Institution Actors

The TNFD Recommended Disclosures for Financial Institutions:

The Taskforce on Nature-related Financial Disclosures' (TNFD) Disclosure Recommendations[150] were published in September 2023. They include a specific recommended disclosure that applies to all sectors including financial institutions (found under Metrics and Targets C in the guidance). The TNFD Additional Guidance for Financial Institutions[151] provides added specificity on applying the TNFD Recommendations, which continue to be updated based on work with the TNFD's partners.

Biodiversity Impact Measurement Approaches for the Financial Sector:

Finance for Biodiversity (FfB) offers a Guide on biodiversity measurement approaches[152] that includes coverage of tools for quantifying impacts on biodiversity that are scientifically robust, such as:

- IBAT (the Integrated Biodiversity Assessment Tool)[153] created by BirdLife International, Conservation International, the International Union for Conservation of Nature (IUCN), and the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), offers geolocated data on important sites for biodiversity (including protected areas, key biodiversity areas and IUCN Red List species). IBAT helps businesses incorporate biodiversity considerations into project planning and management decisions, including screening potential investments and siting operational locations.
- Corporate Biodiversity Footprint[154] (CBF) is a methodology created by Iceberg Data Lab to assess the annual biodiversity impact of corporates, financial institutions, and sovereign issuers. The CBF is designed to quantify the impact of investment strategies (portfolio or index development, exclusions, risk management), and is based on the impact of the underlying activities of a corporation.

The FfB measurement guide also includes new tools that are becoming available that offer new methods for assessing the state of biodiversity, such as remote sensing, eDNA, and bioacoustics. Financial institutions are advised to carefully consider what tools to use for assessment (Step 1) and what for baselines and targets (Step 3).

SBTN Step 3: Measure, Set, and Disclose (continued)

Company Actors

Resources for Location Analysis Prior to Science-based Target Setting for No Conversion of Natural Ecosystems:

Preventing the conversion of natural ecosystems (SBTN's Land Target 1) starts by knowing where natural lands exist. With SBTN's Natural Lands Map[155] tool, companies can begin to understand potential land impacts (by natural land classification) in areas of potential operations. SBTN's technical documentation[156] provides additional guidance on using the tool and describes its underlying methodology.

SBTN's Target Validation Process:

To ensure companies have correctly and completely followed the target setting methods, companies will prepare and submit their targets for validation. The Science Based Targets Network (SBTN) is currently piloting the target validation process[157] with an initial group of companies to ensure robust, feasible and clear validation criteria ahead of the full roll-out anticipated in Q1 2024.

Incorporating Societal Considerations for Target Setting:

The Earth Commission[158] is working to develop a framework for safe and just Earth System Boundaries which integrates methods to reduce harm to people, increase access to resources, and address societal inequalities for adjusting global biophysical boundaries. The aim of the Earth System Boundaries is to underpin the setting of science-based targets to help companies address the twin crises of nature and biodiversity loss and climate change while considering societal implications and generating societal co-benefits.

Using the TNFD LEAP Framework, Consistent with SBTN:

The Taskforce on Nature-related Financial Disclosures' (TNFD) Recommendations were published in September 2023, which includes guidance on setting metrics and targets. Businesses can follow the methodology under the "Prepare" phase of TNFD's "LEAP"[159] ("Locate," "Evaluate," "Assess," "Prepare") approach to set science-based targets for nature. The Guidance for corporates on science-based targets for nature[160] was developed in consultation with the SBTN. It includes an overview of the SBTN's methods and 5-step approach to setting science-based targets for nature, and insight into how the SBTN and the TNFD guidance fit together.

Financial Institution Actors

Data Clarity that is also Credible and Comparable:

IRIS+[161] is a system of generally accepted metrics created by the Global Impact Investing Network (GINN) that measure social, environmental, and financial performance and support data comparability, credibility, and transparency, which enables greater accountability in impact measurement practices. Included in the TNFD Tools Catalogue,[162] IRIS+ serves as the taxonomy, or set of terms with standardized definitions, that governs the way companies, investors, and other stakeholders define and understand their social and environmental performance.

Biodiversity Target Setting for Banks:

The United Nations Environment Programme Finance Initiative (UNEP FI) and the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) published the Guidance for Biodiversity Target-setting[163] which is geared towards Principles for Responsible Banking members and demonstrates a practical approach to biodiversity target setting. The guide positions biodiversity as a key impact area for financial institutions and provides tools, industry case studies, and methods for biodiversity measurement.

Reviewing Indicator Repositories for More Comprehensive Metric-setting and Responsive Management Systems:

The UN Environment Programme Finance Initiative (UNEP FI) created the Indicator Library[164] to provide a compilation of impact analysis-related indicators and metrics that can be used or further tailored for measurement purposes.

Financial Sector Decision Framework to Select the Most Suitable Measurement Tool:

In its Update Report 3,[165] the EU Business and Biodiversity Platform introduced the first version of the Biodiversity Measurement Navigation Wheel for financial institutions, a decision framework to select the most appropriate measurement tool for their needs. More recently, in its Update Report 4[166] the Platform presented the Biodiversity Measurement Navigation Wheel 2.0 for Businesses. Sector applicability has been added as an additional selection criterion, including financial institutions as a frequent user and key contributor to management actions for nature in the private sector.

SBTN Step 3: Measure, Set, and Disclose (continued)	
Company Actors	**Financial Institution Actors**
To better prepare for future disclosures following the establishment of science-based targets for nature, the TNFD has published a discussion paper on proposed sector disclosure metrics,[167] which can help businesses consider their data and measurement needs in their prioritized locations for nature management. Due to the essential pre-requisite of high quality, comparable, and easily accessible nature-related data to reverse nature loss, the TNFD and 11 partner organizations released a high-level scoping study that explores the case for a global nature-related public data facility,[168] which would have significant benefits for public, private, and civil society stakeholders globally. The next phase of exploratory work involves consultations for blueprinting a preferred governance, funding, and operational model for the proposed public data facility and ensuring synergies with related climate data initiatives. **Primary and Secondary Biodiversity Data Collection:** The EU Business and Biodiversity Platform developed a Thematic Report on Biodiversity Data[169] for businesses and financial institutions. The report covers innovative approaches for primary data collection, such as Environmental DNA and Bioacoustics, as well as the use of widely accessed secondary data sources such as Integrated Biodiversity Assessment Tool[170] (IBAT) and Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE).[171] The report also offers insights about the evolving field of geospatial data and remote sensing. To complement the report, the EU Business and Biodiversity Platform developed a webinar series[172] including practical examples on how companies have applied primary and secondary biodiversity data. **Open-source Datasets and Repositories to Supplement Available Primary Data:** The Ecosystem Services Valuation Database[173] contains approximately 9,500 value records from over 1,100 valuation studies regarding the economic benefits of ecosystem services distributed across all biomes and geographies. This information is communicated in monetary values that can support decision-making on valuing nature use and impact mitigation (risk and impact assessments, nature price-setting, case studies, and cost-benefit analyses).	–

SBTN Step 3: Measure, Set, and Disclose (continued)	
Company Actors	**Financial Institution Actors**
The UN Biodiversity Lab[174] provides companies and government actors public access to spatial data and analytic tools to support decision-making, priority-setting, monitoring, and reporting on biodiversity impacts. **Overview of the Biodiversity Measurement Field and Decision Framework to Select the Most Suitable Measurement Tool:** The EU Business and Biodiversity Platform organized the webinar series Measuring biodiversity for business and finance[175] with the aim to provide companies with an overview of the field of biodiversity measurement, present case studies, and discuss the main strengths and challenges of applied measurement approaches. The EU Business and Biodiversity Platform's Assessment of Biodiversity Measurement Approaches for Businesses and Financial Institutions[176] offers detailed guidance about the Biodiversity Measurement Navigation Wheel 2.0 for Businesses, a decision-making framework that helps companies and financial institutions select appropriate biodiversity measurement tools and metrics according to their specific needs and priorities. The Navigation Wheel covers 29 biodiversity measurement approaches, and uses seven selection criteria: business context, biodiversity pressures, biodiversity ambition, biodiversity scope, metrics, level of efforts, and sector. **Context-based Metrics that Incorporate "Authentic Sustainability":** The UN Research Institute for Social Development's (UNRISD) set of Sustainable Development Performance Indicators (SDPIs)[177] assesses impact and performance across metrics reflecting norms and thresholds consistent with sustainable development. The SDPI system includes some nature-related measures in its initial 2022 version, including water recycling and reuse, hazardous waste treatment, and circularity and atmospheric measures that intersect with nature.	–

JUMP TO SECTION

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SBTi Step 3: Submit

Businesses seeking to set near-term or long-term science-based targets in line with the SBTi's criteria and process can refer to its detailed Corporate Manual here.

Navigator Notes:

For organizations setting climate-related targets with the SBTi, targets must be **submitted to the SBTi for validation within 24 months of signing** the SBTi commitment letter.

While the SBTi defines its Step 3 more narrowly, **this navigator places resources below that address sequentially** what management steps may follow the finalization of SBTs. For example, the SBTi does not specifically include in its 5-step framework a more direct, "action oriented" step for businesses to assess how to reduce or mitigate negative climate impacts to deliver on targets.

Transition planning resources, or creating timebound, comprehensive action plans that describe how an organization intends to reduce its carbon emissions and climate risks in line with national and international targets (WWF definition),[xvi, 178] can be helpful as businesses seek to set SBTs. Due to the **cross-functional aspects** of such planning (strategy setting, governance planning, and management of material factors), these resources can be found with other cross-cutting resources below in Table 6, Topic D.

xvi For definitions of critical terms used in this navigator, please refer to "Navigator Key Terminology Definitions and Additional Glossary Resources" in Annex 1.

SBTi Step 3: Submit

Company Actors

Science-Based Target-Setting Criteria and Validation:

The Science Based Targets initiative's (SBTi) Criteria and Recommendations for Near-Term Targets[179] and Corporate Net-Zero Standard Criteria[180] set requirements for companies that submit their targets to be validated by the SBTi.

For target validation guidance, the SBTi has protocols for companies[181] and small and medium-sized enterprises[182] (SMEs) to follow.

Companies can submit their near-term target(s) for validation to the SBTi by using its corporate submission form.[183] Companies can refer to the SBTi's update submission form[184] to update an existing validated science-based target.

Resources for Scenario Modelling, Monitoring, and Land Use Actions for Positive Climate Outcomes:

For the agriculture sector, Field to Market has developed the Fieldprint® Platform[185] which aggregates and analyzes data from farmers using their proprietary metrics and algorithms for various climate, biodiversity, water, and land-use indicators to measure the environmental impacts of commodity crop production and identify opportunities for continuous improvement.

The World Business Council For Sustainable Development (WBCSD) created the Food & Agriculture Roadmap[186] that sets out transformational targets, key action areas, and solutions required to transform food systems to achieve environmental sustainability, equitable livelihoods, and healthy and sustainable diets for all. The Roadmap presents scientific and economic analysis and helps companies prioritize and develop business-led solutions.

WBCSD also created a Climate Scenario Catalogue[187] that models multiple climate change drivers across the energy, food, and land use sectors – such as carbon pricing, consumer shifts, and technology innovations – to create a range of scenarios that can be used for climate scenario analysis. The particular focus on transition risk is a helpful addition to the scenario analysis toolbox to improve business resilience.

Financial Institution Actors

Standardized Criteria for Science-Based Target Setting and Validation for Financial Institutions:

The Science Based Targets initiative's (SBTi) Near-Term Criteria and Recommendations for Financial Institutions[188] and Financial Institutions Net-Zero (FINZ) Standard Conceptual Framework and Initial Criteria[189] underwent public consultation from June to August 2023. The FINZ aims to establish criteria and methods for financial institutions to set and submit their science-based targets and establishes the protocols for target validation by the SBTi. It is planned for release in early 2024. Currently, financial institutions can submit their near-term target for validation to the SBTi using its FIs submission form.[190]

Addressing Fossil Fuel Financing Activities:

To align with SBTi requirements, financial institutions should refrain from supporting the expansion of unabated fossil fuel production capacity. The consultation draft of the SBTi Fossil Fuel Finance Position Paper[191] presents both near- and long-term criteria for financial institutions with fossil fuels investments, focused on fossil fuel activities at the company level, the project level, and the portfolio level. The draft of this position paper includes four broad requirements related to the disclosure, arrest, transition, and phase-out of fossil fuel related assets and activities.

Maintaining Investment Alignment with Climate Scenarios:

The Paris Agreement Capital Transition Assessment (PACTA) tool, originally developed by Two Degrees Investing Initiative (2DII) but now overseen by RMI, is a free software that calculates the extent to which financial portfolios are aligned with various climate scenarios across a set of sectors. PACTA for Investors[192] focuses on corporate capital expenditures and industrial assets being financed through equity, bonds, or funds. PACTA for Banks,[193] on the other hand, focuses on banks' corporate lending portfolios. Financial institutions can use this information to help steer their investments in line with climate scenarios, to achieve their science-based targets, and to inform engagement activities with clients and portfolio companies.

SBTi Step 3: Submit (continued)

Company Actors	Financial Institution Actors
The Accountability Framework initiative developed guidance[194] for companies that take an integrated approach to managing and monitoring deforestation, ecosystem conversion, and greenhouse gas emissions resulting from land use change. It details how companies can use the Accountability Framework along with the GHG Protocol and SBTi FLAG (forest, land, and agriculture) guidance to comprehensively address land use changes and assess the linkages between agriculture and forestry production and GHG emissions. **A Customizable Climate Action Hub of Tools and Trainings that can Help Turn Climate Ambition Into Action:** Environmental Defense Fund's Net Zero Action Accelerator[195] is a climate action hub designed to meet the demand for practical, actionable resources -backed by science. The Net Zero Action Accelerator offers over 25 net zero pathways, 75 customizable action steps, live and recorded trainings, and a resource library of hundreds of the best net zero resources from Environmental Defense Fund, Deloitte, Race to Zero, Transform to Net Zero, and more. From transportation to agriculture to consumer-packaged goods – the web hub identifies the highest-impact climate solutions across six key industries. No matter where you are in your climate journey, the Net Zero Action Accelerator can help you find what you need to turn climate ambition into action. **Climate Initiative for Small- to Medium-Sized Companies:** SME Climate Hub is a non-profit global initiative that empowers small- to medium-sized companies to take climate action. Using the SME Climate Hub enables users to be counted as part of the UN Climate Change High-Level Champions' Race to Zero Campaign. Businesses can calculate their emissions using the Hub's Business Carbon Calculator,[196] learn how to reduce these emissions, find support, and report on their commitment efforts. **Tools and Programs for Consumer Goods Companies Pursuing Regenerative Agriculture:** The Climate x Nature x Agriculture Ecosystem Map[197] is an online mapping tool, developed by the Consumer Goods Forum, which provides a list of technology platforms, associations, supplier engagement mechanisms, and standards mapped to the Race to Zero Campaign's framework criteria. Companies seeking to implement regenerative agriculture practices may use this tool to better understand how to get started on target setting, achieve decarbonization, and report on progress.	–

TABLE 4: USER JOURNEY

SBTN Step 4 "Act";
SBTi Step 4 "Communicate"

Step 4: Start here if your organization is ready to take action for nature and climate and communicate about its efforts, or if your organization is deepening or accelerating its actions.

If companies and financial institutions have worked through the set of actions in Steps 1-3 that are relevant to their business and/or corporate strategies, they are positioned to take action for nature and climate related to identified and prioritized material factors, locations, and activities.

SBTN Step 4: Act

4
Act

Businesses seeking to set science-based targets for nature using the SBTN's methodology[xvii] can refer to its detailed Step 4 guidance here, which includes the AR3T Action Framework.

Navigator Notes:

This navigator includes several frameworks that can be helpful when **planning actions for nature**, including the SBTN's AR3T Framework. The SBTN's Framework is built on the established mitigation and conservation hierarchies.

This includes steps to "*Avoid*" and "*Reduce*" pressures on nature loss to prevent future negative impacts that will otherwise continue growing, "*Regenerate*" and "*Restore*" to initiate or accelerate the recovery of nature (i.e., its health, integrity, and longer-term sustainability), and "Transform" underlying systems to address the drivers of nature loss.

As noted in the "Opportunity Areas in the Landscape of Management Resources and Next Steps for This Work" section of this navigator above, management resource specificity on the transformative action steps organizations can take to mitigate adverse impacts on nature of their operations and portfolio investments **is still an underdeveloped area** in the resource set available (and the SBTN detailed guidance for Step 4 has not yet been released). There are a number of organizations currently working on guidance for business pressure reduction, impact remediation, and transformation related to specific industry sectors, natural capital dependencies, and biomes that may offer more prescriptive action recommendations in the near-term.

Ultimately, **businesses should plan to take multiple kinds of actions** (e.g., avoidance as well as reduction of impact), with the effectiveness and legitimacy of these actions, especially those that seek to foster nature regeneration and restoration, underpinned by consistent effort and sustained levels of commitment to realize impact. **Transparent assessment** of impact and disclosures of progress towards goals and targets become critical appraising tools.

xvii Note that SBTN has not yet completed its specific target-setting guidance for financial institutions but encourages preparation in accordance with its 5-Step Framework to be positioned to act for nature and to set up all associated management controls and internal monitoring and data collection processes.

SBTN Step 4: Act

Company Actors

Using the SBTN Step 4 Guidance for Management, including the SBTN Mitigation Hierarchy Framework:

Detailed guidance for the Science Based Targets Network's (SBTN) Step 4 has not yet been released. However companies can begin to understand the SBTN's Action Framework, AR3T ("Avoid," "Reduce," "Regenerate," "Restore," and "Transform"), in the SBTN's Initial Guidance for Business[198] and its SBTs for Nature Initial Guidance for Business Technical Annexes.[199] These resources provide descriptions of this framework, guidance, and example actions in accordance with AR3T. The SBTN also provides example actions or response options for companies to consider in the appendix of both the Freshwater Technical Guidance (v1.0)[200] and the Land Technical Guidance (v0.3).[201]

Resources to Support Corporate Actions to "Avoid":

SBTN's 2020 SBTs for Nature Initial Guidance for Business Technical Annexes[202] highlights tools and resources that can support organizations in their "Avoid" actions, such as maps of geographical areas to avoid, resources highlighting existing approaches to managing impacts to nature, and data sources to further inform avoidance efforts. Below are a sample of resources from SBTN's "Technical Annex (TA) 6.5 Data Sources for Informing Avoidance":

- The International Union for Conservation of Nature (IUCN)'s Red List of Threatened Species[203] categorizes species into nine categories to highlight their risk of extinction. Further, the IUCN also has a Red List of Ecosystems[204] that evaluates and monitors the condition of ecosystems. These lists can support companies in understanding species and ecosystems that should be protected and avoided in operations.
- The Nature Conservancy's Last Chance Ecosystems[205] is a mapping tool that showcases areas that are in need of protection. Companies can use this resource to ensure that they avoid operations in these critical areas.
- The UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC)'s Global Critical Habitat Screening Layer[206] is a mapping tool that highlights areas of likely or potential Critical Habitat (as defined by the International Finance Corporation's Performance Standard 6 criteria). Companies can use this tool to ensure that their operations avoid negatively impacting these critical habitats.

Financial Institution Actors

Using the TNFD Guidance to Take Action:

Financial institutions can reference the Taskforce on Nature-related Financial Disclosures' (TNFD) recommended disclosures[207] and its LEAP guidance[208] ("Locate," "Evaluate," "Assess," "Prepare") to initiate management actions to address nature-related impacts, dependencies, risks, and opportunities. The TNFD recommends that organizations follow the Science Based Targets Network's (SBTN) AR3T Action Framework ("Avoid," "Reduce," "Regenerate," "Restore," and "Transform") to assess actions they can take in line with its mitigation hierarchy in response to identified material nature impacts. Users of this navigator should also refer to the "Company Actors" column on the left for more detail on the TNFD, and to its additional guidance[209] for financial institutions.

Roadmap of Priority Actions Towards a Nature-positive Future:

Business for Nature, the World Economic Forum (WEF), and the World Business Council for Sustainable Development (WBCSD) developed prescriptive guidance for 12 sectors, including financial services,[210] that outlines sector-specific actions for businesses to support the reversal of nature loss and to build contributions to an equitable, nature positive economy. The guidance provides an overview of the key impacts, dependencies, and priority actions for financial institutions, helping them to identify and implement relevant, impactful actions for nature.

Aligning Financial Flows with Global Biodiversity Targets:

The UN Environment Programme Finance Initiative released a high-level roadmap[211] for financial services actors on integrating the Kunming-Montreal Global Biodiversity Framework into their investment policies and decision-making processes. Drawing upon existing commitments, guidance publications, and frameworks, it proposes three overarching recommendations for building organizational culture and capacity, developing innovative financial solutions, and strengthening stakeholder dialogue for positive nature outcomes.

SBTN Step 4: Act (continued)

Company Actors	Financial Institution Actors
Additional detailed guidance for the SBTN's Step 4, inclusive of the AR3T ("Avoid," "Reduce," "Regenerate," "Restore," and "Transform") Action Framework's suggested actions and tools, is still being developed with updates expected in 2024. **Example AR3T Action Steps for Companies:** Recommendations of actions to support targets in the SBTN's first release are summarized in the v1.0 Response Option Database[212] highlighting mitigation hierarchy action steps (across the AR3T ("Avoid," "Reduce," "Regenerate," "Restore," and "Transform") Action Framework categories) that companies may take related to freshwater and land use. **Guidance for Planning and Implementing Nature-Based Solutions:** The International Union for Conservation of Nature's (IUCN) Global Standard for Nature-based Solutions (the Standard)[213] provides a methodology for companies to design, implement, verify, and scale up nature-based solutions in a consistent and reliable way. Released in 2020, the Standard's governing body will revise the Standard every four years. An accompanying document[214] is also available which provides guidance on how to use the Standard. The Cambridge Institute for Sustainability Leadership developed a diagnostic tool, titled Decision-making in a Nature Positive World,[215] to help companies better understand how nature-based solutions can help them protect, restore, and/or manage landscapes, seascapes, and watersheds while addressing societal issues and benefiting local communities. To facilitate reforestation, Nature4Climate has developed Reforest Better,[216] a guide for companies to better select and implement forest restoration and tree growing projects. High-quality and high-impact projects will not only offer benefits to local biodiversity but also to local communities while addressing climate change impacts. To decide what actions to take and which locations may provide the best potential for both nature and climate impact, companies may refer to Nature4Climate's Natural Climate Solutions World Atlas,[217] a tool which illustrates the mitigation potential resulting from nature safeguarding, management, and restoration activities across the world.	The International Finance Corporation's Biodiversity Finance Reference Guide[218] builds on the Green Bond Principles and the Green Loan Principles to provide green finance guidance that supports activities that conserve and restore biodiversity and ecosystem services. Recent updates also map investment activities to the Kunming-Montreal Global Biodiversity Framework's targets, which financial institutions can use to inform decision-making about their financing activities. The High Conservation Value Network's High Conservation Value (HCV) Approach[219] is a globally applicable end-to-end methodology that identifies ecosystems, biodiversity, indigenous peoples, and local communities for protection from the effects of land use changes related to agriculture and commodity production (e.g., wood, pulp and paper, palm oil, sugarcane, cotton, rubber, and cocoa). The HCV Network is managed by a representative board, including nonprofits, standard setters, and commodity producing companies. The approach can be utilized by financial institutions such as commercial banks to ensure their investments do not have negative impacts on these high value geographic areas that should be conserved. **Guidance to Address Deforestation:** Global Canopy's Finance Sector Roadmap,[220] which builds on the Accountability Framework's principles and guidance for companies, provides key steps and specific recommended actions for financial institutions to begin to meaningfully eliminate commodity-driven deforestation, land conversion, and associated human rights abuses from their financial portfolios by 2025. The World Wildlife Fund (WWF) offers guidance, analysis, and case studies[221] for financial institutions working to address deforestation and ecosystem conversion risks in alignment with the Accountability Framework. The guide highlights the sector-specific physical, transition, and systemic risks associated with nature, but it also highlights opportunities for financial institutions to become leaders for nature, including investment vehicles such as green bonds, sustainability-linked loans, innovative insurance products, and others.

SBTN Step 4: Act (continued)

Company Actors

Using the TNFD Guidance to Take Action:

Companies can reference the Taskforce on Nature Related Financial Disclosures' (TNFD) Recommendations[222] and its LEAP ("Locate," "Evaluate," "Assess," "Prepare") guidance[223] to initiate management actions to address nature-related impacts, dependencies, risks, and opportunities. The TNFD recommends that organizations follow the Science Based Targets Network's (SBTN) Action Framework for the mitigation hierarchy, AR3T, when determining responses to identified nature-related impacts, dependencies, risks, and opportunities. Where relevant, further options for specific business responses to identified issues may be found in the TNFD biome guidance[224] with specific draft sectoral guidance planned for publication in late 2023 and 2024.

Sector-specific Roadmaps for Business to Contribute Towards a Nature Positive Future:

In addition to high-level guidance for all sectors,[225] the World Business Council for Sustainable Development (WBCSD) has developed systems Roadmaps that offer specific in-depth guidance for four high impact sectors on nature: Agri-food,[226] Forest Products,[227] Built Environment,[228] and Energy.[229] The Roadmaps are based on ACT-D's high level business actions on nature. As part of ACT-D's "Transform" stage, and guided by the SBTN's AR3T Action Framework, the Roadmaps outline specific actions that businesses should prioritize to contribute to a nature positive future.

Business for Nature, the World Economic Forum (WEF) and the World Business Council for Sustainable Development (WBCSD) have developed guidance for 12 sectors[230] outlining sector-specific actions that businesses should take to support the reversal of nature loss and to build contributions to an equitable, nature positive economy. The guidance provides an overview of the key impacts, dependencies, and priority actions for each sector, helping businesses identify and implement relevant, impactful actions for nature. Comprehensive reports are also available that provide further depth, helpful case studies, and additional insights on the transformative actions specific to each sector.

Financial Institution Actors

Private Sector Finance Flows into Forestry Nature-based Solutions:

The Forest Investor Club (FIC), established by the U.S. Department of State and led by the World Business Council for Sustainable Development (WBCSD), is a network of public and private financial institutions, investors, and companies committed to accelerating investment in conservation, restoration, and the sustainable management of forests and nature. FIC's 2023 Annual Report[231] includes seven case studies detailing how FIC members are developing and implementing innovative investment strategies to drive capital into high-impact forestry nature-based solutions projects.

Performance Standards for International Project Finance and Non-Recourse Opportunities that Support Nature Action:

The International Finance Corporation's (IFC)[232] Sustainability Framework comprises IFC's Policy and Performance Standards on Environmental and Social Sustainability. The Performance Standards establish the importance of 1) integrated assessment to identify the environmental and social impacts, risks, and opportunities of projects; 2) effective community engagement through disclosure of project-related information and consultation with local communities; and 3) management of environmental and social performance throughout the life of the project. Aligning project investments to IFC's Performance Standards forms the basis of creating responsive management plans to monitor, measure, and mitigate project impacts over its life. Performance Standard 6, "Biodiversity Conservation and Sustainable Management of Living Natural Resources", specifically supports the protection and conservation of biodiversity and the maintenance of ecosystem services and natural resources.

The European Bank for Reconstruction and Development (EBRD) outlines 10 Performance Requirements in its Environmental and Social Policy[233] projects must meet to qualify for support. Performance Requirement 6, "Biodiversity Conservation and Sustainable Management of Living Natural Resources", aims to achieve no net loss of biodiversity, maintain ecosystems services, and promote sustainable management of natural resources.

SBTN Step 4: Act (continued)

Company Actors	Financial Institution Actors
Nature Action for Supply Chains in Agriculture and Forestry: The Accountability Framework[234] provides a roadmap, based on 12 core principles, for companies to work on addressing critical issues such as deforestation, ecosystem conversion, and human rights in their agricultural and forestry supply chains. The framework helps companies understand and implement responsible land acquisition and management processes and collaborate with other key actors, as the drivers of these environmental and social issues are often beyond the activities or influence of any one company. **Supply Chain Traceability for Key Commodities:** The United Nations Global Compact has A Guide to Traceability[235] which presents practical steps for implementing traceability programs within companies and identifying sustainability issues associated with high value commodities across supply chains.	–

JUMP TO SECTION

SBTi Step 4: Communicate

Businesses seeking to set near-term or long-term science-based targets in line with the SBTi's criteria and process can refer to its detailed Corporate Manual here, which includes guidance on how to communicate the approved target(s).

Navigator Notes:

For organizations setting climate-related targets with the SBTi, **target(s) must be published within six months of receiving SBTi validation.** Failure to publicly communicate the validated target(s) will result in the need for revalidation.

SBTi Step 4: Communicate

Company Actors	Financial Institution Actors
How to Communicate the SBTi Validated Targets: The Science Based Targets initiative's (SBTi) communications guide[236] for companies and financial institutions provides guidelines for communicating about their commitment or their validated science-based target(s). **Avenues for Communicating Targets:** The CDP Climate Change Program[237] aims to reduce companies' greenhouse gas emissions and improve awareness of climate risks through measurement and disclosure, which includes requesting information from the world's largest companies on behalf of over 700 institutional investor signatories. Companies can use CDP's annual questionnaires as an avenue to publish their SBTi-validated near-term emissions reduction or net zero targets. CDP adapts the Climate Change Questionnaire annually to reflect the latest criteria and recommendations from the SBTi and issues a dedicated technical note on science-based targets.[238]	**How to Communicate the SBTi Validated Targets:** The Science Based Targets initiative's (SBTi) communications guide[239] for companies and financial institutions provides guidelines for communicating about their commitment or their validated science-based target(s).

TABLE 5: USER JOURNEY

SBTN Step 5 "Track"; SBTi Step 5 "Disclose"

Step 5: Track Progress and Report

If companies and financial institutions have worked through the set of actions in Steps 1-4 that are relevant to their business and/or corporate strategies, they may be positioned to disclose the actions they have taken for nature and climate, and/or progress towards targets. In keeping with the ACT-D and Race to Zero Campaign Holistic Frameworks (see "Conceptualizing Holistic, Continuous, and Transparent Management Action" described above), transparent disclosure should happen continuously for organizations to reassess their positions, maintain credibility, and to communicate with stakeholders.

This navigator does not make recommendations to organizations as to which disclosure instruments should be utilized; businesses should take into consideration the legal and regulatory requirements that apply in the jurisdictions where they operate as well as the information that is most important to communicate to their stakeholders. Each disclosure instrument will carry its own procedural requirements that preparers must follow.

SBTN Step 5: Track

5
Track

- **Monitor**
- **Report**
- **Verify**

Businesses seeking to set science-based targets for nature using the SBTN's methodology can refer to its detailed Step 5 guidance here.

Navigator Notes:

It is recommended that **measurement, reporting, and verification** (MRV) related activities occur throughout the science-based target-setting process through the organization's own reporting channels and through voluntary and/or mandatory disclosure instruments as required/appropriate. This could follow materiality analyses and value chain mapping (SBTN Step 1), the prioritization of locations and activities for nature management and/or SBT-setting (SBTN Step 2), the collection of baseline data and disclosure of targets set (SBTN Step 3), and throughout the process of action for nature, including progress on SBTs (SBTN Step 4).

Establishing an **effective, ongoing MRV process** is essential to actively manage organizational progress towards nature targets and goals. A successful monitoring and measurement program will **track interim and longer-term targets through defined KPIs and benchmark** metrics that incorporate value chain priority location data and corporate level impact data.

This process should also be **closely tied to the organization's corporate strategy**, supported by a cross-functional team with periodic strategic reviews to allow for adaptations and recalibrations when appropriate to ensure success in meeting near- and longer-term milestones. If needed, businesses may use information gleaned from this process to update their targets or target-setting strategies accordingly.

Reporting disclosures around nature impacts, dependencies, and related business pressures are **critical steps** of the wider collective process of creating a nature positive future. While preparing formal disclosure reporting related to nature management objectives, actions, and results (including any formalized nature targets) has been largely voluntary until now, **it is fast becoming a necessary consideration** as regulatory attention increases (see "Summaries of Key Disclosure Instruments" and Annexes 2-5 later in this navigator for more information). Businesses may need to independently verify reported progress on broader nature action and towards science-based targets in its sustainability-related reporting (see Annex 4).

SBTN Step 5: Track

Company Actors

Reporting and Disclosure Instruments Are Explored in Summary Form Below in this Navigator:

Reporting and disclosure instruments receive specific attention in this navigator. Below this User Journey are brief descriptions of some of the high-impact resources, frameworks, and methodologies that often inform and guide standardized disclosures of nature-related information. Further in this navigator are summaries of key disclosure instruments that are vehicles through which companies disclose sustainability-related performance information. These disclosures may be released via voluntary or regulatory-driven standards and published in different formats – such as part of a company's annual sustainability report, an integrated report, disclosure system, etc.

Key Frameworks and Methodologies for Nature Management with Disclosure Recommendations Highly Associated with Standards Development:

The Taskforce on Nature-Related Financial Disclosures (TNFD)

The Science Based Targets Network (SBTN)[xviii]

Annual Disclosure Systems for Nature Disclosure (both voluntary and as requested within a supplier network or bank lending program):

CDP (Water Security, Forest, Climate Change with Biodiversity sub-questions)

Voluntary Disclosure Standards with Content for Nature Impacts and Dependencies:

Global Reporting Initiative (GRI) (303 Water and Effluents, 304 Biodiversity and Ecosystems)

International Financial Reporting Standards (IFRS), and the Sustainability Accounting Standards Board (SASB) Standards

Mandatory or Regulatory-driven Disclosure Standards with Content for Nature Impacts and Dependencies:

European Sustainability Reporting Standards (ESRS) / Corporate Sustainability Reporting Directive (CSRD)

Financial Institution Actors

Reporting and Disclosure Instruments Are Explored in Summary Form Below in this Navigator:

Much of the descriptive content in the left column of this User Journey step for companies may apply and/or be useful to financial sector actors when considering the disclosure landscape for nature. Key disclosure instruments are summarized below the User Journey in this navigator.

Annual Disclosure Systems with the Opportunity to Disclose on Sustainability-Related:

Principles for Responsible Investment (PRI)

(Note: PRI does not currently require signatories to disclose nature-related information. PRI recently announced a new collaborative initiative[240] on nature in October 2023 that will convene a group of investors with the objective of contributing to the goals of the Kunming-Montreal Global Biodiversity Framework. The initiative will initially focus on forest loss and land degradation and will later expand to other drivers of biodiversity loss.)

Mandatory or Regulatory-driven Disclosure Standards with Content for Nature Impacts and Dependencies Specifically for Financial Institutions:

Sustainable Finance Disclosure Regulation (SFDR)

Other Guidance Materials for Nature Management and Disclosure:

The Taskforce on Nature-related Financial Disclosures (TNFD) published specific guidance[241] for financial institutions. This guidance document includes the draft TNFD disclosure metrics and metrics architecture for financial institutions and a list of examples of metrics already in use by financial institutions as they assess and prepare disclosures for nature-related issues.

xviii The SBTN does not yet offer disclosure recommendations for companies or financial institutions but may include this content in future iterations of its 5-step framework.

SBTN Step 5: Track (continued)	
Company Actors	**Financial Institution Actors**
Other Guidance Materials for Nature Management and Disclosure: The Taskforce on Nature-Related Financial Disclosures (TNFD) offers helpful guidance documents on its disclosure recommendations,[242] which are structured under four pillars: Governance, Strategy, Risk and Impact Management, and Metrics and Targets. The recommendations are designed to meet the corporate reporting requirements of organizations across jurisdictions, to be consistent with the global baseline for corporate sustainability reporting, and to be aligned with the global policy goals in the Kunming-Montreal Global Biodiversity Framework. The TNFD has also published a discussion paper[243] on the draft core sector disclosure metrics for industries such as apparel and textiles, mining and minerals, construction, oil and gas, food, real estate, forestry, and others. The International Union for Conservation of Nature's (IUCN) Guidelines for Planning and Monitoring Corporate Biodiversity Performance[244] offers a four-stage approach for companies developing a corporate-level biodiversity strategic plan, including measurable goals and objectives mapped to a set of core linked indicators that will allow companies to evaluate their biodiversity performance across their operations. It can be used by any size company in any sector that has impacts and dependencies on biodiversity. The guidelines lead businesses through a series of practical steps to plan biodiversity goals, choose and apply appropriate biodiversity indicators, and to collect and analyze data in a way that facilitates results-based management and corporate biodiversity reporting.	–

SBTi Step 5: Disclose

Businesses seeking to set near-term or long-term science-based targets in line with the SBTi's criteria and process can refer to its detailed Corporate Manual here, which includes guidance on how to disclose progress once the target(s) has been approved.

Navigator Notes:

Following the validation of science-based targets by the SBTi, businesses should **disclose their GHG emissions annually and monitor progress** towards reaching their target(s). Disclosures may be made through relevant formal disclosure instruments (see "Summaries of Key Disclosure Instruments" below), and through any number of preparer-specific annual and sustainability reports, organization websites, and/or other applicable corporate channels.

SBTi Step 5: Disclose

Company Actors	Financial Institution Actors
Reporting and Disclosure Instruments Are Explored in Summary Form Below in this Navigator: Reporting and disclosure instruments receive specific attention in this navigator. Below this User Journey are brief descriptions of some of the high-impact resources, frameworks, and methodologies that often inform and guide standardized disclosures of climate-related information. Summaries of key disclosure instruments that serve as vehicles through which companies disclose sustainability-related performance information are also included later in this navigator. These disclosures may be released via voluntary or regulatory-driven standards and published in different formats – such as part of a company's annual sustainability report, an integrated report, disclosure system, etc. **Methodologies for Climate Management and Disclosure Highly Associated with Standards Development:** The Science Based Targets initiative (SBTi) SBTi FLAG ("Forest, Land, and Agriculture") Task Force on Climate-Related Financial Disclosures (TCFD) Greenhouse Gas (GHG) Protocol	**Reporting and Disclosure Instruments are Explored in Summary Form Below in this Navigator:** Much of the descriptive content in the left column of this User Journey step for companies will be useful to financial sector actors when considering the disclosure landscape for nature. Disclosures for certain financial institutions operating in the European Union are currently governed by the 2018 Sustainable Finance Action Plan, which includes multiple disclosure requirements. Key disclosure instruments are summarized below the User Journey in this navigator. **Annual Disclosure Systems for Climate-related Information:** Principles for Responsible Investment (PRI) **Mandatory or Regulatory-driven Disclosure Standards with Content for Nature Impacts and Dependencies Specifically for Financial Institutions:** Sustainable Finance Disclosure Regulation (SFDR)

SBTi Step 5: Disclose (continued)

Company Actors	Financial Institution Actors
Annual Disclosure System for Nature Disclosure (both voluntary and as requested within a supplier network or bank lending program): CDP Climate Change **Voluntary Disclosure Standards with Content for Nature Impacts and Dependencies:** Global Reporting Initiative (GRI) (302 Energy, 305 Emissions, 201 Economic Performance) International Organization for Standardization (ISO) International Financial Reporting Standards (IFRS) (S2- Climate-related Disclosures), and the Sustainability Accounting Standards Board (SASB) Standards **Mandatory or Regulatory-driven Disclosure Standards with Content for Nature Impacts and Dependencies:** European Sustainability Reporting Standards (ESRS) / Corporate Sustainability Reporting Directive (CSRD) United States SEC Climate Rules (Proposed) **GRI Sector-specific Disclosure Resources for Companies:** The Global Reporting Initiative (GRI) Sector Program is working to develop standards for 40 sectors, starting with those that have the highest impact. As of August 2023, there are sector standards for oil and gas,[245] coal,[246] and agriculture, aquaculture, and fishing.[247]	**GRI Sector-specific Disclosure Resources for Financial Institutions:** The Global Reporting Initiative (GRI) Sector Program is working to develop standards for 40 sectors, starting with those that have the highest impact. In September 2023, it began its work developing the sector standard for financial services[248] which includes banking, insurance, and capital markets. The public exposure draft is expected at the end of 2024 with the final sector standard slated for publication mid-year in 2025. **Reporting Standard for the Financial Industry:** The Partnership for Carbon Accounting Financials' (PCAF) Global GHG Accounting and Reporting Standard for the Financial Industry[249] provides methodological guidance for measuring and reporting GHG emissions, and includes three sub-sections for different users: • Financed Emissions Standard: Associated with seven asset classes as well as guidance on emission removals • Facilitated Emissions Standard: Associated with capital markets transactions • Insurance-Associated Emissions Standard: For insurance and reinsurance underwriting

TABLE 6: CROSS-CUTTING RESOURCES THAT SERVE EACH STEP OF THE USER JOURNEY

While the User Journey Tables 1–5 above aggregate important technical documents to support business actions in the identification and management of nature- and climate-related impacts, dependencies, risks, and opportunities, there are many cross-cutting elements that support each step of these processes.

These important themes inform continuous and adaptive management for nature and climate, and include references to external benchmarks measuring company progress, resources to support holistic and responsive stakeholder engagement, and frameworks for operationalizing strong strategy and governance process reviews to serve nature and climate management, among others.

A. Benchmarking Tools

Benchmarking tools and platforms serve important purposes: they allow for 1) the tracking of company progress and performance over time, 2) the assessment of the organization's performance against relevant peer organizations, 3) the assessment of larger industry performance and progress, and 4) serve as a valuable resource for investors and other company stakeholders to understand company performance.

While a great deal of progress on nature and climate goals will need to come from businesses' self-initiated actions, benchmarking can support **external transparency** and can act as a useful datapoint to **spur additional management actions for nature and climate** within organizations.

Company Actors	Financial Institution Actors
Benchmarking Mechanisms Utilizing Publicly Available (and Shared) Data from Selected Companies: World Benchmarking Alliance (WBA) benchmarks companies in seven different "systems transformation" areas including social, digital, urban, decarbonization and energy, food and agriculture, nature and biodiversity, and financial system transformation. For WBA's Nature Benchmark,[250] companies are selected and assessed across governance, ecosystems and biodiversity management, and social inclusion efforts through WBA's Nature Benchmark Methodology.[251] For the Climate and Energy Benchmark,[252] companies are selected and assessed on their low-carbon transition readiness levels through the ACT ('Assessing Low-Carbon Transition') methodologies. Companies are invited to participate and share data, but WBA will also use publicly available information to benchmark companies into its analysis even without formal participation.	**Prominent Financial Sector ESG Rankings are Including Exposures to Nature- and Climate-related Risks:** In addition to the World Benchmarking Alliance (WBA) and CDP which cover financial institutions in benchmarking analysis, most public (and many private) companies are being evaluated and rated on their ESG performance by various third-party providers of reports and ratings. Many of these rankings include nature- and climate-related impact and exposure risks, including land use, biodiversity, and carbon emissions. Institutional investors, asset managers, financial institutions, and other stakeholders increasingly rely on these ratings reports to assess longitudinal company ESG performance and compare it to peer organizations. Report and ratings methodologies, vary amongst providers,[253] but some of the most prominently referenced by investors are: • Institutional Shareholder Services (ISS) ESG • Bloomberg ESG Data Service • Corporate Knights Global 100 • Dow Jones Sustainability Index (DJSI) • MSCI ESG Research • Sustainalytics Company ESG Reports • RepRisk • Thomson Reuters ESG Research Data

A. Benchmarking (continued)

Company Actors

Benchmarking Using a Broad System of Self-submitted Information:

CDP provides ratings for companies and financial services actors that respond to CDP's Water Security, Forest, or Climate Change questionnaires, which allows for some comparison between companies. CDP also provides benchmarking analysis[254] so companies and financial services actors can compare their scores to peer organizations.

Voluntary Benchmarking to Peers on SDG Performance Management:

The B Lab and the United Nations Global Compact's (UNGC) SDG Action Manager[255] offers a self-assessment tool that can help companies compare their performance on key Sustainable Development Goals (SDGs) for their business with peer organizations.

Benchmarking Tools to Assess Performance Management of Supply Chains:

Ecovadis scorecards[256] assess suppliers in Environment, Ethics, Labor and Human Rights, and Sustainable Procurement. Assessments can also be compared through benchmarks by industry or country location.

Benchmark the Deforestation-related risks of Companies:

Global Canopy's Forest 500 ranking[257] identifies the 350 companies and 150 financial institutions with the greatest exposure to tropical deforestation risk and annually assesses them on the strength and implementation of their deforestation and human rights commitments.

WWF's palm,[258] soy,[259] and timber[260] scorecards track the performance of companies operating in these high impact sectors on deforestation, land conversion, human rights records, and other associated supply chain effects.

Developed by the Zoological Society of London (ZSL), the Sustainability Policy Transparency Toolkit (SPOTT)[261] assesses companies that operate in industries with a high risk of deforestation: palm oil, tropical forestry (timber and pulp), and natural rubber. SPOTT annually assesses producers, processors, and traders in these industries against more than 100 sector-specific ESG indicators to benchmark and track their progress over time.

Financial Institution Actors

Benchmarking Investors on Biodiversity and Climate Change:

ShareAction's InvestorHub[262] provides resources to benchmark investors' performance on sustainability-related topics and defines the highest standards for responsible investment. The resources include surveys and rankings on the biggest environmental and social issues that companies are facing, such as safeguarding biodiversity and halting and reversing climate change effects.

Benchmarking of the World's Largest Corporate GHG Emitters on their Net Zero Transitions:

In March 2021, Climate Action 100+ established the Net Zero Company Benchmark[263] to assess the world's largest GHG emitters on their net zero transition progress. The benchmark's methodology is designed to provide greater insight for investors on companies' transition to net zero emissions business models and looks at a number of indicators including short-, medium-, and long-term ambitions, capital allocations, credible disclosures, policy engagement, and others.

B. Building Awareness of Management Actions for Nature and Climate and Obtaining Organizational Buy-in

Business contributions to a nature positive and net zero future are critical to delivering on the goals of the Kunming-Montreal Global Biodiversity Framework and the Paris Agreement.

Building awareness and organizational buy-in for increased focus on managing for nature and climate is important to **create comprehensive corporate strategies, governance systems, and operational processes across all levels of the organization** and throughout the business value chain.

Company Actors

C-Suite Oriented Briefing on the Business Case for Managing for Nature:

The World Economic Forum (WEF) and its partners have prepared a CEO Briefing Series:

- CEO briefing: Investing in a Nature-positive, Net-zero and Equitable Global Economy[264]
- CEO briefing: Leading a Sustainable Land Use Transition[265]
- CEO briefing: Measuring Nature Positive Outcomes from Business Actions[266]

Articulate the Business Case for Nature-positive Management:

The World Economic Forum (WEF), produced the New Nature Economy Report[267] series, showing the relevance of nature loss to boardroom discussions on risks and opportunities. These insights provide pathways for business to be part of the transition to a nature positive economy

The first report in the series, Nature Risk Rising,[268] developed in collaboration with PwC, outlines the business case for nature positive strategies in companies across all industry sectors. The reporting leverages some of the lessons from the Task Force on Climate-related Financial Disclosures' (TCFD) approach to climate risk and suggests how the evolving management of nature-related risks and opportunities may follow as the Taskforce on Nature-related Financial Disclosures (TNFD) continues to develop its tool set.

Financial Institution Actors

Communicate the Importance of Aligning to the Kunming-Montreal Global Biodiversity Framework and Other Global Goals:

The Kunming-Montreal Global Biodiversity Framework (GBF) applies to the financial industry through the intersections of risks, opportunities, dependencies, and impacts. The United Nations Environment Programme Finance Initiative (UNEP FI), Principles for Responsible Investment (PRI), and Finance for Biodiversity (FfB) have co-authored a series called "Stepping on up Biodiversity: what the Kunming-Montreal Global Biodiversity Framework means" for both "responsible investors"[269] and for "responsible banks".[270] A similar publication for the insurance industry is planned for publication in 2023.

Further, financial actors can build an understanding of how applying the (UNEP FI) principles of positive impact finance[271] can create impact aligned with the UN Sustainable Development Goals (SDGs).

B. Building Awareness and Buy-in (continued)

Company Actors

The second report, The Future of Nature and Business,[272] was developed in collaboration with AlphaBeta. This report looks at nature positive transitions and provides key business opportunities across three socioeconomic systems: 1) food, land, and ocean use; 2) infrastructure and the built environment; and 3) energy and extractives.

The UN Environment Programme's (UNEP) Adapt to Survive: Business transformation in a time of uncertainty[273] brief helps organizations understand why it is important to begin their journey towards a nature positive approach to business.

The World Business Council for Sustainable Development's (WBCSD) 2021 guidance, What does nature-positive mean for business? A Practitioners Guide,[274] presents six building-blocks to help businesses understand the required level of ambition and action to achieve a nature positive world by 2030.

Mobilize Internal Buy-in To Set Science-based Targets for Nature:

The Science Based Targets Network's (SBTN) provides an interactive overview[275] that builds the business case for setting science-based targets (SBTs) for nature. To showcase how this has been implemented in practice, the SBTN's Corporate Insights[276] highlight how consumer food companies have conducted freshwater target-setting pilots throughout their value chains.

Set Net-Zero Targets in the Corporate Sector:

The Science Based Targets initiative's (SBTi) Foundations for Science-Based Net-Zero Target Setting in the Corporate Sector[277] is a primer for companies that aims to ensure that corporate net zero targets are translated into action consistent with the goal of achieving net zero by 2050. The report outlines the preliminary foundations for science-based target setting.

Financial Institution Actors

Conceptualize Action in Biodiversity:

Finance for Biodiversity (FfB) published Act Now! The Why and How of Biodiversity Integration by Financial Institutions[278] that instructs users on why they should act, where and how they can begin biodiversity integration into their due diligence and decision-making processes, and what to keep in mind regarding biodiversity metrics and measurement.

The Partnership for Biodiversity Accounting Financials (PBAF) created an introduction to biodiversity impact assessment,[279] which consists of a brief Q&A of key questions financial institutions should ask themselves to prepare for action, including what types of data will be needed for meaningful biodiversity measurement.

ICGN Signals the Need for Financial Institutions to Take Steps to Manage to the New COP15 Global Biodiversity Framework:

The International Corporate Governance Network (ICGN), a leading voice for corporate governance and investor stewardship, released a supportive position statement on the governance and stewardship responsibilities of investors and asset managers[280] to manage their impacts on biodiversity. As further implementation guidance is developed, ICGN recommends that financial institutions take steps now to complete nature-focused materiality assessments, set science-based targets, and develop responsive governance policies and procedures (including measurement and monitoring plans, hiring diverse senior staff with the necessary experience, and aligning executive pay to nature performance metrics).

B. Building Awareness and Buy-in (continued)

Company Actors

Access WBCSD's Rich Resource Set for Business Sustainability:

The World Business Council for Sustainable Development (WBCSD) has developed resources for nature and climate management that explore the latest topics in business management of natural systems, including:

- Natural Climate Solutions Alliance publication[281]
- The Role of Nature-Based Solutions in Strategies for Net-Zero, Nature Positive and Address Inequality[282]
- Technical Paper: The Role of Natural Climate Solutions (NCS) in Reaching Net-Zero[283]

To Understand the Landscape of Management and Measurement Resources and How they Fit Together:

The Impact Management Platform provides a mapping for companies[284] of the available public good resources to support businesses in the management of their sustainability impacts. The maps are interactive and link to summary pages of the guidance and to the resources themselves.

Self-Assess for Strategic Management:

Future-Fit Business Benchmark[285] is a free tool designed to guide businesses in their sustainability journeys. The resource helps companies set ambitions and engage with stakeholders through its system of break-even goals and progress indicators. Specifically, its guidance on aligning to SDG 13, "Climate Action", discusses engaging in climate action through low-carbon procurement and investing, ecosystem restoration, and carbon capture.

Financial Institution Actors

Conceptualize Stronger Joint Action for Nature and Climate through Comprehensive Transition Planning:

The World Wildlife Fund (WWF) developed WWF's Criteria for Credible Climate and Nature Transition Plans for Financial Institutions,[286] which builds upon existing frameworks to present a high-level overview of important considerations for transition planning. The document includes WWF's guiding principles on transition plans; criteria and expectations for transition plans for financial institutions; and recommendations for financial institutions, policymakers, regulators, and other stakeholders to guide transition plan development and standardization.

To Understand the Landscape of Management and Measurement Resources and How they Fit Together:

The Impact Management Platform provides mapping for financial institutions[287] of the available public good resources to support them in the management of their sustainability impacts. The maps are interactive and link to summary pages of the guidance and to the resources themselves.

C. Organizational Governance and Strategy Adaptation for Effective Management for Nature and Climate

Implementing organizational governance and strategy adaptation for effective management for nature and climate involves operationalizing an approach that looks **beyond compliance** and **aligns an organization's near- and long-term goals and practices** with the objective of contributing to a nature positive and net zero economy. It encompasses a comprehensive set of policies, processes, and initiatives aimed at minimizing negative impacts on nature and climate systems while promoting sustainable practices.

To implement effective organizational governance and strategy adaptation for management for nature and climate, **several key elements should be considered**, including leadership and commitment levels, internal policy development, integration into strategy and operations, organizational capacity building, and continuous improvement and innovation.

While undertaking comprehensive transition planning can be an important part of strategy-making, transition planning resources have been grouped separately under Topic D.

Company Actors	Financial Institution Actors
Harnessing and Integrating Results of Natural Capital Assessments into Strategy, Communications, and Business Workflow: The Capital Coalition's (CapsCo) Natural Capital Protocol[288] is a framework that guides organizations in measuring and valuing impacts and dependencies on natural capital, and provides guidance on how to integrate this information holistically into decision-making, strategy, and external disclosure. In the "Take Action" section of the Protocol, the CapsCo provides guidance on how to act on the results of natural capital assessments, how to communicate the results to inform decisions and engage stakeholders, and how to build natural capital assessments into the company's current policies and workflow processes.	**Key Components of a Net Zero Investment Strategy:** The Net Zero Investment Framework 1.0,[289] launched in 2021, sets out components for an effective net zero investment strategy, with recommendations on the key actions and methodologies in relation to governance, targets, strategic asset allocation, asset class alignment, market engagement and policy advocacy. The Framework aims to provide a consistent foundation for asset owners and asset managers to align portfolios to the goals of the Paris Agreement. It originally provided guidance on listed equity, corporate fixed income, sovereign bonds and real estate. In 2023, complementary guidance was released for two additional asset classes: private equity[290] and infrastructure.[291]

C. Governance and Strategy Adaptation (continued)

Company Actors

Compare Global Leading Governance Practices:

The Corporate Climate Responsibility Monitor[292] is a report that highlights leading governance practices and assesses the climate strategies of 25 major global companies. It critically analyzes the extent to which they demonstrate corporate climate leadership, transparency, and integrity through the setting of emission reduction targets, tracking and disclosing emissions and reductions progress, and taking responsibility for unabated emissions through climate contributions or offsetting.

Environmental and Social Governance Resources for Boards:

The World Business Council for Sustainable Development (WBCSD) has an ongoing Governance and Internal Oversight Project,[293] through which a suite of resources for boards was created. These resources are designed to increase awareness and support the integration of environmental and social considerations into boardroom decision-making and existing governance responsibilities.

To help businesses factor climate action into their decision-making processes, WBCSD's Business Climate Resilience: Thriving Through the Transformation[294] outlines key steps that companies can take to build business climate resilience.

The Exponential Roadmap Initiative's 1.5°C Business Playbook[295] serves as a handbook for CEOs, board members, managers, and employees on how to actionably align with the 1.5°C climate action goal outlined in the Paris Agreement. This resource is compatible with the Race to Zero Campaign Framework, the GHG Protocol, SBTi, CDP, and others.

Financial Institution Actors

The Net Zero Standard for Banks,[296] which complements the Net Zero Investment Framework, sets out investor expectations for banks on the transition to net zero around areas such as decarbonization strategy and emissions disclosure. It focuses on banks' financed and facilitated emissions, rather than emissions associated with their operations.

The Investor Climate Action Plans (ICAPS) Expectations Ladder[297] is described as a "self-assessment checklist" that supports investors in acting for climate outcomes through actions, such as assessing their approach for managing climate risks and opportunities, publishing an ICAP and aligning it to their strategies, plans, and disclosures, as well as communicating these efforts to stakeholders. This guidance encourages several actions from target setting and strategy creation to investor statements, emissions reporting, portfolio assessment, and more. These encouraged actions are categorized into four focus areas (investment, corporate engagement, policy advocacy, and investor disclosure) and a cross-cutting theme (governance).

Maintaining Investment Alignment with Climate Targets:

The Glasgow Financial Alliance for Net Zero's (GFANZ) Measuring Portfolio Alignment: Driving Enhancement, Convergence, and Adoption[298] provides a practitioner perspective for measuring the alignment of investment, lending, and underwriting activities with the Paris Agreement and 2050 global net zero objectives. It also includes case studies on how portfolio alignment methods and metrics are used today, thereby helping financial institutions ensure that their transition plans and allocations are on track to meet their established net zero targets.

The Net Zero Banking Assessment Framework[299] contains a set of indicators that can be used to assess banks' performance in managing the low-carbon transition and mitigating the impacts of climate change. The Framework allows banks to align their business with investor expectations and the goals of the Paris Agreement.

C. Governance and Strategy Adaptation (continued)

Company Actors

Sector-specific Roadmaps to Accelerate Nature-Positive Action:

The World Business Council for Sustainable Development (WBCSD)'s Roadmaps to Nature Positive provides foundational guidance for all businesses[300] to define and improve ambitious strategies, investments and transition plans aligned with nature positive outcomes. In addition, WBCSD has also developed systems roadmaps that offer specific in-depth analysis for four high impact sectors on nature: Agri-food,[301] Forest Products,[302] Built Environment,[303] and Energy.[304] Using these roadmaps can position companies to better manage nature-related risks, prepare for incoming policy and regulatory requirements, identify priority actions to reduce negative impacts, and unlock value creation opportunities across their supply chains.

The University of Cambridge Institute for Sustainability Leadership has developed a primer for the fashion industry on how to develop a corporate biodiversity strategy[305] that can be used and adapted by companies in any sector.

Comprehensive Resource Navigator to Support Companies in their Freshwater Journey for Action:

The Freshwater Accountability Navigator (FAN),[306] which is being developed by the World Business Council for Sustainable Development (WBCSD) and in collaboration with Quantis, provides clear guidance on what is expected of companies to put in place to set meaningful water-related action. Organized along the ACT-D Framework, the FAN summarizes key water-related frameworks and tools that are relevant to a company's water journey. The FAN will be a publicly available and interactive guide that is expected to be released in early 2024.

Financial Institution Actors

Navigating the Integration of Climate and Nature Reporting Disclosures:

CDP released a report in 2022 detailing a comprehensive cross-thematic disclosure analysis covering trends in financial institutions' climate and nature reporting practices and highlighting the overall lag in industry nature reporting. Titled Nature in Green Finance: Bridging the gap in environmental reporting,[307] this resource focuses on governance and strategy implementation alongside other themes such as risk management.

Building a Roadmap for Management of Impact in the Marine Realm:

The United Nations Environment Programme Finance Initiative (UNEP FI) developed a practical guide for financial institutions to support a sustainable ocean recovery, which consists of a market-first, practical toolkit for financial institutions to pivot their activities towards financing a sustainable blue economy. Turning the Tide: How to Finance a Sustainable Ocean Recovery[308] is designed for banks, insurers, and investors, and outlines how to avoid and mitigate environmental and social risks and impacts when providing capital to companies or projects within the blue economy. The guide also includes easy-to-follow recommendations for approaching financial activity in ocean sectors, supporting financial decision-makers in taking immediate action, and providing information to better understand which client activities represent best practice and which should be challenged or avoided.

D. Transition Planning as a Tool for Setting Interim and Longer-term Organizational Goals, and Holistic Impact Measurement

Transition plans are **timebound, comprehensive action plans** that describe how a business intends to reach certain goals, such as reducing carbon emissions, in line with national and international targets, like those of the Paris Agreement (WWF definition).[309] These plans detail business targets (often inclusive of near- and medium-term targets that will achieve longer-term goals), supported by a series of actions to achieve them across the business' operations, value chains, and portfolios.

To date, transition plans have been focused mainly on climate change risks, where businesses describe how they will manage climate risks and take action to reach their climate targets. Given the interrelationships of risks related to the climate and nature loss challenges, and the potential to leverage nature-based solutions and ecosystem services to mitigate climate damage and capture value creation opportunities, it makes good business sense to bring planning and solutions for climate change and nature degradation together under a single, **integrated transition plan.**

A growing number of multi-stakeholder initiatives have **started to develop guidance for credible, integrated transition planning.** As jurisdictions globally consider making transition planning disclosure mandatory, it is increasingly important for organizations to familiarize themselves with these resources and planning opportunities.

Company Actors	Financial Institution Actors
Integrating Nature into Corporate Transition Planning: Given the interdependencies between nature loss and climate, the World Wildlife Fund (WWF) developed a guidance paper called Nature in Transition Plans[310] which outlines how companies can consider nature and climate together in transition planning to support global decarbonization and nature positive goals. The resource includes an overview of tools that may help support transition planning for nature and climate, as well as steps for integrating nature into transition plans that build on existing Glasgow Financial Alliance for Net Zero (GFANZ) guidance.	**Building on Established Climate Frameworks to Align Net Zero Strategies with Transition Strategies for Nature:** The Integrated Risk and Opportunity Framework,[311] developed by Nature Finance, is a tool that financial institutions can use to structure their approach to transition to both a net zero and nature positive world. The framework enables financial institutions to bring together existing approaches to assess, report, and act on climate- and nature-related risks and opportunities in an integrated way. Financial institutions can account for the material interactions between climate and nature, ensure their approaches to both transitions are aligned and accurate, and better manage their portfolios. The framework is flexible for simpler or more complex levels of analysis, and can be adapted over time as organizational capacity, data availability, and understanding of the integrated risks and opportunities develop.

D. Transition Planning (continued)

Company Actors	Financial Institution Actors
Incorporating a Climate Transition Plan into the Overall Business Strategy: The Transition Plan Taskforce (TPT), established in April 2022, works to build on existing international disclosure instruments to create a gold standard for private sector climate transition plans. Its Disclosure Framework,[312] which details steps companies can take to prepare and disclose a transition plan, including baselining, setting levels of ambition, developing an action plan, and ensuring accountability for delivery was released after public consultation in October 2023. The organization also published additional supporting documentation, such as mappings between the TPT Disclosure Framework and the TCFD, IFRS S2, and the ESRS.[313] **Investor Expectations of Corporate Transition Plans:** The Glasgow Financial Alliance for Net Zero (GFANZ) provides guidance for real-economy companies,[314] of all sizes, in developing net zero transition plans. Additionally, it brings consistency on metrics and data points required by financial institutions to evaluate the progress of companies' transition plans. The report aims to help companies understand the growing expectations of financial institutions that are aligning their investment strategies with net zero. The Institutional Investors Group on Climate Change's (IIGCC) corporate transition plan guidance[315] defines the key components of a net zero transition plan, relevant to companies of different sizes, sectors and geographies. It is designed to map onto the requirements of investors implementing the Net Zero Investment Framework. Both corporate and investor assessment frameworks need to be aligned to streamline information flow and optimize capital allocation during the transition.	**End-to-End Recommendations for Operationalizing Net Zero Commitments:** The Glasgow Financial Alliance for Net Zero (GFANZ) works to support financial institutions in turning their net zero commitments into action by publishing voluntary guidance and tools. Its Financial Institution Net-zero Transition Plans[316] outlines pan-sector recommendations for financial institutions to operationalize their net zero commitments, including implementation strategies, stakeholder engagement strategies, governance, and metrics and targets. GFANZ's Guidance on Use of Sectoral Pathways for Financial Institutions[317] introduces a framework to evaluate and select sectoral pathways suitable for their net zero transition planning processes and implementation efforts. Sectoral Pathways help financial institutions identify where investment can enable the transition, align their portfolios to net zero, and facilitate engagement with clients and portfolio companies to support their transition. **Assessing Transition Risk in Diversified Mining's Net Zero Journey:** Climate Action 100+ released the first Net Zero Standard for Diversified Mining,[318] which provides investors with the necessary metrics to assess mining companies' significant transition risks as they move towards net zero goals. This resource is being piloted to create a final metrics list and will eventually be used to assess mining companies' performance, but currently is also serving as a helpful tool for companies to better plan for the net zero transition to reduce levels of risk exposure.

E. Stakeholder Engagement for Equitable Natural Resource Access and Benefit

For many companies and financial institutions, **the greatest impacts on nature and climate systems will take place within its extended value chain.** Stakeholder engagement is critical for organizations to understand their **holistic impact**, **transparently communicate** about their operational plans, and ultimately implement business strategies that **create positive outcomes for nature, climate, and society.** Stakeholder groups can include surrounding local communities and indigenous peoples, supplier networks, employees, investors, end-consumers, and other groups.

Businesses are **not solely affected by changes** to nature and climate systems. In line with current investment norms, businesses should continue to **assess risks to stakeholder communities in their value chains** and look to identify opportunities to become leading stewards for management practices that center positive and just outcomes for both natural systems and society.

The 2022 Kunming-Montreal Global Biodiversity Framework places particular importance on **respecting the rights of indigenous and local communities** and counts this as a critical effort central to nature action.

Company Actors

Engaging with Stakeholders as a Critical and Continuous Component of Management for Nature and Climate:

The Science Based Targets Network (SBTN) released its Stakeholder Engagement Guidance (v0.1) in 2023.[319] This guidance accompanies all steps of the SBTN framework (Steps 1-5), and provides principles and frameworks to guide organizations in the practice of stakeholder engagement and highlights:

- Why organizations should engage with stakeholders when setting targets
- How to identify vital stakeholders
- How and when to engage with stakeholders
- How to evaluate effective relationships with stakeholders

The Taskforce on Nature-Related Financial Disclosures' (TNFD) Guidance on Engagement with Indigenous Peoples, Local Communities and Affected Stakeholders[320] outlines the foundation of international standards, guidelines, and frameworks – in particular the UN Guiding Principles on Business and Human Rights (mentioned further below in this table). It also provides guidance for organizations on engagement with Indigenous Peoples, Local Communities and affected stakeholders when identifying, assessing, and managing their nature-related dependencies, impacts, risks, and opportunities.

Financial Institution Actors

Prominent Initiatives for Global Investors Focused on Targeted Engagement to Drive Business Ambition and Action on Nature and Climate:

Climate Action 100+[321] is a global investor engagement initiative that drives the world's highest GHG emitters to take action to fight climate change. In June 2023, the initiative announced the launch of its second phase featuring an enhanced investor engagement model. Nature Action 100[322] has complementary aims to Climate Action 100+, mobilizing institutional investors to set expectations for businesses to act on nature and biodiversity loss.

Nature Action 100[323] (NA100) supports institutional investors to engage with companies on tackling nature and biodiversity loss. As of October 2023, 191 investors with $25.7 trillion in assets under management or advice were participating in the initiative. Under NA100, investors engage with 100 companies in key sectors that are deemed to be systemically important in reversing nature and biodiversity loss by 2030, including biotechnology and pharmaceuticals, chemicals, food and beverage retail, metals and mining, and others. The initiative's Secretariat and Corporate Engagement Working Group is co-led by Ceres and the Institutional Investors Group on Climate Change (IIGCC. The initiative's Technical Advisory Group is co-led by the Finance for Biodiversity Foundation (FfB) and Planet Tracker.

E. Stakeholder Engagement (continued)

Company Actors

AccountAbility's Stakeholder Engagement Standard[324] (AA1000SES, 2015) provides a generally applicable framework for assessing, designing, implementing, and communicating an integrated approach to stakeholder engagement. The standard can be used by organizations of all profiles and sizes, and establishes the requirements for high-quality stakeholder engagement, supported by guidance that covers:

- How to establish the necessary commitment to stakeholder engagement,
- How to ensure it is fully integrated into strategy and operations, and
- How to define the purpose, scope, and corresponding stakeholders of an engagement.

Alignment to UNGC Principles-driven Conduct for Responsible Business:

The United Nations Global Compact's (UNGC) 10 Principles[325] outline how companies should conduct operations to meet fundamental responsibilities in the areas of human rights, labor, the environment, and anti-corruption (Principles 7–9 deal with the environment specifically). Companies can become signatories to the compact, which applies across all geographies of a company's operations. The Principles draw on several international declarations and other authoritative documents.

The IUCN's 10 Steps for Inclusive Natural Resource Access:

The International Union for Conservation of Nature (IUCN)'s Natural Resource Governance Framework (NRGF)[326] is a comprehensive framework that outlines best practices, standards, and guidance for organizations to evaluate and establish or improve their natural resource governance. The Natural Resource Governance Framework (NRGF) includes key best-practice elements of effective and equitable governance relevant to conservation and natural resource management and is designed to serve a range of applications and diverse contexts.

Financial Institution Actors

Engaging with Companies on Biodiversity:

The Finance for Biodiversity (Ffb) Foundation's Guide for Engagement With Companies[327] outlines key considerations for engaging with companies on biodiversity impacts and dependencies, how to prioritize and structure these engagements for positive outcomes, and how to use voting as a tool to promote biodiversity stewardship. The guide's Annex 2[328] provides concrete templates for company engagement.

Foundational Engagement Principles for Project Finance and Emerging Markets Investment:

The International Finance Corporation's handbook, Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets,[329] provides a comprehensive overview of good practices for stakeholder engagement. The handbook focuses on defining stakeholder groups that are "external" to the core operation of the business, such as affected communities, local government authorities, non-governmental and civil society organizations, local institutions and other interested or affected parties. The handbook details key concepts and principles of stakeholder engagement, vetted practices, and tools to support the delivery of effective stakeholder engagement. The handbook also indicates how these principles, practices, and tools fit within different phases of the project cycle.

Engaging with Companies on Water:

The Valuing Water Finance Initiative[330] is a new global investor-led effort to engage companies with a higher impact water footprint to value and act on water as a financial risk and to drive the necessary large-scale change to better protect water systems. The initiative calls on companies to meet Corporate Expectations for Valuing Water[331] that align with the United Nations' 2030 Sustainable Development Goal for Water (SDG 6) and the actions laid out in the Ceres Roadmap 2030.

E. Stakeholder Engagement (continued)	
Company Actors	**Financial Institution Actors**
A Government-backed Resource for Setting Objectives and Laying Out Principles and Business Standards: The Organization for Economic Cooperation and Development (OECD) published Guidelines for Multinational Enterprises[332] in 2011 that is still widely used. This is an international instrument on responsible business that is often referenced by regulators in policymaking discussions. It covers a range of topics such as human rights, labor relations, employment practices, public health and safety, bribery and extortion, science and technology and taxation. The OECD has also developed a due diligence guide[333] (last updated in May 2018) to serve as practical support for companies implementing the OECD Guidelines. **A UN Resource for Business Actions on Human Rights:** The United Nations Guiding Principles on Business and Human Rights[334] are a set of guidelines and instructions for companies in how to prevent, address, and remedy human rights abuses that can occur in the course of business operations. This resource can be used to create strategy, establish governance systems around human rights, operationalize strong, continuous engagement mechanisms and grievance redressal systems, set organizational targets, monitor conditions, and transparently disclose results. **A Stakeholder Engagement Toolkit Created by a High Impact Industry Leadership Organization:** The International Council on Mining and Metals (ICMM) created a toolkit[335] with step-by-step guidelines for mining companies wanting to understand, measure, and monitor key drivers of reputation among all stakeholder groups. **Engaging Suppliers on the Decarbonization Journey:** The World Wildlife Fund (WWF), on behalf of the SBTi, developed a guide that outlines how to develop and achieve Scope 3 supplier engagement targets.[336] It supports companies in the evaluation and setting of supplier engagement targets, as well as the implementation of related initiatives to achieve those goals. Exponential Roadmap Initiative's 1.5ºC Supplier Engagement Guide[337] provides a framework for companies to commit to reducing their GHG emissions, engage with suppliers, and report on annual progress to achieve the Paris Agreement's 1.5ºC goal. ERI's guide is aligned with the Race to Zero Campaign.	–

Section 07

SUMMARIES OF HIGH IMPACT RESOURCES, FRAMEWORKS, AND METHODOLOGIES

Sub-sections

Management steps for nature and climate build on each other and require continuous monitoring, assessment, and recalibration. Managing for nature and climate outcomes can also go beyond target setting and should be looked at holistically. For instance, organizations should consider how they can take ambitious and comprehensive action for nature and climate to mitigate and reverse adverse impacts. They can also look to join industry coalitions that coordinate efforts to advance nature and climate action and can look for opportunities to contribute to policy and advocacy discussions.

The framework summaries included in this section present holistic approaches to continuous action, as well as additional ways to adopt a dynamic, leadership-oriented posture as change agents in bringing about positive business management and advocacy paradigm shifts for the benefit of nature and climate systems.

ACT-D HIGH-LEVEL BUSINESS ACTIONS ON NATURE FRAMEWORK

Created by the Capitals Coalition, Business for Nature, World Business Council for Sustainable Development (WBCSD), Taskforce for Nature-related Financial Disclosures (TNFD), Science Based Targets Network (SBTN), World Economic Forum (WEF), and World Wildlife Fund (WWF), ACT-D ("Assess, Commit, Transform, and Disclose")[338] is a holistic framework that provides high-level steps for businesses to take for action on nature:

1. **Assess:** Measure, value, and prioritize the impacts and dependencies that the business has on nature and identify the most pressing items to address.
2. **Commit:** Create science-based targets for the business.
3. **Transform:** Avoid and reduce impacts of the business, regenerate and restore impacts that cannot be avoided, update business strategies and models accordingly to support these efforts, and advocate for policy ambition.
4. **Disclose:** Monitor how the business is performing against these efforts and disclose this information publicly (throughout).

These steps are represented in a circular graphic to highlight that businesses must continuously act on nature and improve existing efforts. Within each framework step, specific sub-actions are outlined along with supporting tools and resources that can help organizations in these efforts. WEF, the Capitals Coalition, WBCSD, SBTN, Business for Nature, TNFD, and WWF also offer other resources[339] such as case studies demonstrating businesses putting ACT-D into practice.

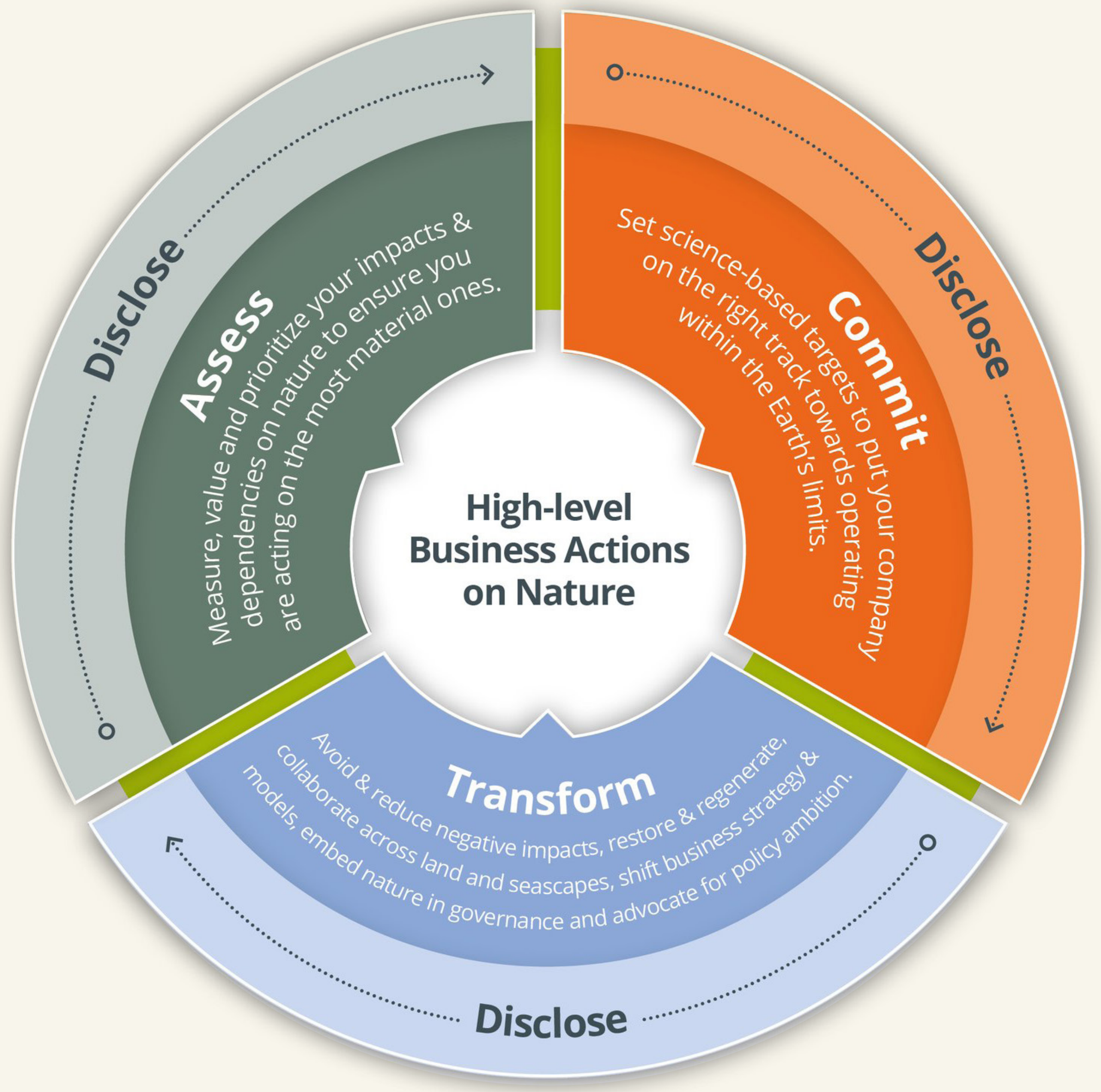

Fig. 11 The ACT-D Framework

THE HIGH-LEVEL EXPERT GROUP (HLEG) ON THE NET ZERO EMISSIONS COMMITMENTS OF NON-STATE ENTITIES (EXPERT GROUP)

Established in 2022 by the United Nations Secretary General, the High-Level Expert Group[340] (HLEG) on the Net Zero Emissions Commitments of Non-State Entities works to support net zero emissions pledges by non-State entities, such as investors, cities, businesses, etc. The Expert Group provides a roadmap to define and achieve net zero targets that is based on existing standard setting frameworks for net zero pledges.

Launched at the COP 27 UN Climate Conference, its Integrity Matters: Net Zero commitments by Businesses, Financial Institutions, Cities and Regions[341] report provides five guiding principles and 10 recommendations for non-state entities to prevent "greenwashing" and ensure meaningful net zero commitments and organizational transparency and accountability.

The 5 Principles:

1. Ambition which delivers significant near- and medium-term emissions reductions on a path to achieving net zero globally by 2050
2. Demonstrated integrity by aligning commitments with actions and investments
3. Radical transparency in sharing relevant, non-competitive, comparable data on plans and progress
4. Established credibility through plans based in science and third-party accountability
5. Demonstrated commitment to both equity and justice in all actions

The 10 Recommendations:

01. Announcing a Net Zero Pledge:

a. Pledge by entire entity, made publicly by leadership
b. Reflective of city/region/corporation’s share of needed global climate mitigation

02. Setting Net Zero Targets:

a. Set interim targets every five years, paving a path towards carbon neutrality
b. Act urgently and encompass the local value chain of business/city

03. Using Voluntary Credits:

a. Non-state actors must prioritize urgent/deep reduction of emissions across value chain
b. High integrity carbon credits in voluntary markets should be used for beyond value chain mitigation — cannot be counted toward a non-state actor’s interim emission reductions

04. Creating a Transition Plan:

a. Publicly share comprehensive net zero transition plans

05. Phasing out of Fossil Fuels and Scaling Up Renewable Energy:

a. City, region, finance, and business net zero plans must not support new supply of fossil fuels

06. Aligning Lobbying and Advocacy:

a. Non-state actors must lobby for positive climate action and not against it

07. People and Nature in the Just Transition:

a. By 2025, businesses, cities and regions with significant land use emissions must clean up their businesses practices
b. Financial institutions should not fund businesses linked to deforestation and should eliminate agricultural commodity-driven deforestation from their portfolios by 2025

08. Increasing Transparency and Accountability:

a. Non-state actors must report their progress publicly every year
b. Reports should be independently verified and added to the UNFCCC Global Climate Action Portal

09. Investing in Just Transitions:

a. Financial institutions and multinational corporations working with governments must consistently take more risks and set targets to scale their investments in the clean energy transition in developing countries

10. Accelerating the Road to Regulation:

a. Regulators should develop standards starting with high-impact corporate emitters
b. Countries should launch a new task force on net zero regulation to convene regulators across borders and across regulatory domains

RACE TO ZERO CAMPAIGN

To ensure integrity and accelerate meaningful progress towards halving global emissions by 2030, the Race to Zero Campaign established minimum criteria for robust net zero commitments, where nature is also integrated into Race to Zero's leadership criteria. The Race to Zero criteria, known as the 5 P's (Pledge, Plan, Proceed, Publish, and Persuade),[342] include the "starting line" minimum requirement as well as leadership practices to strive for:

a) "Starting line" criteria denote common procedural requirements that all individual members must meet to both join and remain in the campaign. These criteria apply to members who join Race to Zero through its Partners' initiatives.[343] The Partners are responsible for managing their respective members' operationalization and fulfilment of these criteria.

b) "Leadership practices" exemplify progressive pathways that guide organizations towards a net zero economy. Many of these practices will become starting line criteria over time (i.e., minimum requirements), and Partners and their Members are encouraged to adopt as many leadership practices as possible.

The "Starting Line" Criteria:

1. **Pledge:** Pledge to reach net zero no later than 2050 and contribute to halving emissions by 2030.
2. **Plan:** Publicly disclose a transition plan, including actions by 2030.
3. **Proceed:** Take action to achieve net zero, consistent with your targets and contribute to sector breakthroughs.
4. **Publish:** Publicly report progress on your targets and actions, feeding into the United Nations Framework Convention on Climate Change (UNFCCC) Global Climate Action Portal.
5. **Persuade:** Align policy and engagement, including membership associations, with halving emissions by 2030 and achieving net zero by 2050.

The outlined criteria are supported by an Interpretation Guide[344] that provides additional guidance on how the Expert Peer Review Group[xix] interprets the Race to Zero criteria, and how Partners and their Members can expect to implement these criteria. As the knowledge and practice of working towards net zero continues to develop, Race to Zero has committed to periodically strengthen, clarify, and update these criteria documents.

Race to Zero's 5th P (Persuade) Handbook[345] provides guidance to businesses and financial institutions on integrating the "5th P" into their plans, frameworks, and activities. The Handbook includes key recommendations and resources that support non-state actors in aligning their advocacy, policy, and engagement with net zero goals such as the Responsible Policy Engagement Framework,[346] Global Standard on Responsible Climate Lobbying,[347] and the AAA Framework for Climate Policy Leadership.[348]

xix The Expert Peer Review Group (EPRG) comprises over 20 scientific and technical experts and practitioners, who make recommendations to the Climate Champions Team on Race to Zero's criteria, and Partner initiatives.

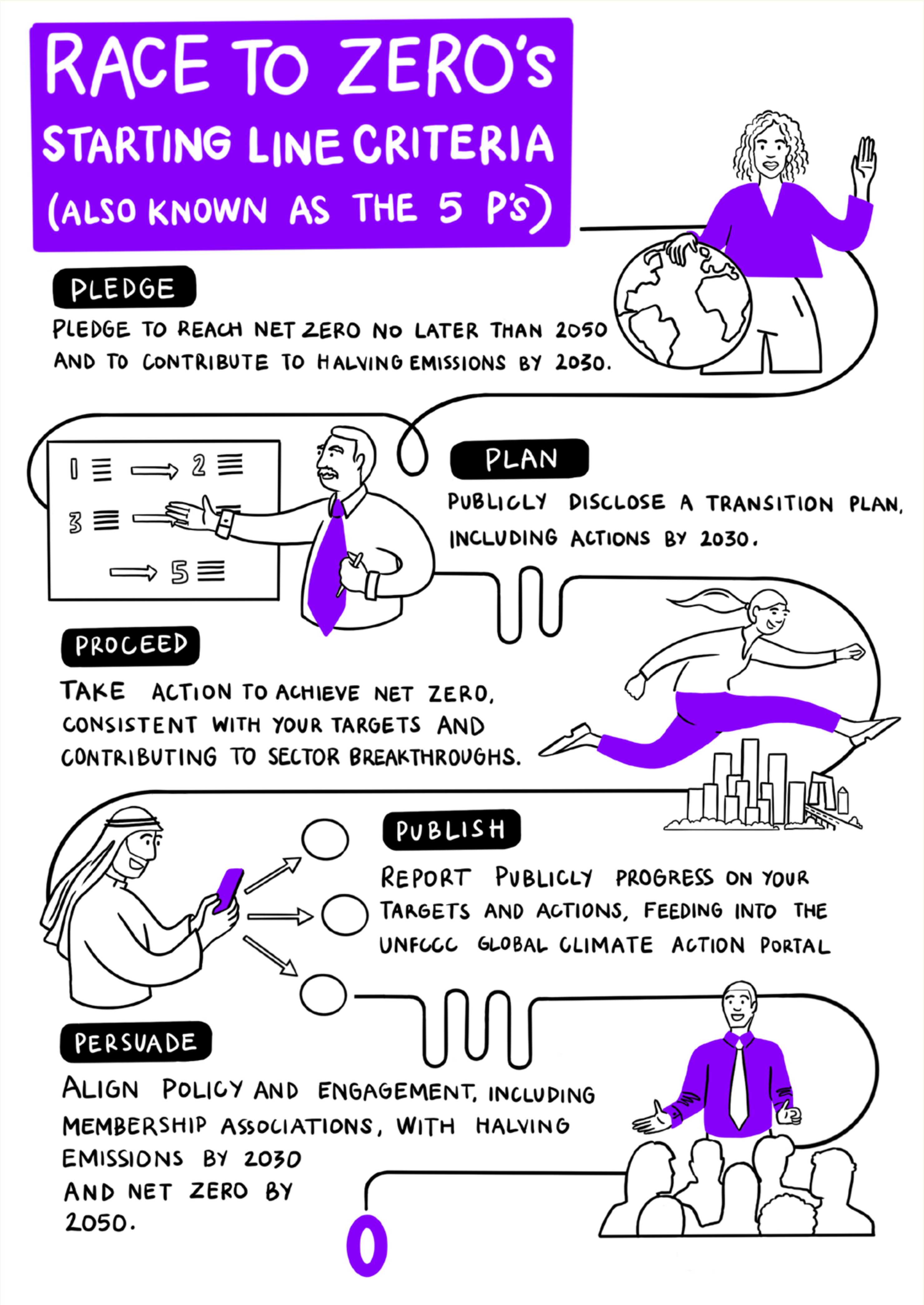

Figure 12: The Race to Zero Campaign's 5 Ps Framework

ISO (INTERNATIONAL ORGANIZATION FOR STANDARDIZATION) NET ZERO GUIDELINES

Launched at COP27, the Net Zero Guidelines[349] were established to tackle the fragmented net zero governance landscape. The guidelines provide a common reference and global basis for understanding and planning for a net zero future for state, regional, city and organizational level actors. These guidelines set the basis for:

- The definition of "net zero" and related terms (e.g., GHG removals, offsetting, value chain)
- High-level principles for all actors who want to achieve climate neutrality
- Guidance on urgent action (achieving net zero by 2050)
- Transparent communication, credible claims, and consistent reporting on emissions, reductions, and removals

The 10 Net Zero guiding principles serve as the foundation for achieving net zero GHG emissions for organizations at every level, using a standard, framework, or voluntary initiative:

1. **Alignment:** Align organizations on common climate action approaches to support meeting the goals of the Paris Agreement and any subsequent global agreement.
2. **Urgency:** Immediate and ongoing action to achieve net zero GHG emissions as early as possible.
3. **Ambition:** Organizations with higher capacity, historical responsibility or high current emissions take additional and ambitious action to achieve net zero emissions.
4. **Prioritization:** Reduction of GHG emissions is prioritized for interim and long-term net zero targets.
5. **Decision-making based on scientific evidence and indigenous knowledge:** Decision-making relating to the achievement of net zero by or before 2050 is based on current scientific evidence and indigenous and local knowledge.
6. **Risk-based approach:** Risks related to climate change mitigation actions are assessed and controls are put in place to address them.
7. **Credibility:** Mitigation actions can be demonstrated to be of high quality, prioritizing significant emissions reductions across all sectors, and are verifiable using internationally accepted accounting standards.
8. **Equity and justice:** Targets and actions align with the United Nations Sustainable Development Goals (SDGs) to support equity and global transition to a net zero economy.
9. **Transparency, integrity, and accountability:** Information relating to current emissions status, baseline, targets, and plans are comprehensive and publicly reported.
10. **Achievement and continuation of net zero:** Action is taken at all levels in accordance with the principles of equity and justice.

SCIENCE BASED TARGETS NETWORK'S 5-STEP SCIENCE-BASED TARGET-SETTING FRAMEWORK FOR NATURE

Building on the Science Based Targets Network (SBTN)'s 2020 Science-Based Targets for Nature Initial Guidance for Business,[350] the SBTN released the following technical guidance[351] in May 2023 that covers the first three steps of the SBTN's 5-step science-based target-setting framework for nature.

SBTN considers three natural realms in its target-setting guidance: Freshwater, Land, and Oceans. Within these realms, the SBTN also protects and supports Biodiversity.

- **Step 1** (**Assess**) technical guidance (v1.0) applies to the **Freshwater**, **Land**, and **Oceans** realms.
- **Step 2** (**Interpret & Prioritize**) technical guidance (v1.0) applies to the **Freshwater**, **Land**, and **Oceans** realms.
- **Step 3** (**Measure, Set & Disclose**) technical guidance currently enables corporate target setting for the **Freshwater** and **Land** realms.
  - The current technical guidance (v1.0) for **Freshwater**[352] covers water quantity and freshwater quality.
  - The current technical guidance (v0.3) for **Land**[353] includes three targets: no conversion of natural ecosystems, land footprint reduction, and landscape engagement.

The SBTN also released a paper[354] that discusses how **Biodiversity** is addressed by science-based targets for nature and outlines related key gaps in current methods.

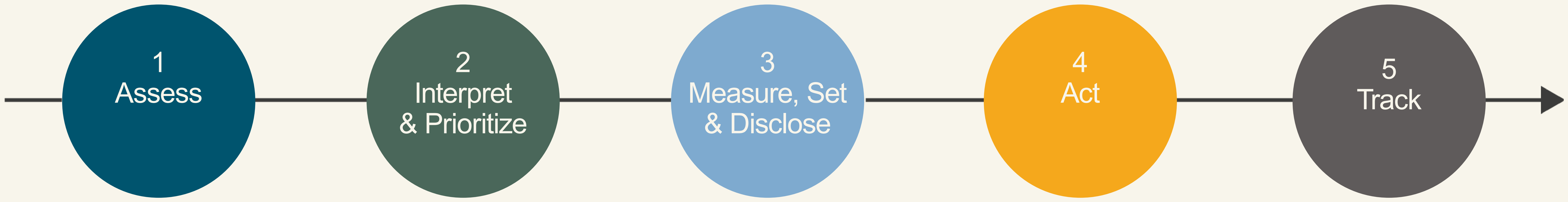

Figure 13: SBTN's 5 steps to set Science-Based Targets for Nature

To further support companies in this work, the SBTN has also released Stakeholder Engagement Guidance (v0.1)[355] and plans to release a Corporate Manual and a Data Readiness Guide later in 2023. It is expected that the SBTN will continue to update existing versions of the technical guidance and complementary resources listed above, in addition to releasing complete technical guidance for all realms inclusive of the five steps in the science-based target-setting framework for nature – including **Step 4 (Act)** and **Step 5 (Track)**. Finally, while the SBTN does plan to create guidance for financial sector actors, they do not currently outline a timeline for this effort.

As part of Step 4, the SBTN created the Action Framework (AR3T)[356] – "Avoid", "Reduce", "Regenerate and Restore", and "Transform." AR3T includes actions to avoid future nature impacts, reduce current impacts, regenerate and restore ecosystems, and transform the systems in which companies are embedded. The AR3T Action Framework is built on the well-established mitigation and conservation hierarchies, which call for the prevention of new impacts on nature as well as investments in its restoration and regeneration. Alignment with the framework requires that companies combine all of these types of action, with investments in positive action made credible by sufficient effort put towards mitigatory measures.

This work complements the existing methodology for science-based climate targets from the Science Based Targets initiative (SBTi), bridging the gap between preserving nature and meeting the 1.5°C global warming target.

Note that there is no SBTN summary in the "Summaries of Key Disclosure Instruments" section of this navigator as disclosure guidance has not yet been released by the SBTN.

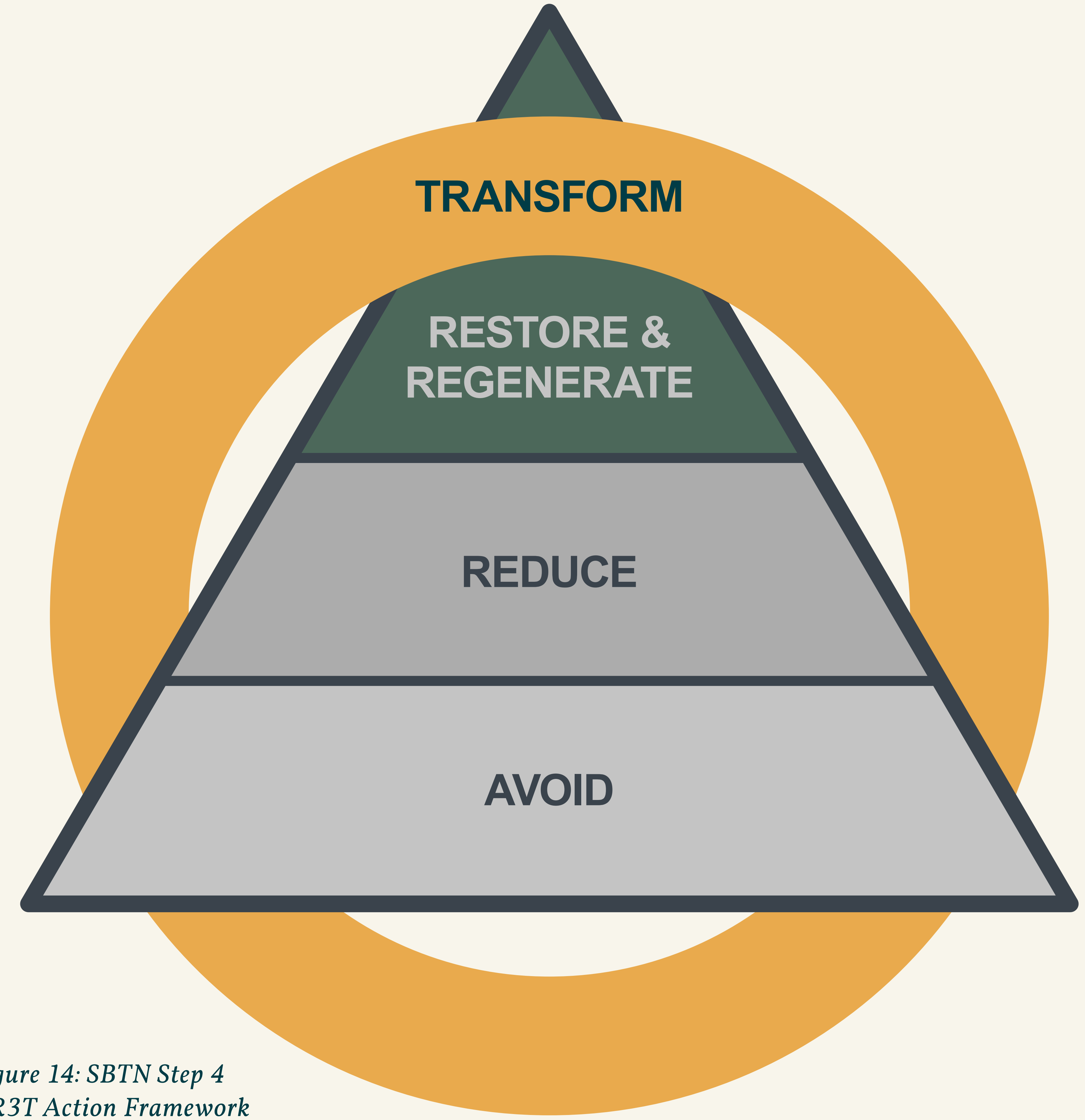

Figure 14: SBTN Step 4 AR3T Action Framework

TASKFORCE ON NATURE-RELATED FINANCIAL DISCLOSURES' RECOMMENDATIONS AND GUIDANCE

In September 2023, the Taskforce on Nature-Related Financial Disclosure (TNFD) released a risk management and disclosure framework aiming to enable organizations to report and act on evolving nature-related risks. The TNFD framework consists of a set of disclosure recommendations[357] and additional guidance and is consistent with the approach of the Task Force on Climate-related Financial Disclosures (TCFD) Recommendations,[358] the International Sustainability Standards Board's (ISSB) International Financial Reporting Standards (IFRS), and the Global Reporting Initiative's (GRI) global sustainability standards.[359]

The TNFD disclosure recommendations[360] also include conceptual foundations for nature-related disclosures and a set of general requirements and are structured around the four recommendation pillars of governance, strategy, risk and impact management, and metrics and targets. The recommendations of the TNFD were designed to meet corporate reporting requirements across jurisdictions and to align with the global policy goals outlined in the Kunming-Montreal Global Biodiversity Framework[361] of 2022.

To support its disclosure recommendations, the TNFD has developed a suite of resources[362] and signposts to several supporting tools:

- A foundational resource[363] for getting started with the TNFD Recommendations;
- End-to-end guidance[364] on the TNFD Recommendations, their scope, and application;
- Guidance on identifying and assessing nature-related dependencies, impacts, risks and opportunities (the LEAP approach);[365]
- Specific guidance on the TNFD Recommendations adoption for financial institutions,[366] including banks, asset managers, insurance companies, development finance institutions, and others;
- Guidance on science-based target setting for nature,[367] developed in consultation with the Science Based Targets Network;
- Draft metrics for specific sectors[368] in high impact industries;
- Guidance on engagement[369] with Indigenous Peoples, Local Communities and affected stakeholders;
- Guidance for businesses to explore and contextualize potential impacts, dependencies, risks, and opportunities related to specific biomes[370] where they might operate or hold investments;
- Guidance on conducting scenario analysis for nature;[371]
- The TNFD's proposed approach for considering the upstream and downstream elements of value chains;[372] and
- A Knowledge Hub[373] for capacity building resources for organizations to enhance their understanding of evolving nature-related issues, access market insights, learning materials, and register for the TNFD webinars and events.

The TNFD guidance to support companies and financial institutions with integrated assessment is called "LEAP".[374]

LEAP consists of four phases:

- **Locate** your interface with nature;
- **Evaluate** your dependencies and impacts;
- **Assess** your risks and opportunities; and
- **Prepare** to respond to nature-related risks and opportunities and to report on your material nature-related issues.

LEAP is a **voluntary approach** intended to support nature-related impact, dependency, risk, and opportunity assessments and is **not a mandated or required process step to adhere to the TNFD's disclosure recommendations**. Not everything that may be identified and evaluated by businesses using the LEAP approach is recommended for disclosure when adopting the TNFD's disclosure recommendations and core metrics.[375]

The TNFD intends to update the LEAP guidance as and when needed with additional insights and refinements.

GUIDE ON BIODIVERSITY MEASUREMENT APPROACHES

The Finance for Biodiversity Foundation (FfB), in collaboration with the EU Business and Biodiversity Platform and its Finance and Biodiversity Community, developed a comprehensive guide on biodiversity measurement approaches,[376] that provides a helpful orientation for financial institutions looking to measure and manage biodiversity impacts and externalities in their portfolios. Updates to the guide are annually maintained by the partnering organizations, with the most recent refresh publication delivered in July 2022.

The guide provides an overview of seven biodiversity footprinting and measurement tools (e.g., geospatial analysis) that a) are relevant to the financial sector, b) include the main drivers of biodiversity loss, and c) are scientifically robust. The overview highlights the strengths and limitations of each tool, aiming to help financial institutions identify those that fit their organizational needs. The measurement approaches included in the guide are:

- Biodiversity Footprint Financial Institutions (BFFI)[377]
- BIA-GBS – Biodiversity Impact Analytics powered by the Global Biodiversity Score (BIA-GBS)[378]
- Corporate Biodiversity Footprint (CBF)[379]
- Global Biodiversity Score for Financial Institutions (GBSFI)[380]
- Global Impact Database, Biodiversity Impact Data (GID)[381]
- Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE),[382] and
- Integrated Biodiversity Assessment Tool (IBAT).[383]

The measurement guide also covers financial sector case study applications, data sources and models, and data collection methodologies, and describes why financial institutions have chosen to use these measurement approaches. The measurement guide also covers measuring marine biodiversity specifically, as it can be a particularly challenging natural realm for estimation. Finally, the measurement guide discusses portfolio exposures to material ocean impacts and dependencies (including in particularly sensitive marine zones) as well as how to screen for marine biodiversity exposure risk in key sectors and activities.

NATURAL CAPITAL PROTOCOL

The Capitals Coalition has developed end-to-end guidance that provides organizations with tools to identify, measure, and value their direct and indirect impacts and dependencies on natural capital. Implementation of the Natural Capital Protocol[384] (the Protocol) facilitates decision-making for organizations in any business sector through four stages:

1. The **Frame stage** helps organizations explore **why** a natural capital assessment would be relevant;
2. The **Scope stage** defines **what** the most relevant natural capital impacts and dependencies are through a materiality process;
3. The **Measure and Value stage** guides organizations on **how** to measure and value natural capital; and
4. The **Apply stage** helps organizations to **interpret the results** and identify what actions are needed to integrate the true value of natural capital into existing decision-making and relevant workflow processes.

The adaptive structure of the Protocol allows organizations to adjust their approach over time as organizational capacity develops or expands, data availability increases, and as the understanding of the integrated nature of the risks and opportunities associated with natural capital further develops.

The Capitals Coalition is also developing sector-specific and additional guidance to the Protocol. The sector guides complement the Protocol and provide practical examples to demonstrate sector-specific business applications of the framework. Specific Biodiversity Guidance[385] accompanies the Natural Capital Protocol and is designed to help businesses better incorporate the value of biodiversity into natural capital assessments. A high-level, how-to-get-started primer[386] also lays out the process in steps.

Considerations for Financial Institutions

The Capitals Coalition developed a Finance Supplement[387] for financial institutions with a specific focus on banking, investment, and insurance. The supplement provides a framework to assess the natural capital impacts and dependencies of the entities and portfolios that financial institutions support.

SCIENCE BASED TARGETS INITIATIVE

The Science Based Targets initiative (SBTi) drives ambitious corporate climate action by enabling organizations in the private sector to set science-based greenhouse gas emissions reduction targets. Science-based targets (SBTs) qualify as "science-based" when they align with the latest climate science and provide target-setting organizations with a specific pathway on the greenhouse gas (GHG) emissions reductions needed to align with the Paris Agreement's objectives. The SBTi validates SBTs that are in line with these goals, and against its science-based criteria. As of July 2022, the SBTi only accepts target submissions that are aligned with limiting global warming to 1.5°C. As a Race to Zero Campaign partner, all companies setting net zero targets under the SBTi are integrated as members of the campaign under the leadership of the UN Climate Change High-Level Champions.

The SBTi's process for businesses and financial institutions to set science-based GHG emissions reduction targets include 5 steps:

1. Commit to set a near-term science-based target;
2. Develop a near-term science-based target aligned with the SBTi's criteria;[388]
3. Submit target for validation up to 24 months after committing;
4. Communicate the approved science-based target to stakeholders; and
5. Disclose GHG emissions and progress against targets annually.

Considerations for Financial Institutions

The SBTi's Guidance for Financial Institutions[389] outlines requirements for near-term SBT-setting for both Scope 1+2 and Scope 3 near-term targets for financed emissions.

The SBTi provides a range of resources[390] for organizations at all stages of the science-based target-setting journey. The Getting Started Guide[391] provides a step-by-step flow chart that allows companies to understand how to set relevant near-term and net zero science-based targets. In addition, the SBTi provides specific sector-specific requirements and tailored guidance for industries[392] such as Information and Communication Technology (ICT), Forest, Land and Agriculture (FLAG), cement, maritime, and steel, among others. The SBTi notes that if specific requirements and guidance have not yet been released for a particular sector, affected organizations should use the SBTi's core methodologies and resources to set their targets.

JUMP TO SECTION

SCIENCE BASED TARGETS INITIATIVE: FOREST, LAND, AND AGRICULTURE SCIENCE-BASED TARGET-SETTING GUIDANCE (SBTI FLAG)

Land-intensive companies are of particular interest, as the land sector holds significant potential for emissions reductions and removal efforts (e.g., this sector could contribute approximately 30% of the necessary global emissions mitigation needed by 2050 to achieve the 1.5°C target).[393] While many land-intensive companies have already established science-based targets (SBTs), they did not have clear guidance to account for land-based emissions in their targets or disclosures, until last year. To address this, and provide businesses with the understanding of how to accelerate decarbonization of land emissions to limit global warming to 1.5°C, the SBTi developed the SBTi FLAG Guidance.[394] "FLAG", or "Forest, Land and Agriculture" Science-Based Target-Setting Guidance, offers businesses a standardized approach for setting science-based targets that include land-based emissions reductions and removals. For companies with substantial FLAG emissions, setting a FLAG-related SBT is obligatory.

Companies setting FLAG targets focus on land-related emissions, while other emissions fall under non-FLAG targets, also known as energy/industry science-based targets. It is important to note that FLAG SBTs and non-FLAG SBTs are distinct, and emissions reductions occurring on working lands in a company's supply chain cannot be used to meet non-FLAG emission targets. This distinction maintains the integrity of targeted efforts to address land-related emissions without compromising progress towards broader emission reduction goals.

Key requirements of the SBTi FLAG Guidance include:

1. Establish near-term (next 5-10 years) FLAG science-based emission reduction targets (in line with 1.5°C goal)
2. Include GHG removals in near-term FLAG science-based targets
3. Establish long-term (no later than 2050) FLAG science-based targets
4. Establish goals to reach zero deforestation by 2025
5. Establish science-based targets for fossil fuel emissions

The SBTi offers two approaches to FLAG target setting:

1. **A FLAG sector approach** for companies with diversified source of FLAG emissions and removals potential (sector-specific absolute reduction)
2. **A FLAG commodity-based approach** for companies with a high percentage of their emissions emanating from one or several of the 11 commodities included in this pathway: Beef, chicken, dairy, leather, maize, palm oil, pork, rice, soy, wheat, and timber and wood fiber (sector-specific intensity convergence)

Having ambitious science-based FLAG emissions targets signals to industry, investors, policymakers, and others that the organization is committed to achieving its climate and nature goals. Merging climate and nature goals also encourages comprehensive strategies over isolated solutions, bringing them closer to Paris Agreement goals. FLAG guidance will continue to be updated as new and improved data becomes available. Starting May 2023, FLAG is now mandatory for relevant sector companies meeting emission thresholds and setting science-based targets for the first time. These companies must account for FLAG-related emissions and appropriate removals/storage in alignment with the draft version of the GHG Protocol Land Sector and Removals Guidance[395] and incorporate these emissions in their target boundary.

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)

To help investors, lenders, and insurance underwriters obtain the necessary information to appropriately assess climate-related risks and opportunities, the Financial Stability Board established an industry-led task force called the Task Force on Climate-Related Financial Disclosures (TCFD). The 32-member Task Force consisted of members from both financial and non-financial international organizations and developed voluntary climate-related financial disclosures[396] that are useful to better understand material risks.

In 2024, the IFRS Foundation will assume monitoring responsibilities for climate-related disclosures through the TCFD and have incorporated the recommendations into its foundational S1 and S2 standards (see "Summaries of Key Disclosure Instruments" below). With the TCFD's 2023 Status Report[397] released in October 2023, the Financial Stability Board confirmed that the TCFD's work was complete and that it would be disbanded.

The TCFD Recommendations remain available for business reference and may be a required method for related disclosures in some jurisdictions. Understanding the TCFD Recommendations will also position users well if they consider future disclosures using the International Sustainability Standards Board (ISSB) Standards or the TNFD Recommendations. A summary of the recommendations is included in this navigator, but the TCFD is not included in the "Summaries of Key Disclosure Instruments" section below.

The TCFD Recommendations[398] were released in June 2017 and are structured around **four core pillars**:

1. **Governance:** Disclose the organization's governance around climate-related risks and opportunities.
2. **Strategy:** Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.
3. **Risk Management:** Disclose how the organization identifies, assesses, and manages climate-related risks.
4. **Metrics and Targets:** Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

Along with these recommendations, the TCFD also highlights 11 recommended disclosures across these four areas to help investors and other stakeholders understand how reporting organizations assess climate-related risks and opportunities. For instance, under "Governance," the TCFD recommends disclosing the level of oversight the organization's board has over climate-related risks and opportunities.

The TCFD released additional guidance[399] for preparers on disclosures of climate-related metrics and targets, information on transition planning, and the linking of disclosure information with estimates of financial impacts. In addition, the TCFD's Guidance on Risk Management Integration and Disclosure[400] helps organizations integrate climate-related risks into their corporate risk management processes.

In 2021, the TCFD released its Implementing Guidance[401] that provides general guidance on the application of the recommendations applicable to all sectors, and supplemental guidance for the financial sector (banks, insurance companies, asset owners, and asset managers), and non-financial sectors most affected by climate change (energy, transportation, construction, food and agriculture, and forest products).

Considerations for Financial Institutions

The Task Force developed supplemental guidance[402] for four industries in the financial sector: lending (banks), underwriting (insurance companies), asset management (asset managers), and investing (asset owners). The Task Force identified certain areas across Strategy, Risk Management, and Metrics and Targets, where supplemental guidance can help the financial sector when preparing disclosures consistent with TCFD's recommendations.

GREENHOUSE GAS (GHG) PROTOCOL

The World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) jointly created the Greenhouse Gas Protocol (GHG Protocol)[403] to guide the measurement and management of GHG emissions. The GHG Protocol was first published in 2001 and is aimed at both private and public sector operations. The GHG Protocol issues several different greenhouse gas accounting standards, including standards for companies and other organizations, for cities, and for products. The Corporate Standard[404] is the most widely used and breaks down into three GHG accounting scopes:

1. **Scope 1** emissions are direct GHG emissions from owned or controlled operations of an organization. This includes combusted gas for heating or petroleum burned for transportation.
2. **Scope 2** emissions are indirect emissions resulting from the use of purchased energy, such as energy purchased from the energy grid.
3. **Scope 3** emissions are all indirect emissions from an organization's value chain. This includes all indirect emissions not included in Scope 2 as well as upstream and downstream emissions.

The GHG Protocol breaks Scope 3 emissions into 15 categories designed to account for all emissions related to a company's upstream and downstream activities. Accounting for Scope 3 emissions is considered the most challenging but necessary approach to GHG reduction management and is described in detail in a separate guidance document[405] issued by the GHG Protocol.

The GHG Protocol is widely used and is consistent with ISO reporting standard 14064-1.[406] The GHG Protocol is policy/program neutral and underpins many other disclosure recommendations and regimes including the Task Force on Climate-related Financial Disclosures (TCFD), International Sustainability Standards Board (ISSB), and European Sustainability Reporting Standards (ESRS).

Considerations for Financial Institutions

The GHG Protocol Scope 3 Guidance[407] Chapter 15 includes a methodology for financial institutions to calculate emissions from investments not included in Scope 1 or 2. Known as Scope 3 Category 15 emissions, GHG emissions from an organization's investments include emissions from equity and debt investments, project finance, and client services.

Section 08

SUMMARIES OF KEY DISCLOSURE INSTRUMENTS

Sub-sections

While managing for nature and climate certainly goes beyond information disclosure, this is undeniably an important part of businesses' responsibilities and enables wider accountability for progress towards targets. As the landscape of voluntary disclosure instruments is dynamic and the scope of required nature- and climate-related disclosures is also increasing in the near term, disclosure is given special weight and focus in this navigator.

This navigator does not make recommendations as to which disclosure instruments should be utilized; businesses should take into consideration the legal and regulatory requirements that apply in the jurisdictions where they operate as well as the information that is most important to communicate to their stakeholders. Each disclosure instrument will carry its own procedural requirements that preparers must follow.

GLOBAL REPORTING INITIATIVE (GRI)[xx]

Framework Summary

The Global Reporting Initiative (GRI) Standards are a modular system of standards that enable organizations to report on the material impacts of their activities on the economy, environment, and people. After utilizing GRI's Universal Standards to understand their most relevant impacts, organizations can implement topical GRI Standards.

Nature-Related GRI Topical Standards

GRI 304: Biodiversity and Ecosystems

GRI 304: Biodiversity[408] is a topical disclosure standard that enables organizations to report on material biodiversity-related impacts and the steps they are taking to manage those impacts across their value chain. The seven included disclosure topics are 1) operational sites with significant impact; 2) direct drivers of biodiversity loss; 3) state of biodiversity; 4) ecosystem services; 5) management of biodiversity-related impacts; 6) halting and reversing of biodiversity loss; and 7) access and benefit-sharing.

Table 7: Key Version Updates Released and Planned

Versions	Date	Summary of Key Changes
GRI 304: Biodiversity 2006	2006	Original biodiversity standard in GRI 300 Series of topical disclosure standards
GRI 304: Biodiversity 2016	2016	Updated to reflect scientific advancement and growing awareness of nature loss
Draft Biodiversity Standard	2022	Added three new disclosures and reflects goals of Global Biodiversity Framework
GRI 304: Biodiversity 2023	*Q4 2023*	*Incorporates public comments on Draft Standard*

xx Global Reporting Initiative (GRI) is the independent international organization – headquartered in Amsterdam with regional offices around the world – that helps businesses, governments, and other organizations understand and communicate their sustainability impacts.

GRI 303: Water and Effluents

GRI 303: Water and Effluents[409] is a topical disclosure standard that enables organizations to report on material water-related impacts and the steps they are taking to manage those impacts across their value chain. Through a deep understanding of their water use, organizations can assess the impacts they have on water resources related to the wider ecosystem and other water users, and how water needs and usage impacts the organization itself, thereby informing effective water management. The five included disclosure topics are 1) interactions with water as a shared resource; 2) management of water discharge-related impacts; 3) water withdrawal; 4) water discharge; and 5) water consumption.

Table 8: Key Version Updates Released and Planned

Versions	Date	Summary of Key Changes
GRI 303: Water	2016	Original water and effluents standard in GRI 300 Series of topical disclosure standards
GRI 303: Water and Effluents	2018	Updated to include additional disclosure areas for water beyond management approach disclosures. Effective for reports and other materials published on or after January 1, 2021.

Climate-related GRI Topical Standards

GRI 302: Energy

GRI 302: Energy[410] is a topical disclosure standard that enables organizations to report on energy-related impacts and the steps they are taking to manage those impacts across their value chain. The five included disclosure topics are 1) energy consumption within the organization; 2) energy consumption outside of the organization; 3) energy intensity; 4) reduction of energy intensity; and 5) reductions in energy requirements of products and services.

Table 9: Key Version Updates Released and Planned

Versions	Date	Summary of Key Changes
GRI 302: Energy	2016	Original energy standard in GRI 300 Series of topical disclosure standards
GRI 302: Energy	*2024*	*As part of the Project for Climate Change Standards, the standard will be reviewed and adapted to include climate-related impacts beyond GHG emissions and energy consumption, in line with stakeholder expectations and the most recent developments in climate and climate-related fields.*[411]

GRI 305: Emissions (Disclosures 305-1 to 305-5)

GRI 305: Emissions[412] is a topical disclosure standard that enables organizations to report on emissions-related impacts and the steps they are taking to manage those impacts across their value chain. Disclosures 305-1 to 305-5 cover GHG emissions. The five included disclosure topics are 1) direct (Scope 1) GHG emissions; 2) energy indirect (Scope 2) GHG emissions; 3) other indirect (Scope 3) GHG emissions; 4) GHG emissions intensity; and 5) reduction of GHG emissions.

Table 10: Key Version Updates Released and Planned

Versions	Date	Summary of Key Changes
GRI 305: Emissions	2016	Original emissions standard in GRI 300 Series of topical disclosure standards
GRI 305: Emissions	*2024*	*As part of the Project for Climate Change Standards, the standard will be reviewed and adapted to include climate-related impacts beyond GHG emissions and energy consumption, in line with stakeholder expectations and the most recent developments in climate and climate-related fields.*[413]

GRI 201: Economic Performance

GRI 201: Economic Performance[414] is a topical disclosure standard that enables organizations to report on economic impacts and the steps they are taking to manage those impacts across their value chain. Disclosure 201-2: Financial implications and other risks and opportunities due to climate change addresses the potential changes on operations, revenue, or expenditure that could potentially result from risks and opportunities due to climate change.

Table 11: Key Version Updates Released and Planned

Versions	Date	Summary of Key Changes
GRI 201: Economic Performance (Disclosure 201-2)	2016	Original economic performance standard in GRI 200 Series of topical disclosure standards
GRI 201: Economic Performance (Disclosure 201-2)	*2024*	*As part of the Project for Climate Change Standards, the standard will be reviewed and adapted to include climate-related impacts beyond GHG emissions and energy consumption, in line with stakeholder expectations and the most recent developments in climate and climate-related fields.*[415]

Table 12: Framework Interoperability / Linkages

Framework Name	Relationship / Linkage Description
CDP	CDP and GRI highlight their linkages to avoid duplicating the disclosure efforts of organizations.[416]
ESRS	Companies already reporting with GRI should be equipped for the new European Standards.[417] A statement of interoperability between ESRS and GRI standards was approved by the EFRAG Sustainability Reporting Board in August of 2023, which states that entities reporting under ESRS are considered as reporting with reference to the GRI Standards. Additionally, GRI and EFRAG are developing a mapping of ESRS disclosures to corresponding GRI disclosures.[418]
ISSB	Through its Global Sustainability Standards Board (GSSB), GRI established a memorandum of understanding with the International Sustainability Standards Board (ISSB) in 2022 to align their work programs and standard-setting activities to provide a comprehensive and seamless suite of reporting standards, including the IFRS Sustainability Disclosure Standards.[419]
SBTN	GRI recommends using SBTN to identify and prioritize locations with significant operational impact and to apply its AR3T mitigation hierarchy to business pressures on nature.[420]
TCFD	Organizations that report against the GRI Standards with climate change as a material topic will be able to meet the majority of TCFD recommended disclosures. [421]
TNFD	“With respect to impact materiality, the TNFD has aligned its recommendations (and supporting additional guidance) with the language and approach of the GRI Sustainability Reporting Standards.” [422]

Disclosure Considerations

Typical Timing and Cadence of Disclosure	Where and in What Format Does Reported Data Appear?	Views on Third-party Data Verification
GRI disclosures are typically prepared annually for inclusion in a company's own sustainability report.	Reported data appears in a matrix, typically at the end of a company's sustainability report.	GRI recommends but does not require verification or assurance of sustainability-related information.

Table 13: GRI Estimated Level of Effort to Operationalize

Lower	GRI requires the collection of information related to the topics in each disclosure but operates on a disclose or explain basis. GRI is a modular, voluntary set of standards, so topical information disclosure may be recommended and is useful to stakeholders but is not required. GRI is aligned with a network of other disclosure instruments and methodologies, making increasing its accessibility if an organization is already reporting more broadly.

Table 14: Detailed Guidance Available from Disclosure Instrument Authors

Need	Guidance Document
Disclosure index preparation	GRI Content Index Template
Access ongoing and recently completed GRI Standards projects	GRI Standards Development

CDP QUESTIONNAIRES

Framework Summary

CDP provides entities, such as companies, cities, states and regions, etc., the opportunity to disclose sustainability information through its standardized questionnaires. Companies can disclose through self-selected voluntary disclosure, or as requested by stakeholders, including an upstream member of the company's supply network or a lending authority in an ongoing bank program. Companies can also become CDP Supply Chain members to gain support in engaging suppliers, requesting suppliers to report environmental data, and identifying risks and opportunities within the supply chain. Currently in 2023, three CDP nature- and climate-focussed questionnaires are available to companies – Climate Change, Forests, and Water Security.[423] In its 2025 Strategy, CDP outlined its intention to expand its scope to cover a wider, more holistic approach to disclosing, analyzing, and improving environmental performance, focusing both on reducing demands on the environment and increasing the supply of natural systems able to support our needs, as well as working towards a more integrated approach to reporting.[424]

CDP Water Security Questionnaire

CDP's Water Security Questionnaire[425] is meant to showcase the current and future water-related risks and opportunities for disclosing companies and is available as a "*full*" or "*minimum*" version (the minimum questionnaire is only available for certain organizations, such as those disclosing in response to a customer request and that have an annual revenue less than EUR/US $250 million). While this questionnaire is broadly applicable, it does have questions for certain sectors, such as Agricultural Commodities (AC), Food, Beverage, and Tobacco (FB), Electric Utilities (EU), Oil & Gas (OG), Chemicals (CH), and Metals and Mining (MM). Specific questions for the financial sector on Water Security are combined with questions on Forests and together can be found in the CDP Climate Change questionnaire.

Table 15: Key Version Updates Released and Planned

Versions	Date	Summary of Key Changes
CDP Water Security Questionnaire	2010	Established
CDP Water Security 2018 Questionnaire	2018	Updated to "reflect trends in corporate water reporting, the evolving needs of water data users, developments in public policy agendas, greater alignment with CDP's climate change and forests questionnaires, and CDP's introduction of sector questionnaires."[426]
Revised questionnaires	*Annual updates*	*In revised versions, CDP highlights the questions or sections that have changed year over year*

Table 16: Detailed Guidance Available from Disclosure Instrument Authors

Need	Guidance Document
Submit responses through CDP's Online Response System (ORS)	CDP Disclosure Platform – Companies guide
CDP Reporting Guidance	CDP Water Security 2023 Reporting Guidance
CDP Question Changes	CDP Water Security Questionnaire Changes 2022-2023
CDP Scoring Methodologies	CDP Water Security 2023 Scoring Methodology
Information on Nature in Global Supply Chains	CDP Global Supply Chain Report 2022

CDP Forests Questionnaire

CDP's Forests Questionnaire[427] is meant to showcase how organizations produce, source, and use key forest risk commodities including timber, cattle products, soy, palm oil, cocoa, coffee, and rubber and is available as a "*full*" or "*minimum*" version (the minimum questionnaire is only available for certain organizations, such as those disclosing in response to a customer request and that have an annual revenue less than EUR/US $250 million). While the Forests Questionnaire is broadly applicable, it does have questions for certain sectors, such as Coal (F-CO) and Metals and Mining (F-MM). For the past decade, CDP has used its disclosure mechanism to track progress on avoidance of deforestation associated with the production of a selection of key agricultural commodities. This is now being expanded to avoidance of destruction of all natural ecosystems (Deforestation and Conversion Free). For its Supply Chain program Forests members, CDP also implements the Forests Supply Chain Challenge (FSCC) that supports companies and suppliers in working together to implement projects that encourage restorative supply chains.[428]

Considerations for Financial Institutions

Forests and Water Security questions for the financial sector, FW-FS (FS Only), can be found in the CDP Climate Change full questionnaire. These questions cover topics, such as board oversight, assessing risks and opportunities, and measuring portfolio impacts.

Table 17: Key Version Updates Released and Planned

Versions	Date	Summary of Key Changes
Revised questionnaires	*Annual updates*	*In revised versions, CDP highlights the questions or sections that have changed year over year*

Table 18: Detailed Guidance Available from Disclosure Instrument Authors

Need	Guidance Document
Submit responses through CDP's Online Response System (ORS)	CDP Disclosure Platform – Companies guide
CDP Reporting Guidance	CDP Forests 2023 Reporting Guidance
CDP Question Changes	CDP Forests Questionnaire Changes 2022-2023
CDP Scoring Methodologies	CDP Forests 2023 Scoring Methodology
CDP provides CDP Forests guidance for suppliers	CDP Forests Disclosure 2023
CDP Technical Note for Deforestation and Ecosystem Conservation Commitments	CDP Technical Note for Implementing Commitments on Deforestation and Ecosystem Conservation
Information on Nature in Global Supply Chains	CDP Global Supply Chain Report 2022

CDP: Climate Change Questionnaire (Includes C15 – Biodiversity Measurement Questions)

CDP's Climate Change Questionnaire[429] is meant to showcase how organizations measure and disclose climate-related data. The questionnaire also includes questions regarding biodiversity and highlights how companies measure impacts, set targets, and showcase progress. The original goal of CDP's Climate Change Questionnaire was to provide climate-related data and increase ambition around climate. Now, CDP is shifting its focus towards ensuring stated objectives and commitments are associated with concrete action plans, including metrics and transparent evidence of progress. In line with its 2021-2025 strategy, the questionnaire will be further evolving to focus on target setting and actionable climate transition plans. Also in line with the 2021-2025 strategy, CDP is broadening the environmental issues covered in its questionnaires, beginning with biodiversity. Responses will inform future biodiversity metrics, ensuring the relevance and usefulness of biodiversity corporate reporting to both financial institutions and policymakers. The questionnaire is available as a "*full*" or "*minimum*" version (the minimum questionnaire is only available for certain organizations, such as those disclosing in response to a customer request and that have an annual revenue less than EUR/US $250 million).

Table 19: Key Version Updates Released and Planned

Versions	Date	Summary of Key Changes
CDP Climate Change Questionnaire Update – C15 Biodiversity	2022	CDP expands its questionnaires to cover additional environmental issues that are in line with its 2021-25 strategy. For instance, in 2022 CDP's Climate Change Questionnaire included questions regarding governance, commitments, monitoring, and reporting on biodiversity issues.[430]
Revised questionnaires year over year	*Annual updates*	*In revised versions, CDP highlights the questions or sections that have changed*

Table 20: Detailed Guidance Available from Disclosure Instrument Authors

Need	Guidance Document
Submit responses through CDP's Online Response System (ORS)	CDP Disclosure Platform – Companies guide
CDP Reporting Guidance	CDP Climate Change 2023 Reporting Guidance
CDP Question Changes	CDP Climate Change Questionnaire Changes 2022-2023
CDP Scoring Methodologies	CDP Climate Change 2023 Scoring Methodology
CDP provides a framework for small and medium enterprises (SMEs)	CDP Climate Disclosure Framework for SMEs (2021)
CDP Technical Note for Financial Services Sector Companies	CDP Technical Note: Portfolio Impact Metrics for Financial Services Sector Companies
Information on Nature (that includes Climate) in Global Supply Chains	CDP Global Supply Chain Report 2022

Table 21: Framework Interoperability / Linkages

Framework Name	Relationship/Linkage Description	Applies to Which CDP Resource (i.e., Water Security, Forests, Climate Change)
TNFD	CDP supports the TNFD as a knowledge partner, playing an active role in using its data to inform TNFD developments. In September 2023, CDP announced its intention to align its global disclosure platform with the TNFD.[431]	All
SFDR	CDP collects data on 8 out of 9 SFDR mandatory principle adverse impacts on environmental issues for corporate exposures.[432]	All
ESRS	CDP has published a policy explainer that highlights the links between the CSRD reporting requirements and the ESRS reporting requirements as per CSRD with the CDP disclosure system.[433]	All
UN SDGs	The CDP Questionnaires highlight connections to the SDG framework.[434]	All
S&P Global Corporate Sustainability Assessment	The CDP Questionnaires are aligned with S&P Global Corporate Sustainability Assessment.[435]	Climate and Water
UN Global Compact CEO Water Mandate	The CDP Water Security Questionnaire highlights the connection between certain questions and the CEO Water Mandate framework.[436]	Water Security
GRI (303)	The CDP Water Security Questionnaire highlights the connection between certain questions and the GRI framework.[437]	Water Security
Ellen MacArthur Foundation Global Commitment	The CDP Water Security Questionnaire is mapped against the Ellen MacArthur Foundation Global Commitment.[438]	Water Security
New York Declaration on Forests (NYDF)	CDP data is used to help assess NYDF Goal 2 and Goal 3, a common, multi-stakeholder framework for forest action that drives forest protection, restoration, and sustainable forest use.[439]	Forests

Table 21: Framework Interoperability / Linkages (continued)

Framework Name	Relationship/Linkage Description	Applies to Which CDP Resource (i.e., Water Security, Forests, Climate Change)
Accountability Framework (AFi)	CDP is part of AFi's effort to help companies fulfill commitments for responsible agriculture and forestry supply chains. AFi's Accountability Framework provides a set of principles and guidelines designed to establish common definitions, norms, and best practices to help companies set, implement, monitor, and report on ethical supply chain commitments. Since 2020, CDP has aligned its Forest Questionnaire with the AFi's AccountAbility Framework's principles, terminology, and guidance.[440]	Forests
ISSB	Beginning in 2024, CDP will integrate the ISSB climate disclosure standard (IFRS S2) into its system.[441]	Climate Change
RE100	The CDP Climate Change Questionnaire highlights connections to RE100 initiative, a global corporate renewable energy initiative bringing together businesses committed to 100% renewable electricity, that, in partnership with CDP, is requesting disclosure from its member companies.[442]	Climate Change
TCFD	The CDP Climate Change Questionnaire has been in line with TCFD Recommendations since 2018 and highlights connections to the Task Force on Climate-related Financial Disclosures (TCFD) framework.[443]	Climate Change
SEC	CDP disclosure is largely aligned with the proposed SEC rule on climate-related financial risks disclosure and both are aligned with the TCFD framework.[444]	Climate Change
NZAM	The CDP Climate Change Financial Sector (FS only) Questionnaire highlights connections to the Net Zero Asset Managers initiative (NZAM),[445] which is an initiative that allows asset managers to commit to supporting net zero targets by 2050.[446]	Climate Change

Disclosure Considerations

Typical Timing and Cadence of Disclosure	Where and in What Format Does Reported Data Appear?	Views on Third-party Data Verification
January Respondents can preview the English questionnaire **March** Respondents can preview the translated questionnaires (5+ languages offered) **April** CDP's Online Response System (ORS) opens to respondents **June – September** Timeframe for respondents to submit their questionnaire. For updates to or future reporting dates, please check the website.	Data submitted to CDP can be found in CDP data packages and is also used for CDP Scores (entities can receive a score from CDP for "Climate Change," "Forests," and "Water Security" categories based on the questionnaire(s) they responded to). *First-time respondents can request to keep scores private, but the score may still be made available to certain entities, such as CDP country partners or research partners for internal use only (not authorized for publication).* *If the disclosing entity has been requested to use disclose through CDP by another entity company in its supply chain or as part of an ongoing bank lending program, CDP may disclose the score to those requesting authorities.* *Repeat respondents do not have authority after Year 1 over how the scores resulting from CDP disclosed data are published or shared by CDP.*	While third-party verification or assurance is not required, CDP does encourage data verification and respondents may report responses that have been third-party verified, where applicable. In the event of reported verification, CDP requires that those verification activities be completed in accordance with recognized standards. CDP publishes criteria on its website that must be followed to qualify as verified disclosed information. CDP will assess the acceptability of any information submitted that is qualified as verified by the disclosing entity.

Table 22: CDP Questionnaires Estimated Level of Effort to Operationalize

Medium	Given the wider socialization of climate reporting and its comparable longevity in the marketplace, many organizations may already have developed internal capacity and may be better positioned to operationalize the CDP Climate Change Questionnaire, inclusive of the biodiversity questions. The range of data required in the CDP Water and CDP Forests Questionnaires and the associated capacity needed to operationalize disclosure may be higher and more challenging for some organizations that do not yet have the resources to examine site specific information and/or report more integrated natural capital and financial information.

TASKFORCE ON NATURE-RELATED FINANCIAL DISCLOSURES (TNFD) RECOMMENDATIONS

Framework Summary

The Taskforce on Nature-related Financial Disclosures (TNFD) published Version 1.0 of its recommendations[447] in September 2023 covering nature-related dependencies, impacts, risks, and opportunities. The recommendations include a set of general requirements for nature-related disclosures and a set of 14 recommended disclosures structured around the four pillars of 1) Governance; 2) Strategy; 3) Risk and Impact Management; and 4) Metrics and Targets. These pillars are consistent with the TCFD Recommendations[448] and the ISSB/IFRS standards.[449] The recommendations of the TNFD have been designed to meet corporate reporting requirements across jurisdictions and to align with the global policy goals outlined in the Kunming-Montreal Global Biodiversity Framework of 2022.

Considerations for Financial Institutions

The Taskforce also provides additional guidance[450] for financial institutions to apply the TNFD Recommendations. The guidance applies to banks, insurance companies, asset managers and owners, and development finance institutions. In addition, the LEAP approach[451] includes dedicated sections throughout the document highlighting FI perspectives.

The TNFD Recommendations include six general requirements[xxi] that are additional to the general requirements and other provisions of the ISSB's IFRS-S1 Standard. Report preparers publicly stating their use of, and alignment with, TNFD Recommendations are expected to apply the general requirements to create consistency in the information disclosed. The general requirements apply to the four pillars of the recommended disclosures outlined above. The TNFD provides a set of "core disclosure metrics" that apply to all sectors as well as "sector metrics" for each sector that can be disclosed on a comply or explain basis, and a set of additional disclosure metrics to be disclosed where relevant and decision useful for organizations. The recommendations also include a larger set of additional disclosure and assessment metrics that report preparers may use for assessment and planning purposes and for disclosure when relevant and helpful.

In addition to this disclosure approach, the TNFD offers a nature-related impacts, dependencies, risks, and opportunities assessment framework, "LEAP" (see "Summaries of High Impact Resources, Frameworks, and Methodologies" above).

Table 23: Key Version Updates Released and Planned

Versions	Date	Summary of Key Changes
TNFD Version 1.0	September 2023	The first version of TNFD's disclosure recommendations that followed over a year of development and public consultations
Additional sector guidance	*Late 2023 and 2024*	*Will continue to publish proposed sector disclosure metrics for different industry sectors*

xxi The six general requirements describe 1) the application of materiality, 2) the scope of disclosures, 3) the location of nature-related issues, 4) integration with other sustainability-related disclosures, 5) the time horizons considered, and 6) the engagement of Indigenous Peoples, Local Communities and affected stakeholders in the identification and assessment of the organization's nature-related issues.

Table 24: Framework Interoperability / Linkages

Framework Name	Relationship / Linkage Description
SBTN	The TNFD has released guidance on science-based target setting[452] that was developed with SBTN, based on SBTN's methods.
TCFD	The TNFD Recommendations have been designed to be consistent with the language, structure, and approach of the Task Force on Climate-related Financial Disclosures (TCFD) to enable integrated climate- and nature-related reporting.[453]
IFRS	The TNFD Recommendations are consistent with the International Sustainability Standards Board (ISSB) International Financial Reporting Standards (IFRS) S1 and S2 and support what is anticipated to be the global baseline for sustainability reporting and measurement set by ISSB.[454]
GRI	The GRI is a knowledge partner of the TNFD. The TNFD has aligned its impact materiality recommendations and supporting guidance with GRI's Sustainability Reporting Standards language and approach.[455]
ESRS	In drafting elements of ESRS such as ESRS E4 Biodiversity and ecosystems, EFRAG has referenced TNFD's work and incorporates content from TNFD.[456]

Disclosure Considerations

Typical Timing and Cadence of Disclosure & Where and in What Format Does Reported Data Appear?

The TNFD developed an integrated framework for risk and opportunity management and disclosure with the aspiration to inform, and align with, the specific standards and disclosure requirements developed by organizations such as the ISSB and specific market regulators. There is no specified timeline, format, or platform for disclosure associated with the TNFD Recommendations at this time.

Views on Third-party Data Verification

The TNFD recommends third-party verification of disclosures, especially under its core metrics, but does not require external review or validation at this time.

Table 25: TNFD Estimated Level of Effort to Operationalize

Medium	The TNFD Recommendations accommodate organizations to use their preferred approach to materiality and include six general requirements and 14 recommended disclosures, with a small set of core disclosure metrics, which is anticipated to reduce the disclosure burden on users in terms of data and metrics needed. Organizations with experience using the TCFD framework will find the TNFD framework structurally aligned, and the TNFD has also aligned some of its other inputs with GRI and CDP.

Table 26: Detailed Guidance Available from Disclosure Instrument Authors

Need	Guidance Document
Starting to understand the TNFD Recommendations and considering adoption	Getting started with the TNFD Recommendations
The final TNFD Recommendations	Taskforce on Nature-related Financial Disclosures (TNFD) Recommendations
Specific guidance for financial institutions	Additional guidance for financial institutions
Science-based target setting guidance with SBTN, based on SBTN's methods	Guidance for corporates on science-based targets for nature
Sector specific disclosure metrics	Discussion paper on proposed sector disclosure metrics
Learning how to use the LEAP approach	Guidance on the identification and assessment of nature-related issues: the LEAP approach
Engagement	Guidance on engagement with Indigenous Peoples, Local Communities and affected stakeholders
Contextualizing potential impacts and dependencies through awareness and analysis of biomes (with additional sector guidance published in late 2023 and 2024)	Guidance on biomes
Considering value chains and traceability	Discussion paper on proposed approach to value chains
Using scenario analysis for strategy and planning	Guidance on scenario analysis
TNFD signposted tools to support adoption	Tools Catalogue

INTERNATIONAL SUSTAINABILITY STANDARDS BOARD (ISSB): IFRS S1 AND S2, AND THE SUSTAINABILITY ACCOUNTING STANDARDS BOARD (SASB) STANDARDS

Framework Summary

Under the International Financial Reporting Standards (IFRS) Foundation's oversight, the International Sustainability Standards Board (ISSB) developed standards that aim to serve as the global baseline upon which all sustainability disclosures can be based. Through these standards, the ISSB intends to create focused materials to serve the information needs of investors and other capital markets participants.

The ISSB released its first two IFRS Sustainability Disclosure Standards in June 2023: 1) IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information;[457] and 2) IFRS S2 Climate-related Disclosures.[458] These standards respond to requests from primary users (investors, lenders, and other creditors) for a more consistent, comparable, and verifiable sustainability-related information to assist them in assessing an entity's enterprise value. The ISSB has prioritized climate-related disclosures with IFRS S2. Future standards are expected to cover nature-related disclosures.

While IFRS S1 requires an entity to disclose information on its short-, medium-, and long-term material sustainability-related risks and opportunities, IFRS S2's requirements are specific to the identification, measurement, and disclosure of climate-related financial information. Both standards will become effective for annual reporting starting January 2024, with companies beginning to issue disclosures against the standards in 2025 on a voluntary basis.[xxii] The ISSB initiated an open consultation with stakeholders to determine focus areas for future standards development over the next couple of years, and is considering topics such as biodiversity, human capital, human rights, and integration in reporting.

IFRS S1 and S2 fully incorporate the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and the ISSB will take over the monitoring responsibilities of the TCFD from 2024 onwards.[459] The ISSB standards are broader than the TCFD and aim to create a more consolidated nature-reporting landscape.

Maintaining the Industry-based SASB Standards

In August 2022, the International Sustainability Standards Board (ISSB) of the IFRS Foundation assumed responsibility for the Sustainability Accounting Standards Board (SASB) Standards.[460] The ISSB has committed to maintain, enhance, and evolve the SASB Standards and encourages preparers and investors to continue to use them until they are ultimately replaced by the IFRS Sustainability Disclosure Standards. In conjunction with IFRS S1/S2 reporting, the SASB standards serve two functions: 1) IFRS S1 requires companies to consider the 77 industry-specific SASB standards to identify industry-specific sustainability-related risks and opportunities for topics beyond climate, and 2) IFRS S2 provides accompanying industry-based guidance[461] derived from the climate-related topics and metrics in the SASB Standards.[462]

xxii Dozens of jurisdictions around the world are actively considering their adoption roadmaps and pathways toward the mandatory application of the ISSB/IFRS Standards.

Table 27: Key Version Updates Released and Planned

Versions	Date	Summary of Key Changes
IFRS S1 and S2 Exposure Drafts	March 2022	IFRS Foundation released exposure drafts of General Requirements (S1) and Climate-related Disclosures (S2) standards to gather feedback from stakeholders; the associated comment period ended in July 2022.
ISSB Exposure Draft Methodology for Enhancing the International Applicability of the SASB Standards	May 2023	Following the consolidation of the Value Reporting Foundation and the IFRS Foundation, ISSB is responsible for the maintenance and enhancement of the SASB Standards. Enhancements to the SASB Standards are important to ensure SASB can be applied to sustainability-related disclosures internationally.
IFRS S1 and S2 Updated SASB Standards	June 2023	Release of IFRS S1 and S2 standards incorporating feedback from the Exposure Drafts. In addition, updated SASB Standards were released to align the climate-related topics and metrics with the industry-based guidance in IFRS S2.

Table 28: Framework Interoperability / Linkages

Framework Name	Relationship / Linkage Description
CDSB and VRF	ISSB builds on the work of the Climate Disclosure Standards Board (CDSB) following the consolidation of CDSB into the IFRS Foundation in 2021.[463]
VRF and SASB	The ISSB plans to embed SASB's industry-based standards development approach. Industry-based guidance has already been provided by the ISSB for IFRS S2. The ISSB encourages companies and investors to continue to use the SASB Standards until they are replaced by IFRS Sustainability Disclosure Standards. The Value Reporting Foundation (VRF) created the SASB standards and was consolidated into the IFRS Foundation in 2022.[464]
TCFD and TNFD	IFRS Sustainability Disclosure Standards builds on the work and recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) and will take over TCFD's monitoring responsibilities in 2024. Consistent with the ISSB's approach of building upon the work of market-led initiatives, the ISSB will look to the Taskforce on Nature-related Financial Disclosures' (TNFD) recommendations in its future work.[465]
GRI	The ISSB established a memorandum of understanding with the Global Reporting Initiative (GRI) in 2022 to align their work programs and standard-setting activities to provide a comprehensive and seamless suite of reporting standards, including the IFRS Sustainability Disclosure Standards.[466]

Disclosure Considerations

Typical Timing and Cadence of Disclosure	Where and in What Format Does Reported Data Appear?	Views on Third-party Data Verification
A company's IFRS Standards disclosures are required to be reported at the same time and cover the same reporting period as the company's financial statements.	Reported data is required to appear in a company's general purpose financial reports, including but not limited to its annual report, integrated report, and sustainability report.	The ISSB recommends but does not require verification or assurance of sustainability-related information. Verification or assurance requirements are subject to jurisdictional regulations.

Table 29: IFRS Sustainability Disclosure Standards Estimated Level of Effort to Operationalize

Medium	The IFRS Standards were built upon a foundation of existing internationally recognized disclosure standards and frameworks, including the TCFD Recommendations, SASB Standards, and the GRI Standards, among others. Given that their disclosure requirements reference other existing reporting frameworks, the level of effort required to operationalize IFRS S1 and S2 decreases if an organization is already reporting on ESG more broadly. For instance, IFRS S2 is suitable for organizations with prior climate-related non-financial reporting experience (e.g., GHG Protocol) since they would already have institutional capacity on hand to measure and disclose their Scope 1, 2, and 3 GHG emissions.

Table 30: Detailed Guidance Available from Disclosure Instrument Authors

Need	Guidance Document
Illustrative guidance on IFRS S1's primary users and sources of guidance	IFRS S1 Accompanying Guidance
Illustrative guidance on IFRS S2's metrics, emissions aggregation and disaggregation, and industry-specific applications	IFRS S2 Accompanying Guidance
Industry-based guidance for IFRS S2 derived from the SASB Standards	IFRS Sustainability Disclosure Standards Navigator
Likely benefits and costs of applying IFRS S1 and S2	Effects Analysis
SASB Standards to help companies to apply IFRS S1 and S2	77 industry-based SASB Standards

ISO (INTERNATIONAL ORGANIZATION FOR STANDARDIZATION)

Framework Summary

The International Organization for Standardization (ISO) is a global network of 169 national standards bodies that brings together experts to share knowledge and develop voluntary, consensus-based, market-relevant International Standards that support innovation and provide solutions to global challenges. ISO has developed numerous standards that play an essential role in climate action, with the ISO 14000 family of standards for environmental management systems being one of the most noteworthy of the climate-related ISO standards. This family of standards includes the ISO 14064[467] series that specifies principles and requirements for quantification, monitoring, reporting, and validation of GHG emissions and removals, and ISO 14067[468] that gives specifications for the quantification and communication of the carbon footprint of a product. Other standards that support climate change mitigation and adaptation are ISO 14080[469] that sets out a framework to develop consistent, comparable and improved methodologies on climate actions, and ISO 14090[470] that specifies requirements and guidelines for adaptation to climate change within or across organizations. ISO also has Net Zero Guidelines that complement ISO 14000 standards. These guidelines cover topics such as emissions reduction, transparency, and accountability through GHG monitoring and reporting, and stakeholder engagement.[471]

Because biodiversity is a critical component of long-term business survival, ISO's Technical Committee 331 are developing standards that 1) specify requirements to help organizations understand and integrate biodiversity protection and conservation, 2) provide guidelines for product characterization of native species, and 3) provide guidance on the design and delivery of gains for biodiversity through the lifecycle of a project.[472]

Considerations for Financial Institutions

ISO 14097[473] *includes principles and requirements for assessing and reporting investments and financing activities related to climate change.*

Table 31: Key Version Updates Released (not exhaustive)

Versions	Date	Summary of Key Changes
ISO 14064	2006	Original version of the ISO 14064 Series was released.[474]
ISO 14064	2018 and 2019	A revised version of part 1 of the ISO 14064 Series was released in 2018 that includes a new approach to reporting boundaries and added new GHG quantification/reporting guidance, while revised versions of part 2 and 3 were released in 2019.[475]
ISO/TS 14067:2013	2013	The technical specification of ISO 14067 was released in 2013.[476]
ISO 14067	2018	ISO 14067:2018 replaces the technical specification ISO/TS 14067:2013, which was upgraded to International Standard status after the market demanded a more in-depth document.[477]
ISO 14097:2021	2021	ISO 14097 was published in 2021 being the first ISO standard for assessing and reporting investments and financing activities related to climate change.[478]

Table 32: Framework Interoperability / Linkages

Framework Name	Relationship / Linkage Description
GHG Protocol	Aligned with the GHG Protocol, the ISO 14064 series offers specifications for the quantification, monitoring and verification of GHG emissions.[479]
ESRS	The ESRS suggests that companies consider using the methodology of the ISO 14064-1:2018 to identify its significant Scope 3 categories based on the magnitude of their estimated GHG emissions. For quantification of life cycle GHG emissions of products, the ESRS suggests companies apply ISO 14067:2018.[480]
TCFD	ISO 14097 "contributes to the implementation of the TCFD recommendations, by providing guidance on the disclosure of the identification, assessment, and management of climate-related risks and opportunities and related climate actions." [481]

Disclosure Considerations of ISO 14064

Typical Timing and Cadence of Disclosure	Where and in What Format Does Reported Data Appear?	Views on Third-party Data Verification
Organizations encouraged to perform ongoing compliance monitoring as a key part of ISO standards is reviewing and maintaining compliance.	If an organization claims to be ISO 14064 compliant, they are required to issue an independent GHG statement. ISO suggests presenting the required data in a table format.[482]	The ISO 14064 series does not specify requirements for verification/validation bodies or actors in providing assurance against GHG statements or claims by GHG projects.[483] This can be conducted through an internal audit or via a credible third-party entity.

Table 33: ISO 14064 Estimated Level of Effort to Operationalize

Lower	The ISO 14064 series sets the minimum requirements for GHG inventories, providing a foundation for independent auditing. Organizational users benefit from improved consistency, flexibility, and decreased effort in voluntary GHG inventories. Businesses adopting the standard can create easily verifiable and comparable inventories, cutting inventory-related costs. This standard represents consensus on technical GHG inventory best practices, and thus enhances inventory credibility and stakeholder trust.[484]

Table 34: Detailed Guidance Available from Disclosure Instrument Authors

Need	Guidance Document
Guidance for the application of ISO 14064-1	ISO/CD TS 14064-4
How ISO standards can help organizations adapt to and mitigate climate change impacts	ISO and Climate Change
Collection of case studies showcasing how ISO standards can be effectively used as a tool for sustainability	ISO Climate Action Kit

PRINCIPLES FOR RESPONSIBLE INVESTMENT (PRI)

Framework Summary

Supported by the United Nations,[xxiii] Principles for Responsible Investment (PRI) provides financial actors with six principles[485] for understanding the implications of environmental, social, and governance factors and incorporating these factors into investment and ownership decision-making and practices. PRI also describes suggested actions that can be taken in accordance with its principles. Asset owners, investment managers, and professional service providers can become signatories, representing a public commitment to the principles and to disclosing the results of their efforts through PRI's online Reporting Tool (except for service providers). PRI accepts this data annually.[486] In January 2023, PRI published its 2023 Reporting Framework[487] that consists of the full Reporting Framework and a suite of guidance resources, such as the Overview and structure guide.[488] This guide outlines the Reporting Framework structure which consists of the following modules:

1. Senior Leadership Statement
2. Organizational Overview
3. Policy, Governance and Strategy
4. Manager Selection, Appointment and Monitoring
   Asset Class Modules
   a. Asset Class Module: Listed Equity
   b. Asset Class Module: Fixed Income
   c. Asset Class Module: Real Estate
   d. Asset Class Module: Infrastructure
   e. Asset Class Module: Private Equity
   f. Asset Class Module: Hedge Funds
5. Sustainability Outcomes
6. Confidence-Building Measures

xxiii PRI is an independent entity supported by, but not part of, the United Nations.

The information requested by the framework is categorized into two types of questions (called indicators). "*Core*" indicators are mandatory, assessed by PRI, publicly disclosed, and more process focused. "*Plus*" indicators are voluntary, not assessed by PRI, can be publicly or privately disclosed, and are process and outcome focused.[489]

In 2018, PRI introduced a set of minimum requirements to strengthen the accountability of investor signatories to the Principles. These are minimum performance expectations that signatories must demonstrate they meet over a two-year reporting cycle engagement period before being at risk of public delisting as a last resort. The indicators that are used to determine signatory performance on the minimum requirements are all located in the Policy and Governance section (PGS) module.[490]

After becoming a signatory, the organization has a one-year grace period before reporting becomes mandatory. However, in that first year, the organization is still encouraged to report on a voluntary basis to become familiar with PRI's reporting process.[491]

Table 35: Key Version Updates Released and Planned

Versions	Date	Summary of Key Changes
Reporting Framework	2014-2015, 2016, 2017, 2018, 2019, 2020	PRI typically updates its Reporting Framework on an annual basis
Reporting Framework (Service Providers)	2018	Reporting framework for service providers launched[492]
Updated Reporting Framework (Pilot)	2021	PRI significantly updated the Reporting Framework and allowed for comment period
Reporting Framework (Service Providers)	2023	PRI paused reporting for service providers[493]
Updated Reporting Framework (Published)	January 2023	Reporting Framework based on the 2021 Pilot Reporting Framework that incorporates some of the feedback received from this time.[494]
Full Updated Reporting Framework (Published)	*May-July 2024*	*Planned release of full Reporting Framework (including all modules and indicators, alongside reporting structure) in January 2024, with a three-month reporting window to open in May 2024.*

Table 36: Framework Interoperability / Linkages

Framework Name	Relationship / Linkage Description
TCFD	PRI indicates that portions of its framework is aligned with the TCFD[495]
United Nations Guiding Principles on Business and Human Rights (UNGPs)	Some indicators in PRI's 2023 Reporting Framework request information that supports the principles outlined by the United Nations Guiding Principles on Business and Human Rights.[496]

Disclosure Considerations

Typical Timing and Cadence of Disclosure	Where and in What Format Does Reported Data Appear?	Views on Third-party Data Verification
Reporting to PRI requires annual reporting disclosures via PRI's Online Reporting Tool.[497] For 2024 reporting dates please check the website.	Public reports from the 2021 pilot onwards can be accessed through the PRI Data Portal.[498] For reporting investor signatories, PRI produces both an Assessment Report and a Transparency Report.[499]	While third-party data verification is not required to report using PRI, it is encouraged to increase the credibility of reported data.[500]

Table 37: PRI Sustainability Disclosure Standards Estimated Level of Effort to Operationalize

Medium	PRI's reporting framework is descriptive and outlines information that is required vs. voluntary for signatories to disclose. Portions of the PRI framework are also specific to the organization (e.g., Asset Class Modules) to enable more tailored reporting. While PRI does require signatories to disclose certain information (except for Service Providers), it does provide support to signatories, offers a voluntary first year, and offers a grace period for those that fail to meet requirements before delisting them.

Table 38: Detailed Guidance Available from Disclosure Instrument Authors

Need	Guidance Document
Explanation of the structure of the Reporting Framework, changes that have been made, and how to prepare for reporting	2023 Reporting Framework: Overview and structure guide
Explanation of the terminology used throughout the Reporting Framework	Reporting Framework glossary
Guidance for signatories of the Net Zero Asset Owners Alliance (AOA) to use PRI's 2023 Reporting Framework to report on the AOA Target Setting Protocol (TSP) requirements	PRI 2023 Reporting Framework – A Resource Guide for Reporting Against the Target Setting Protocol Requirements of the UN Convened Zero Asset Owners Alliance (NZAOA)
Guidance for signatories of the Net Zero Asset Managers (NZAM) Initiative to use PRI's 2023 Reporting Framework to report on their net zero commitments	PRI 2023 Reporting Framework – A Resource Guide for Reporting Against the Net Zero Asset Manager (NZAM) Initiative Commitments
Explanation for reporting on climate within PRI's 2023 Reporting Framework with detail on the interoperability between the Reporting Framework and TCFD	PRI 2023 Reporting Framework – A Resource Guide for Investor Climate Reporting
Explanation for how some of PRI's 2023 Reporting Framework indicators align to the United Nations Guiding Principles on Business and Human Rights (UNGPs)	PRI Reporting Guidance on Human Rights
Explanation for how investors are assessed on their reporting	PRI 2023 Assessment methodology for investors
Guidance highlighting disclosures that are required to be provided as a minimum requirement for reporting to PRI. Additional resources regarding how to meet these minimum requirements can be found on the PRI website.	Minimum Requirements for PRI Investor Signatories – Accompanying Guidance Document to the 2023 Reporting Framework

EUROPEAN SUSTAINABILITY REPORTING STANDARDS (ESRS)

Framework Summary

The European Sustainability Reporting Standards (ESRS) are a set of reporting standards that contain the disclosure information needed to be in compliance with the European Union's Corporate Sustainability Reporting Directive (CSRD). CSRD intends to make corporate sustainability reporting more common, consistent, and standardized, and broadly applicable to companies operating in the EU. Required filers will have to prepare an annual report that captures qualitative and quantitative forward-looking and retrospective information in the short-, medium-, and longer-term time horizons beginning in 2025 on their 2024 financial year.[xxiv] Reporting will also need to include the upstream and downstream value chain as necessary to adequately capture material sustainability factors. The Corporate Sustainability Due Diligence Directive (CSDDD) additionally establishes a requirement to identify and prevent negative social and environmental impacts along business value chains and requires certain companies to disclose their due diligence capacity.[501]

On July 31, 2023, the European Commission adopted the first set of European Sustainability Reporting Standards[502] by delegated act. The first set of ESRS includes 12 sector-agnostic standards: two "cross-cutting" standards (ESRS 1 and 2) and 10 "topical" standards covering environmental, social, and human rights, and governance topics. ESRS 1 ("General Requirements") sets general principles to be applied when reporting according to ESRS, and ESRS 2 ("General Disclosures") specifies disclosure requirements. While ESRS 2 is mandatory for all companies under the CSRD scope, all the other "topical" standards and the individual disclosure requirements within them are subject to a double materiality assessment.[503]

xxiv Companies will have to start reporting under ESRS in four phases: 1) companies already subject to the Non-Financial Reporting Directive (NFRD), as well as large non-EU listed companies with more than 500 employees, must begin reporting in 2025 on their 2024 financial year; 2) other large companies, including other large non-EU listed companies, must begin reporting in 2026 on their 2025 financial year; 3) listed SMEs, including non-EU listed SMEs must begin reporting in 2027 on their 2026 financial year (SMEs can opt out until 2028); and 4) non-EU companies that generate over EUR 150 million per year in the EU and that have in the EU either a branch with a turnover exceeding EUR 40 million or a subsidiary that is a large company or a listed SME must begin reporting in 2029 on their 2028 financial year.

Considerations for Financial Institutions

The European Financial Reporting Advisory Group (EFRAG) is creating sector-specific reporting standards. The standard for the financial sector will clarify expectations around reporting the scope of financial sector value chains.

ESRS' sector-agnostic topical standards include five environmental standards (E1-E5):

ESRS E1 – Climate Change

ESRS E1 relates to how undertakings affect climate change mitigation and adaptation, as well as covering the disclosure of energy use. Aligned with the Paris Agreement, the standard requires in-scope organizations to disclose their policies, targets, action plans, performance measurement, and financial efforts related to climate change. Material climate risks and adaptation strategies must also be disclosed. In addition, ESRS E1 governs the disclosure of relevant information on energy sources, consumption, efficiency, and renewable energy use.

ESRS E2 – Pollution

ESRS E2 governs how undertakings affect the pollution of air, water, and soil. It covers material positive impacts as well as actual or potential negative impacts. There are disclosure requirements relating to the pollution of air, water, and soil, as well as substances of concern and substances of very high concern. In addition, material risks and opportunities need to be disclosed, along with financial impacts, targets, and capacities to address negative impacts.

ESRS E3 – Water and Marine Resources

ESRS E3 regulates material positive impacts and negative impacts on water and marine resources. This includes actions taken to protect water and marine resources, reduce water consumption, and address risks and opportunities. Total water consumption needs to be disclosed, including water consumption in areas of water risk and high-water stress. The disclosures also cover material risks and opportunities, financial impacts, targets, and capacities to address negative impacts.

ESRS E4 – Biodiversity and Ecosystems

ESRS E4 is designed to disclose companies' impacts and dependencies on nature and how to align their business model with the goal of ecosystem protection and restoration. Measurable biodiversity and ecosystem targets, biodiversity action plans, potential financial implications of biodiversity-related impacts, and other risks and opportunities must also be disclosed.

ESRS E5 – Resource Use and Circular Economy

ESRS E5 covers resource use, resource efficiency, the depletion of resources, sustainable sourcing, and the use of sustainable resources. Undertakings must disclose resource inflows and outflows, targets it has set, and capacities to address negative impacts. Resource outflows include products, materials, and waste, with special provisions for hazardous waste. The disclosure requirements also cover material risks and opportunities and financial impacts.

Table 39: Key Version Updates Released and Planned

Versions	Date	Summary of Key Changes
ESRS E1-E5 Exposure Drafts	April 2022	Under the CSRD, the ESRS revises the Non-Financial Reporting Directive (NFRD) and the Accounting Directive with their first versions which are subject to a public consultation
ESRS E1-E5 Drafts	November 2022	The European Financial Reporting Advisory Group (EFRAG), which provides technical advice to the European Commission, incorporated public comments from a four-month public consultation period
ESRS Draft Act	July 2023	After consulting EU stakeholders including member states and the Parliament, the Commission made amendments and further specifications of technical details and adopted the first set of ESRS standards.
ESRS Updates	*June 2024*	*In future years the Commission is expected to make amendments for additional sets of standards. The CSRD requires the Commission to adopt by June 2024: sector-specific standards, proportionate standards for listed SMEs, and standards for non-EU companies.*

Table 40: Framework Interoperability / Linkages

Framework Name	Relationship / Linkage Description
TCFD	While designed to align with Task Force on Climate-Related Financial Disclosures' (TCFD) reporting areas, it is broader and covers additional sustainability areas.[504]
TNFD	Adopts Taskforce on Nature-related Financial Disclosures' (TNFD) list of priority sectors and TNFD methodology for materiality, risk, and opportunity assessment (LEAP approach).[505]
SBTN	Recommends Science Based Targets Network (SBTN) guidance on how to set targets within ecological thresholds.[506]
ISSB	While ISSB and ESRS do vary in some ways such as the coverage range of ESG matters, they have been developed to be more interoperable to reduce duplicative efforts for entities applying both standards.[507]
GRI	In September 2023, EFRAG and GRI released a joint statement indicating that there is now a high level of interoperability between the ESRS and GRI standards. Next, these organizations will provide a mapping of the ESRS and GRI standards.[508]

Disclosure Considerations

Typical Timing and Cadence of Disclosure	Where and in What Format Does Reported Data Appear?	Views on Third-party Data Verification
Organizations must report annually on the same timeline as financial disclosures. Organizations will need to begin reporting between 2025 and 2029 depending on their size and presence in the EU.	Sustainability information must be easily identifiable and appear in a clearly labeled section of the organization's management report, which must be made publicly available.	Organizations are required to use an independent auditor or certifier to ensure accuracy and reliability of information disclosed under the ESRS. Disclosures will initially be subject to **limited** assurance. By October 2028, the EU Commission expects to adopt requirements for disclosures to be subject to **reasonable** assurance, with the overall objective of achieving a similar level of assurance in the future for financial and sustainability-related information.

Table 41: ESRS Estimated Level of Effort to Operationalize

Higher	ESRS requires companies to perform a robust double materiality assessment to ensure that all sustainability information necessary to meet the objectives and requirements of the Accounting Directive will be disclosed, both in the upstream and downstream value chain. ESRS will also require third-party assurance of reported information, scaled up over time according to specific criteria for different organizations.

Table 42: Detailed Guidance Available from Disclosure Instrument Authors

Need	Guidance Document
Explanation of the Standard and Explanatory Videos	First set of draft ESRS
Guidance on objectives and disclosure requirements of each ESRS standard and the interactions between them	First set of the European Sustainability Reporting Standards

EU SUSTAINABLE FINANCE DISCLOSURE REGULATION (SFDR)

Framework Summary

Part of the 2018 Sustainable Finance Action Plan is the European Commission's Sustainable Finance Disclosure Regulation (SFDR),[509] a mandatory disclosure requirement for financial market participants, asset managers, and advisors that is meant to improve transparency in the market for 1) sustainable investment products and 2) financial entities, and also level the playing field around sustainability in the industry to prevent greenwashing.[510] The regulation applies broadly to all financial advisors in the EU, financial market participants in the EU or with EU shareholders, and those marketing themselves in the EU. Entities with fewer than 500 people are not currently required to comply with SFDR disclosures, but they are required to explain this choice. The SFDR does not currently have direct penalties for non-compliance as each individual member country oversees its implementation in their respective national jurisdictions, but penalties are likely to be phased in over time as the regulation evolves.[511]

SFDR was introduced in two acts, commonly referred to as SFDR Level 1[512] and SFDR Level 2.[513] The regulation applies to all financial products listed in Article 2(12) of SFDR Level 1, including portfolio management products, alternative investment funds, insurance-based investment products, some pension products, and others, but can be broadly classified as 1) financial products that do not promote ESG attributes or features that may or may not be present (Article 6), 2) financial products that promote social and/or environmental attributes and if investment target companies practice good governance (Article 8), and 3) those pursue sustainable investment as their core objective as defined by the SFDR (Article 9).[514] The EU Taxonomy is the central tool used to assess sustainability claims that are made as a part of SFDR.[515]

The regulation is double materiality inclined, making a clear distinction between risks that could cause a material negative impact on the value of an investment, known as sustainability risks, as well as adverse sustainability impacts or "negative externalities" resulting from the financial entity or investment. Among other things, impacted financial market participants and financial advisors need to publish how they account for sustainability risks in their investment decisions. In addition, adverse impacts need to be disclosed and due diligence procedures need to be made publicly available, or reasons for not disclosing adverse impacts must be shared. Sustainability matters are broadly defined to include environmental and social matters, respect for human rights, anti-corruption, and anti-bribery.[516]

As is defined by SFDR Level 1 Article 2(17), sustainable investments are those which contribute to an environmental objective, such as GHG emissions or impacts on biodiversity, a social objective, and where good governance practices are followed. Where financial products promote ESG attributes, detailed information on ESG performance must be disclosed in line with disclosure templates published in SFDR Level 2.[517]

Initial disclosure standards were required as of March 2021 (Level 1) and additional disclosure requirements (Level 2) went into effect in January 2023.[518] Information regarding the first reference period (January 2022-December 2022) is required to be reported by June 30, 2023. Information regarding the second reference period (January 2023-December 2023), as well as comparisons between the first and second reference periods, is required to be reported by June 30, 2024. This reporting cycle will continue annually.

Table 43: Key Version Updates Released and Planned

Versions	Date	Summary of Key Changes
Level 1 Requirements (Regulation (EU) 2019/2088)	March 2021	Level 1 of the regulation covers Article 6, 8, and 9 products and requires that financial market participants, managers, and advisors outline publicly any negative ESG-related impacts of their business models and describe how their investment decisions, advice, and remuneration policies consider sustainability risks. For financial products, it must be outlined how sustainability is achieved, how sustainability risks are considered in investment decisions, and how those risks may impact the investment's profitability.[519]
Level 2 Requirements (Commission Delegated Regulation (EU) 2022/1288)	January 2023	Level 2 of the regulation is for Article 8 and 9 classified products and requires additional in-depth and quantitative information disclosures.
Commission Delegated Regulation (EU) 2023/363 amending Delegated Regulation (EU) 2022/1288	February 2023	Amendments were made to require the disclosure of portfolio exposure to gas and nuclear activities
European Supervisory Authorities (ESMA, EBA, and EIOPA) published a Consultation Paper	April – July 2023	The Consultation Paper is receiving feedback and covers: 1) Adding new social indicators; 2) Clarification around the "Do No Significant Harm" Principle; 3) Greenhouse Gas Emissions Reduction Targets; and 4) Changes to the Article 8 and 9 disclosure templates.[520]
Updates to the SFDR regime based on Consultation Paper feedback	*Expected Early 2024*	*Feedback given to the Commission later this year will be considered with anticipated implementation in a revised version of the SFDR in early 2024*

Table 44: Framework Interoperability / Linkages

Framework Name	Relationship / Linkage Description
EU Taxonomy	Part of the 2018 Sustainable Finance Action Plan, the EU Taxonomy provides the classification framework for sustainable activities.[521]
ESRS / CSRD	Part of the 2018 Sustainable Finance Action Plan, the CSRD regulates sustainability reporting.[522]

Disclosure Considerations

Typical Timing and Cadence of Disclosure	Where and in What Format Does Reported Data Appear?	Views on Third-party Data Verification
Mandatory reporting deadline is June 30th 2023. The typical disclosure cadence will be annual intervals (by June 30th each year)	SFDR disclosures must be made public on the institutions' websites, and must be accompanied by 1) a statement on how sustainability risk is considered in their investment policy; 2) a description of how their investments affect various sustainability factors as specified in the EU Taxonomy; and 3) a statement on how they consider ESG sustainability risks when setting their staff remuneration policies.	Article 15(1)(b) requires that descriptions of the investments underlying the disclosed financial products are aligned with the economic activities in the EU Taxonomy, and users may state whether this EU Taxonomy compliance has been subjected to an assurance process (and if so, provides the name of the assuring third-party entity/entities). This third-party review is currently optional.[523]

Table 45: SFDR Estimated Level of Effort to Operationalize

Higher	SFDR requires organizations to disclose a significant volume of sustainability-related information on their investment decisions as an entity and on their suite of financial products in line with the EU Taxonomy that governs the regulation. SFDR narrowly defines the classifications of products that may be classified as sustainability-focused, and to be in compliance organizations correctly interpret the Taxonomy and apply it in their reported disclosures.

Table 46: Detailed Guidance Available from Disclosure Instrument Authors

Need	Guidance Document
Overview of Level 1 Regulations	European Commission's Sustainability-related Disclosure in the Financial Services Sector
Q&As on SFDR Level 1 and Level 2	European Securities and Markets Authority's Consolidated Questions and Answers

SEC GUIDANCE AND CLIMATE-RELATED DISCLOSURES (PROPOSED)

Framework Summary

The United States Securities and Exchange Commission (SEC) released proposed rules[524] in 2022 to enhance and standardize climate-related disclosure for businesses registered with the SEC, such as securities issuers, investment advisors, and brokers of securities. The proposed rules would apply to all registrants with the SEC that are subject to reporting obligations under the Exchange Act.

The proposed rules mandate the disclosure of material climate-related risks and governance of those risks, the impacts of climate-related events, measurement of Scope 1 and 2 GHG emissions, material Scope 3 GHG emissions, information about carbon offsets and renewable energy credits, and climate related targets with progress updates. The climate-related information would need to be disclosed in annual reports and registration statements as a separate section, and as a note in consolidated financial statements. With some exceptions, Scope 1 and 2 GHG emissions data will be subject to an independent audit.[525]

The proposed rules contain requirements and phase-in periods that vary by organization.[xxv, 526] The breadth and scope of the disclosure rules is still subject to change. The rules underwent a public comment period in 2022 and are due to be finalized in 2023.[527]

Table 47: Key Version Updates Released and Planned

Versions	Date	Summary of Key Changes
The Enhancement and Standardization of Climate-Related Disclosures for Investors (File No. S7-10-22)	April 2022	The SEC proposed an amendment to the Securities Act of 1933 and the Exchange act of 1934. The proposed rules would require certain companies to disclose climate-related information, including GHG emissions. Some of the information would be subject to an auditing requirement.[528]
End of commenting period for the Proposed Rule S7-10-22	May 2022	The SEC held a comment period for Proposed Rule S7-10-22.
Updates to the SEC Climate-Related Disclosure rules	*Expected end of year 2023*	*In its Spring 2023 Regulatory Agenda, the SEC listed its Climate-Related Disclosure Rules as being in the Final Rule Stage. An exact date for when the rules will be finalized is not currently known but is expected at the end of 2023.*

xxv Large Accelerated Filers, issuers with a global market value over $700 million (defined in 17 CFR 240.12b-2) that are subject to shorter filing deadlines, would need to report all proposed disclosures for fiscal year 2023, excluding Scope 3 emissions, which only need to be filed from 2024 onwards. Non-Accelerated Large Filers and Accelerated Filers will need to start disclosures in fiscal year 2024 and will not need to include Scope 3 emissions until 2025. Small reporting companies (see 17 CFR 229.10(f)(1) for SEC definition) are exempt from Scope 3 reporting and only need to follow the other reporting rules beginning in fiscal year 2025.

Table 48: Framework Interoperability / Linkages

Framework Name	Relationship / Linkage Description
TCFD	The disclosure framework is modeled in part after TCFD's recommendations[529]
GHG Protocol	The proposed rules draw on the methodologies laid out in the GHG Protocol[530]

Disclosure Considerations

Typical Timing and Cadence of Disclosure	Where and in What Format Does Reported Data Appear?	Views on Third-party Data Verification
The disclosure cadence is annual, as most of the disclosures will take place through annual financial reports.	Disclosures will need to occur though annual reports or registration statements of SEC registrants. This should occur through separate and appropriately captioned sections or subsections. Climate-related financial statement metrics can be disclosed as a note in an audited financial statement. Both narrative and quantitative climate-related disclosures shall be filed rather than furnished and must be tagged in Inline XBRL.	Some climate-related information will need to be disclosed in audited financial statements under the current proposed rules. In addition, the disclosure of Scope 1 and 2 emissions will be subject to independent attestation. The assurance will be conducted at a limited level during the phase-in period and will later be conducted at a reasonable assurance level. The proposed rules do not require the audit to be conducted by a registered public accounting firm.

Table 49: SEC Guidelines Estimated Level of Effort to Operationalize

Higher	The SEC's proposal requires organizations to disclose a significant amount of information, subject to an audit requirement and high level of verification. The inclusion of Scope 3 emissions disclosure requirements for organizations of a certain size is expected to significantly increase the level of effort. These guidelines are not yet in final form and may be subject to change.

Table 50: Detailed Guidance Available from Disclosure Instrument Authors

Need	Guidance Document
Summary of Proposed Rules on Climate-Related Disclosures	Fact Sheet: Enhancement and Standardization of Climate-Related Disclosures

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ANNEXES

ANNEX 1: NAVIGATOR KEY TERMINOLOGY DEFINITIONS AND ADDITIONAL GLOSSARY RESOURCES

The most critical terms used in this navigator are defined below (alphabetically). Links are also included to comprehensive glossaries of key terms created by specialist organizations/initiatives to provide further information on important terminology for nature and climate.

Biodiversity

The Convention on Biological Diversity defines "biodiversity" as the variability among living organisms from all natural biomes including terrestrial, marine, and other aquatic ecosystems, and the ecological complexes of which they are a part; this includes diversity within species, between species, and of ecosystems.[531]

Climate change

The Intergovernmental Panel on Climate Change (IPCC) defines "climate change" as a change in the state of the climate that can be identified by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcings, such as modulations of the solar cycles, volcanic eruptions, and persistent anthropogenic changes in the composition of the atmosphere or in land use.[532]

Decarbonization

The Intergovernmental Panel on Climate Change (IPCC) defines "decarbonization" as the process by which countries, individuals, or other entities aim to achieve zero fossil carbon existence. Typically refers to a reduction of the carbon emissions associated with electricity, industry, and transport.[533]

Dependencies

The Science Based Targets Network (SBTN) defines "dependencies" as aspects of ecosystem services that an organization relies on to function and/or to deliver its core business objectives across its value chain. These can include an ecosystems' ability to regulate water flow and water quality, provide a suitable habitat for pollinators, sequester carbon, and many others.[534]

Double Materiality

The European Sustainability Reporting Standards (ESRS) define "double materiality" as a sustainability topic or information that meets two dimensions: impact materiality and financial materiality. A sustainability topic is material from an impact perspective if the organization is connected to actual or potential, positive or negative impacts on people or the environment over the short-, medium- or long-term. On the other hand, a sustainability topic is material from a financial perspective if it triggers or could reasonably be expected to trigger material financial effects on the organization over the short-, medium- or long-term.[535]

Ecosystem Services

The Millennium Ecosystem Assessment defines "ecosystem services" as the broad benefits people obtain from ecosystems. These include provisioning services such as food, water, timber, and fiber; regulating services that affect climate, floods, disease, wastes, and water quality; cultural services that provide recreational, aesthetic, and spiritual benefits; and supporting services such as soil formation, photosynthesis, and nutrient cycling.[536]

Greenhouse Gas (GHG)

The Intergovernmental Panel on Climate Change (IPCC) defines "greenhouse gases" as gaseous particles of the atmosphere, both natural and anthropogenic [resulting from human activity], that absorb and emit radiation. Water vapor, carbon dioxide, nitrous oxide, methane, and ozone are the primary GHGs in the Earth's atmosphere. Human-made GHGs include sulfur hexafluoride, hydrofluorocarbons, chlorofluorocarbons, and perfluorocarbons.[537]

Impacts

The Science Based Targets Network (SBTN) defines "impacts" as the changes in the functioning of nature due to an accumulation of pressures (e.g., pollution of air, water, or soil; decreased pollination due to loss of habitat and food sources for pollinators; improved regulation of water flows due to restoration of soils and riverine ecosystems; etc.).[538]

Long-term Science-based Target

The Science Based Targets initiative (SBTi) defines a "long-term science-based target" as a GHG reduction target in line with a) what the latest climate science deems is necessary to reach net zero at the global or sector level in accordance with pathways limiting warming to 1.5°C above pre-industrial levels, and b) before 2050.[539]

Natural Capital

The Capitals Coalition, the organization that developed the Natural Capital Protocol, defines "natural capital" as the stock of renewable and non-renewable natural resources (e.g. plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits to people.[540]

Near-term Science-based Target

The Science Based Targets initiative (SBTi) defines a "near-term science-based target" as a GHG reduction target in line with a) what the latest climate science deems is necessary to limit warming to 1.5°C above pre-industrial levels, and b) are achievable within a 5-10 year timeframe (e.g., from the date of submission to the SBTi).[541]

Net Zero

The Intergovernmental Panel on Climate Change (IPCC) defines "net zero" (GHG emissions) as a condition in which metric-weighted anthropogenic GHG emissions are balanced by metric-weighted anthropogenic GHG removals over a specified period.[542]

Nature

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) defines "nature" as the non-human living world, which also includes other scientific categories such as biodiversity, ecosystem structure and functioning, and the biosphere. As part of this definition, IPBES recognizes other value systems and worldviews, such as those held by indigenous and local communities, where nature is often viewed as inextricably linked to humans and not considered a separate entity.[543]

Nature-based Solutions

The International Union for Conservation of Nature (IUCN) defines "nature-based solutions" as "actions to protect, conserve, restore, sustainably use, and manage" natural or modified ecosystems that also address social, economic, and environmental challenges effectively and adaptively and simultaneously provide human well-being, ecosystem services, and resilience and biodiversity benefits.[544]

Nature Positive

Business for Nature defines "nature positive" as a global goal to halt and reverse nature loss by 2030, with full recovery targeted for 2050, where thriving ecosystems and nature-based solutions continue to support future generations and play a critical role in tackling climate change risks. Achieving a nature positive future will require a diverse set of actors to combine strong individual efforts for systems change, including governments, businesses, cities, and others.[545]

Pressures

The Science Based Targets Network (SBTN) defines "pressures" as human activities that directly or indirectly act as drivers that exert influence on an environment and ecosystem, which can lead to conditions that create impacts or changes to the surrounding environment or ecosystem. In the SBTN methods, several categories are used to describe these pressures, such as ecosystem use and ecosystem use change; resource exploitation; climate change; pollution; and introduction/multiplication of invasive species, and others.[546]

Scope 1 Emissions

The Greenhouse Gas Protocol (GHG Protocol) Corporate Accounting and Reporting Standard defines "scope 1 emissions" as a reporting organization's direct GHG emissions.[547]

Scope 2 Emissions

The Greenhouse Gas Protocol (GHG Protocol) Corporate Accounting and Reporting Standard defines "scope 2 emissions" as a reporting organization's emissions associated with the generation of electricity, heating and cooling, or steam purchased for own consumption.[548]

Scope 3 Emissions

The Greenhouse Gas Protocol (GHG Protocol) Corporate Accounting and Reporting Standard defines "scope 3 emissions" as a reporting organization's indirect emissions other than those covered in scope 2.[549]

Transition Plan

CDP defines a "climate transition plan" as a time-bound action plan that clearly outlines how an organization will pivot its existing assets, operations, and entire business model towards a trajectory that aligns with the latest and most ambitious climate science recommendations. It is important to note that a transition plan can address other risks aside from climate change alone; it could also include wider sustainability-related risks and goals (e.g., related to nature or inclusive of a just transition).[550]

Comprehensive Glossary Resources

- The Science Based Targets Network (SBTN) produced the SBTN Glossary of Terms, intended as a companion resource for users of SBTN's guidance.[551]
- The Capitals Coalition included a comprehensive glossary of terms[552] in the Natural Capital Protocol.
- The Taskforce on Nature-related Financial Disclosures (TNFD) released a comprehensive glossary[553] of all the key terms used in the TNFD Recommendations and accompanying guidance, including disclosure metrics.
- The Race to Zero Campaign lexicon[554] includes key definitions related to the net zero transition, which was prepared by its expert peer review group with many definitions sourced from IPCC reporting.
- The Science Based Targets initiative (SBTi) developed a glossary of common terms[555] used in its corporate net zero standard.
- The Intergovernmental Panel on Climate Change (IPCC) defined key used terms[556] in its sixth assessment report, which summarizes the state of knowledge of climate change, its impacts and risks, and climate change mitigation and adaptation.

ANNEX 2: NAVIGATOR KEY TERMINOLOGY RELATED TO DISCLOSURE INSTRUMENTS

A “disclosure instrument” in this navigator is defined as a resource that facilitates company communication of its position, targets, and management actions towards nature and climate. This could take the form of frameworks and methodologies for measurement and disclosure, such as the TNFD, an annual disclosure system, such as CDP, or a standard for non-financial disclosure, such as GRI.

Disclosure Instrument Type, Related Terms	Definition	Examples *(not exhaustive)*
Framework[557]	A structure designed to support the contextualization of information through a set of guiding principles, a framework can often precede more defined standards. A framework allows for flexibility in defining the direction, but less so the method itself, and does not constitute a mandatory reporting obligation for the user on its own.	RACE TO ZERO; SCIENCE BASED TARGETS NETWORK; Act-D; TNFD
Standard[558]	A standard contains specific and detailed criteria or metrics of what should be reported on each topic and represents an agreed-upon level of information disclosure as well as parameters guiding the quality of disclosed content. In general, corporate reporting standards have a public interest focus, credible independence, due process, and have undergone a public consultation.	GRI
Benchmarks, Ratings, Rankings	Benchmarks, ratings, and rankings reflect a scoring of measured information shared by a company or entity across specified categories and enable comparisons between entities. The information disclosed through reporting standards may serve as a useful data input for benchmarks, ratings, and rankings.	World Benchmarking Alliance; ShareAction»
Voluntary	Voluntary reporting via a disclosure instrument is not mandated by any regulatory process or policy-making body.	ISO
Mandatory	Mandatory reporting via a disclosure instrument is required by a regulatory entity for organizations meeting certain criteria, with non-compliance being followed by specified penalties.	European Commission *(ESRS; SFDR)*
Interoperability	Interoperability involves working towards the goal of collaboration and complementarity of information between two or more frameworks and/or standards. Interoperable disclosure instruments allow for global comparability and consistency of shared information across companies and jurisdictions. In turn, this reduces duplicative reporting requirements and supports the creation of a comprehensive reporting system. For example, the ISSB’s partnership with the Global Reporting Initiative enables the ISSB to build its IFRS disclosure requirements to be interoperable with GRI standards, helping to reduce the reporting burden for companies using both sets of standards for reporting.[559]	*For example:* GRI *with* IFRS Foundation
Assurance	Assurance is the process of establishing the integrity and credibility of disclosed information through an external, third-party review process. This is a common requirement for the disclosure of company financial performance information, but is being increasingly discussed for non-financial, sustainability-related information disclosures, and may be required in the future (especially in Europe, where it is already being phased into certain regulations).	*Limited assurance required under the EU Corporate Sustainability Reporting Directive* European Commission

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ANNEX 3: KEY DISTINGUISHING FEATURES OF DISCLOSURE INSTRUMENTS

Features	GRI	CDP	TNFD	ISSB/ IFRS S1&S2	ISO	PRI	CSRD/ ESRS	SFDR	SEC Climate Rule
Classification									
Framework/Methodology			x						
Voluntary System or Standard	x	x		x	x	x			
Regulatory Standard							x	x	x
Definition of Materiality									
Agnostic or Single/Financial Materiality Inclined		x	x[xxvi]	x	x	x			x
Double/Impact Materiality inclined	x		x				x	x	
Explicitly Requires full year of collected data and/ or projections		x				x		x	x
Stated [plans for] Interoperability with ISSB	x	x	x	n/a					
Guidance is focused towards financial sector actors (beyond sub-questions)				x		x		x	x
Statements on Third-party Data Verification/Assurance									
Recommended	x	x	x	x	x	x		x	
Required							x		x

xxvi The TNFD Recommendations adopt a flexible approach to materiality and can embed either financial or impact materiality.

ANNEX 4: THIRD-PARTY DATA VERIFICATION AND ASSURANCE CONSIDERATIONS FOR DISCLOSURE

Instrument	Perspective on Third Party Data Verification and Assurance
GRI	Under *GRI 2*: General Disclosures, disclosing companies are asked to detail the policies and practices in place related to external validation of sustainability-related information. If the organization's sustainability-related reported information has been externally assured, they are asked to provide a link to the assurance report and to describe what standard of assurance was applied and by what provider.[560]
CDP	If the disclosing company has sought external verification for any or all of the information disclosed, CDP requests that the company report what data was verified and by which standard or mechanism. CDP requires verification to be completed in line with recognized verification standards. Further detail on CDP's view of data verification is available here.[561]
TNFD	TNFD does not require third-party verification or assurance of sustainability-related information but does mention that it may become required in the future.[562]
SBTN	The Science Based Targets Network is currently developing validation criteria and a validation process to ensure that organizations have followed the SBTN methods correctly. Organizations will have to meet the validation criteria before having their targets approved.[563]
IFRS/ISSB	The *IFRS S1* (general sustainability disclosures) does not reference verification or assurance.[564] The IFRS S2 (climate-related disclosures) requires that organizations using carbon offsetting measures to achieve emissions reduction targets report on whether the offsets are externally verified or certified.[565]

Instrument	Perspective on Third Party Data Verification and Assurance
ISO	ISO does not require third-party verification. However, if an organization claims to be compliant with the ISO 14060 standards and thus releases a GHG emissions statement, that statement must be verified through an internal audit or by a third-party verifier.[566]
PRI	PRI does not require third-party data verification. However, PRI signatories are encouraged to obtain data verification to increase the credibility of reported data.[567]
ESRS/ CSRD	The CSRD will require the assurance of sustainability-related information disclosures for reporting companies and entities that meet certain criteria. Assurance requirements are expected to step up over time from more limited information verification to a more substantial portion of disclosures as the market for sustainability assurance grows and matures in Europe. The new regulation requires EU Member States to extend their current statutory audit frameworks to cover the assurance of sustainability reporting, and to establish a system of quality checks for the assurance of sustainability reporting and its adherence to reporting standards.[568]
SFDR	Article 15(1)(b) of the SFDR requires that descriptions of the investments underlying disclosed financial products are aligned with the economic activities detailed in the EU Taxonomy. Disclosing entities may state whether this EU Taxonomy compliance was subject to an assurance process (and if so, provide the name of the assuring third-party entity/ entities). This third-party review is currently optional.[569]
SEC Climate-Related Disclosure Rule	*(Proposed)* The disclosure of Scope 1 and 2 emissions will be subject to third-party attestation. Some climate related information will need to be published in audited financial statements.[570]

ANNEX 5: LEVEL OF EFFORT ESTIMATION SCALE FOR OPERATIONALIZING DISCLOSURE INSTRUMENTS

A scale was developed for this navigator to provide users with an immediate point of reference for understanding the anticipated level of effort (LOE) involved in operationalizing the various nature and climate disclosure instruments summarized. The LOE appraisal included in each disclosure instrument summary is the navigator authoring team's approximation of the effort required for an organization to communicate non-financial information via the disclosure instrument.

As disclosure instruments that include nature-related non-financial disclosures continue to proliferate, organizations that have prior experience preparing reporting on climate goals are expected to be particularly well-placed to adapt. The LOE scale below acknowledges that prior organizational experience with climate disclosure reporting may lessen the preparing burden for information on nature goals and actions.

This table starts on the next page.

Criteria Category		Sub-criteria	Level of Effort Estimate Required to Implement Disclosure Instrument: Scale Interpretation		
			The level of effort required to operationalize this framework is likely suitable for organizations in the early stages of considering climate or nature impact management **and/or** with nascent data collection and reporting processes	The level of effort required to operationalize this framework is likely suitable for organizations with experience in considering climate or nature impact management **or** with prior climate-related non-financial reporting experience (e.g., GHG Protocol)	The level of effort required to operationalize this framework is likely suitable for organizations with experience in integrated impact management (climate and nature) **and** with significant prior climate-related non-financial reporting experience **and/or** with significant support resources for these efforts
			Lower	**Medium**	**Higher**
1	**Accessibility of disclosure instrument for reporting climate and nature-related information**	**a)** Disclosure instrument is adaptable to organizational context (e.g., disclosure instrument is more flexible or modular)	Disclosure guidelines are: Adaptable, flexible, or modular, allowing organizations to selectively disclose available information	Disclosure guidelines are: Partially standardized but have modules that are adaptable or flexible based on organization's needs	Disclosure guidelines are: Fully standardized (not adaptable, flexible, or modular)
		b) Disclosure instrument provides clear and prescriptive guidelines on reporting climate- and nature-related information	Guidelines to report information are clear and/or ample supporting guidance is offered to implement disclosures	Guidelines to report information are moderately clear and/or some supporting guidance is offered to implement disclosures	Guidelines to report information require review of additional supporting guidance to implement disclosures
		c) Disclosure instrument definition of materiality impacts level of information disclosed (e.g., single/ enterprise-value materiality can reduce the information needed)	Single, financial, or enterprise value-focused materiality inclined	Agnostic – organization can define material factors and reported information	Double-materiality inclined (entity must also disclose inside-out impacts on the environment and society)
		d) Disclosure instrument requirements if data is unavailable	If data is not available, disclosure instrument does not require reporting or further explanation	Disclosure instrument operates on a "disclose or explain" basis with explanations required for non-reported questions/categories	Disclosure is required for all questions and categories
		e) Interoperability or alignment with other disclosure methodologies (e.g., climate methodologies)	Disclosure instrument is easily aligned, compatible, or interoperable with other disclosure instruments	Disclosure instrument is moderately aligned, compatible, or interoperable with other disclosure instruments	Disclosure instrument has a low level of alignment, compatibility, and interoperability with other disclosure instruments or requires specialized resources to discern alignment areas

Criteria Category		Sub-criteria	Level of Effort Estimate Required to Implement Disclosure Instrument: Scale Interpretation		
			The level of effort required to operationalize this framework is likely suitable for organizations in the early stages of considering climate or nature impact management **and/or** with nascent data collection and reporting processes	The level of effort required to operationalize this framework is likely suitable for organizations with experience in considering climate or nature impact management **or** with prior climate-related non-financial reporting experience (e.g., GHG Protocol)	The level of effort required to operationalize this framework is likely suitable for organizations with experience in integrated impact management (climate and nature) **and** with significant prior climate-related non-financial reporting experience **and/or** with significant support resources for these efforts
			Lower	**Medium**	**Higher**
2	**Organizational resources required to effectively operationalize disclosure instrument**	**a)** Dedicated or allocated personnel and organizational capacity in place to process relevant data and report (inclusive of professional services support if necessary)	Personnel with climate and/or nature reporting knowledge or experience are likely not required to disclose	Personnel with climate and/or nature reporting knowledge or experience would be highly beneficial to disclose	Personnel with climate and/or nature reporting knowledge or experience are likely necessary to disclose
		b) Data collection processes are in place (e.g., MRV) to continuously gather the necessary information for disclosure across business value chain or ability to supplement data gaps with other credible data sources	Disclosure instrument requirements does not mandate new data collection processes and/or data gaps can be fully addressed through credible supplementary sources	Disclosure instrument requirements mandate moderately new data collection processes and/or data gaps can be partially addressed through credible supplementary sources	Disclosure instrument requirements mandate entirely new data collection processes and/or data gaps can be minimally or cannot be addressed through credible supplementary sources
		c) Level of organizational reporting tools and governance processes in place (e.g., data management systems and internal controls)	The preparation requirements for the disclosure instrument can easily be absorbed into existing, well-established disclosure processes with minimal modification/effort	The preparation requirements for the disclosure instrument can be absorbed into existing, well-established disclosure processes with some modification/effort	The preparation requirements for the disclosure instrument cannot be easily absorbed into existing, well-established disclosure processes without significant modification/effort
3	**Third-party data verification**	**a)** Required third-party verification or assurance can raise the level of difficulty to operationalize disclosure instrument	Third-party verification is not required currently	Third-party verification is suggested or limited	Third-party verification is broadly required

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