

# Roadmaps to Nature Positive

→ *Foundations for  
all businesses*





# Table of contents

## 01. Nature Action: *a business imperative* 3

Nature matters for business	4
Nature risks have shifted global policy	4
Rapid developments in the corporate accountability system for nature	5
Nature positive and current business approaches	7
Catalyzing critical business action in support of nature positive	10

## 02. Introduction to WBCSD's *Roadmaps to Nature Positive* 12

Objectives for the Roadmaps to Nature Positive	13
Overview of the foundations for all businesses	15

## 03. Foundations *for all businesses* 17

<b>Stage 1:</b> Assess (materiality screening)	18
<b>Stage 2:</b> Commit and Transform (targets for priority actions)	25
<b>Stage 3:</b> Disclose (initial disclosures)	31

## 04. The emerging corporate *performance and accountability system* 35

## 05. Conclusion 38

## 06. Annexes 40

Key definitions; ACT-D framework; Maturity tables

# 01. Nature Action: *a business imperative*

# 01. Nature Action: *a business imperative*

## **Nature matters for business**

Nature is the backbone of the world economy: all businesses depend on nature. Societies cannot survive, let alone thrive, without the essential functions that the natural world provides: clean air, water, food and a stable earth system to exist within.

And yet, humanity is using double the resources that the Earth can regenerate each year.<sup>1</sup> Associated land- and sea-use change as well as pollution and greenhouse gas (GHG) emissions are driving record levels of nature loss.<sup>2</sup> The ongoing and accelerating destruction of nature and biodiversity is one of the greatest risks that humanity faces today.

Nature loss is already impacting business. Industry value chains that are highly and moderately dependent on nature (relying heavily on direct extraction of resources from land, freshwater and ocean realms) generate over half of global GDP; every industry has some degree of direct and indirect dependency on nature.<sup>3</sup>

Furthermore, addressing the climate crisis, restoring nature and protecting biodiversity are mutually supporting goals. Climate change cannot be mitigated without taking action to repair and restore natural systems, returning them to healthy and resilient states.

The solutions needed are not incremental tweaks to current business models: achieving **Vision 2050** and creating a world in which more than 9 billion people can live well, within planetary boundaries<sup>4</sup> requires the transformation of societies and economies.

## **Nature risks have shifted global policy**

Nature has rapidly risen up the agenda, both within the real economy and for the financial services industry and investors. There is no escaping rising nature-related risks – driving policymakers, regulators, investors, businesses, consumers and citizens to collectively call for rapid change.

Governments have sent a particularly strong signal. The 15<sup>th</sup> **United Nations Biodiversity Conference** (CBD COP15) took place in December 2022 and culminated with the adoption of the **Kunming-Montreal Global Biodiversity Framework** (GBF) – setting a global ambition to halt and reverse biodiversity loss by 2030.

This is a key milestone for nature action, the equivalent of a “Paris Agreement” for nature, raising nature to the same level as climate on the global political agenda. The GBF’s 23 targets detail the plan to address nature loss for all actors: governments, businesses and civil society.

The GBF will influence business action through policies, regulations and financial incentives. For instance, Target 15 encourages governments to require companies to “assess and disclose dependencies, impacts and risks, to progressively reduce negative impacts and risks, and increase positive impacts”. Target 16 calls for supportive policies for sustainable consumption choices, reducing over-consumption and waste generation. Target 18 requires the elimination of environmentally harmful subsidies and for the alignment of incentives with the mission of the GBF.

Companies that address the risks of nature loss and begin their journeys to contribute to nature positive today will be able to:

- Prepare for incoming policy and regulatory requirements;
- Pro-actively manage nature-related physical, transition and systemic risks;<sup>5</sup>
- Benefit from early nature-positive opportunities.

→ **Complementary TSNF guidance** is available to help companies with their nature-related disclosures, building on lessons from **TSNF pilot with 23 WBCSD members**.



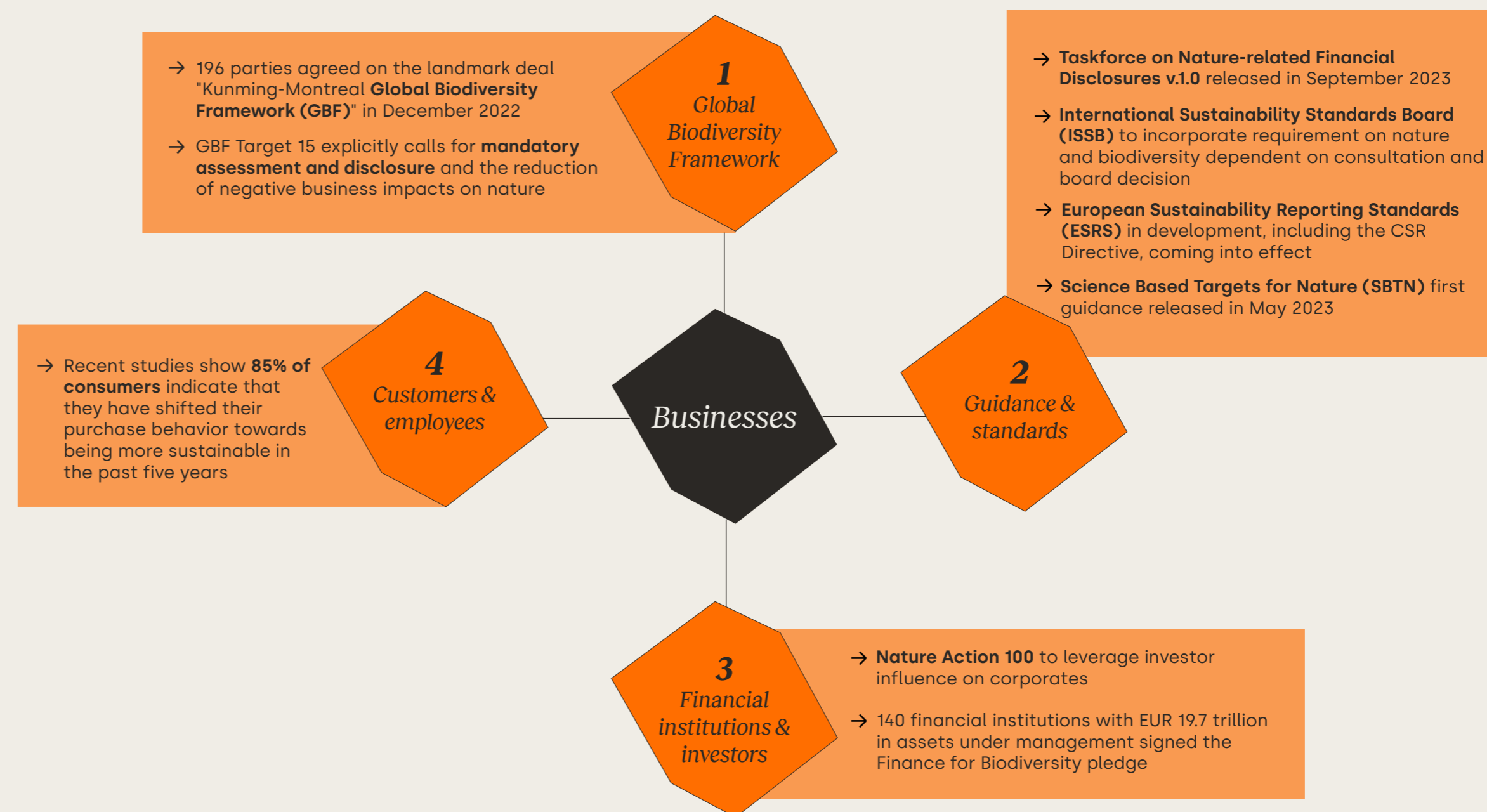
## Rapid developments in the corporate accountability system for nature

A corporate performance and accountability system is emerging to support and catalyze credible and impactful business action on nature (see [section 04](#) for more detail), building on a similar system for climate. The first building blocks of this system are being put in place and key stakeholders, including regulators, investors, standard setters, consumers and employees, are all raising their expectations of business.

### Standards and disclosures

Organizations and governments are putting both voluntary and mandatory accountability mechanisms into place. On the voluntary side, 2023 sees the release of the initial set of science-based targets for nature by the [Science Based Target Network \(SBTN\)](#) and the [Taskforce on Nature-related Financial Disclosures \(TNFD\)](#) v1.0 recommendations for nature-related financial disclosures. Both SBTN and TNFD have engaged with business (including through WBCSD pilots and preparer groups), supporting companies in assessing their impacts, dependencies, risks and opportunities associated with nature, setting science-informed targets where possible, and identifying priority action areas.

Figure 1: Key nature agenda stakeholders



Source: Adapted from World Economic Forum (2023) Sector Transitions to Nature Positive series

## Standards and disclosures (continued)

Mandatory requirements are of immediate relevance to companies. The **European Sustainability Reporting Standards (ESRS)** under the [Corporate Sustainability Reporting Directive](#) (CSRD)<sup>6</sup> will require large and listed companies operating in the European Union to publish regular reports on the social and environmental risks they face and on how their activities impact people and the environment, specifically through their direct operations. Similarly, the Government of India now legally obliges companies<sup>7</sup> to adequately identify, monitor and manage environmental risks and disclose material information, reporting on direct and indirect impacts on biodiversity in ecologically sensitive areas.

And while still voluntary, the **International Sustainability Standards Board (ISSB)** has now published its [General Requirements for Disclosure of Sustainability-related Financial Information](#) (International Financial Reporting Standards (IFRS S-1) and [Climate-related Disclosures](#) (IFRS S-2)). ISSB has indicated that it may require companies to provide additional transparency on impacts and risks related to natural ecosystems and the just transition.<sup>8</sup> Regulators in a number of jurisdictions have indicated they will adopt the ISSB standards and make them mandatory in the near future.<sup>9</sup>

## Financial institutions and investors

The financial industry is taking on a more proactive role to help build an economy that works with, rather than against, nature. Since 2021, around 140 financial institutions, managing a total of EUR €19.7 trillion in assets, have pledged their commitment to the [Finance for Biodiversity Pledge](#). Additionally, investors are coming together through this initiative's [Nature Action 100](#) program, which launched in 2022 to engage with business on nature-related topics. In the same year, the [Stockholm Resilience Centre](#) (SRC) announced the new [FinBio](#) consortium to help the global financial sector develop strategies to curb biodiversity loss and protect nature.

Financial institutions play a crucial role in contributing to building nature-positive economies by conducting regular assessments of investor portfolios for biodiversity risks, engaging with high-risk investees, mobilizing internal and external stakeholders (including clients), establishing nature-friendly investment policies and strategies, and engaging with initiatives such as TNFD and SBTN to share relevant insights.

## Consumers and employees

Overall, there is a growing expectation from society and a wide range of stakeholders for greater business action to halt and reverse nature loss. As part of its [2022 Biodiversity Barometer](#), the Union for Ethical Biobased Trade (UEBT) [Consumers Views survey](#) has found that globally, consumers consider biodiversity loss the second most urgent environmental concern, behind climate change. Consumers in some of the biggest economies and in emerging markets, such as China and Brazil, ranked biodiversity loss as the highest global environmental concern. Other recent surveys from Deloitte<sup>10</sup> and McKinsey<sup>11</sup> show that in countries such as the UK and the US, consumers and employees are increasingly making decisions with sustainability and the environment in mind.

Employees are also increasing expectations when it comes to employer commitments to protecting and restoring nature. Deloitte's 2022 Gen Z and Millennial survey<sup>12</sup> reveals the newer generation of employees consider environmental protection a top priority and expect their employers to prioritize tangible actions, as well as encourage employees to get directly involved.



## Nature positive and current business approaches

Stakeholders widely acknowledge the term “nature positive” as a global goal to halt and reverse nature loss by 2030 and achieve full recovery by 2050, as captured in the mission statement of the Kunming-Montreal Global Biodiversity Framework<sup>13</sup> (see key concepts in [Annex 1](#)).

The goal highlights the need for urgent action from all stakeholders, including business, to rapidly reduce negative impacts and redirect financial flows towards activities that restore and protect nature.

Individual companies can contribute to this shared goal by adopting an approach to nature positive across their spheres of control and influence, including in their direct operations, across value chains and at sites in priority locations related to integrity, stress or biodiversity importance (see Figure 2).

To help guide business action on nature, WBCSD, SBTN, TNFD, the World Economic Forum and Capitals Coalition collaborated to provide business with a consistent approach: the [high-level business actions on nature to Assess, Commit, Transform and Disclose](#) (ACT-D) illustrated in Figure 3 below. The key elements of the high-level actions come together as the basis for an ambitious, credible and strategic business approach to contributing to nature positive (for detailed description of each ACT-D element, please refer to [Annex 2](#)).

Figure 2: Sphere of control and spheres of influence relevant for corporate target-setting

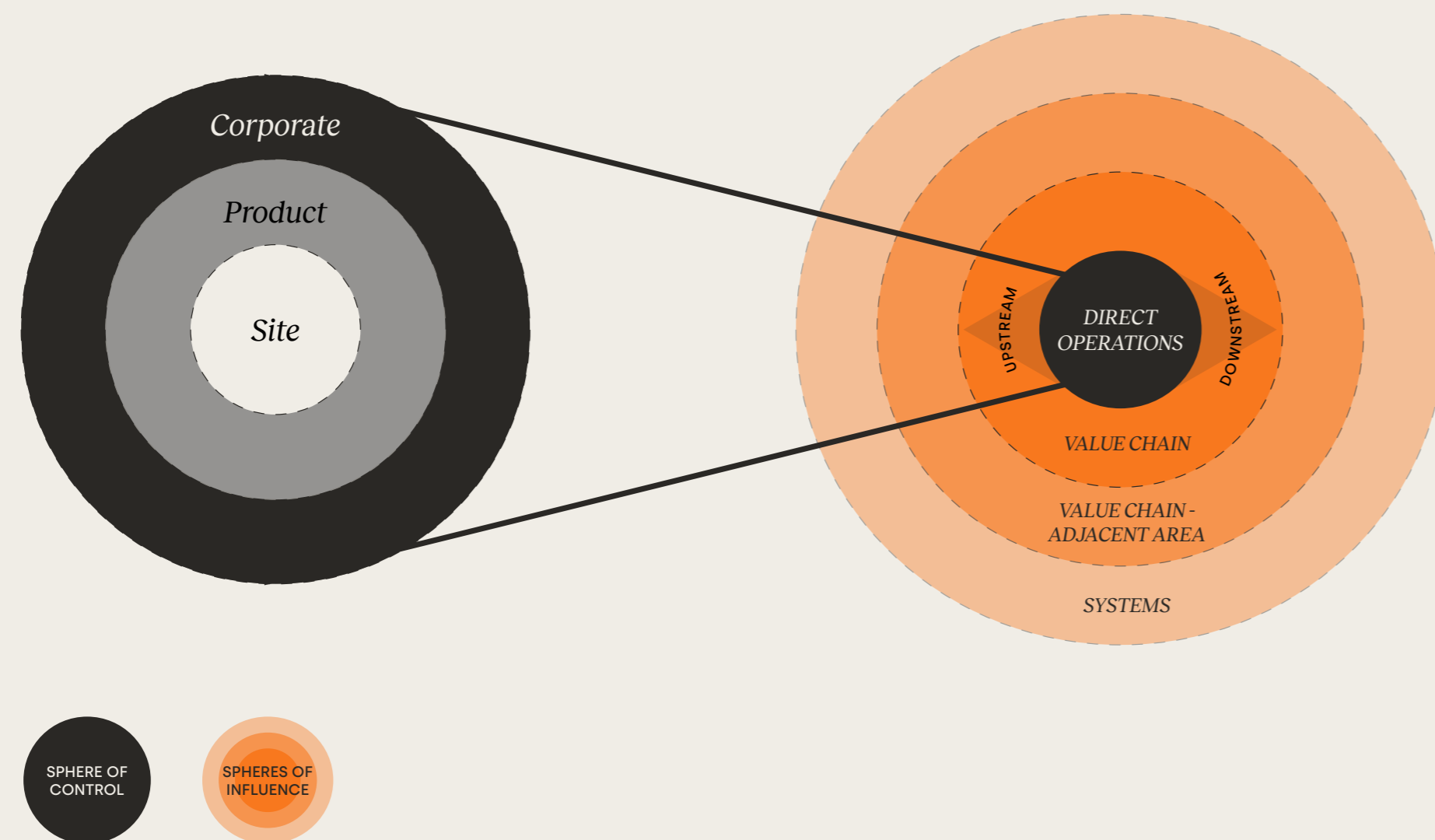
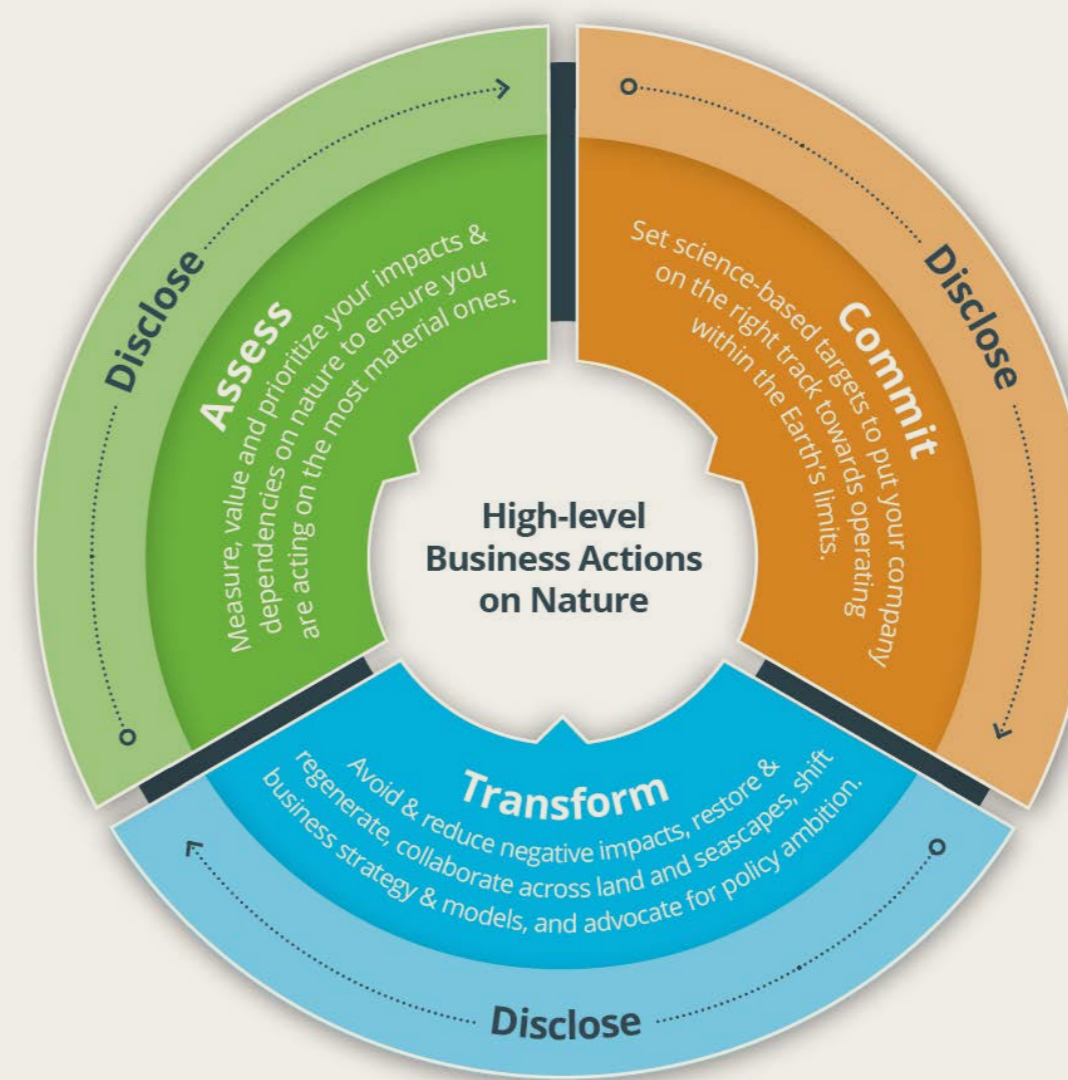


Figure 3: ACT-D Framework (Assess, Commit, Transform, Disclose)



Source: Adapted from SBTN (2020). [Science-Based Targets for Nature Initial Guidance for Business](#)

Source: Business for Nature (2022). [High-level Business Actions on Nature](#)

The ACT-D framework is necessarily ambitious but there is no expectation that companies will implement it in one go. Companies enter nature journeys at different stages of readiness and maturity and with different nature impacts and dependencies. At the same time, the priority actions needed will vary between sector, value chain and geographic location. **To address this, WBCSD has defined maturity levels, informed by an analysis of public corporate disclosures on nature,<sup>14</sup> helping companies understand where they are on their nature journey (see Table 1 and Annex 3 to explore the maturity journey across each of the high-level business actions on nature).**

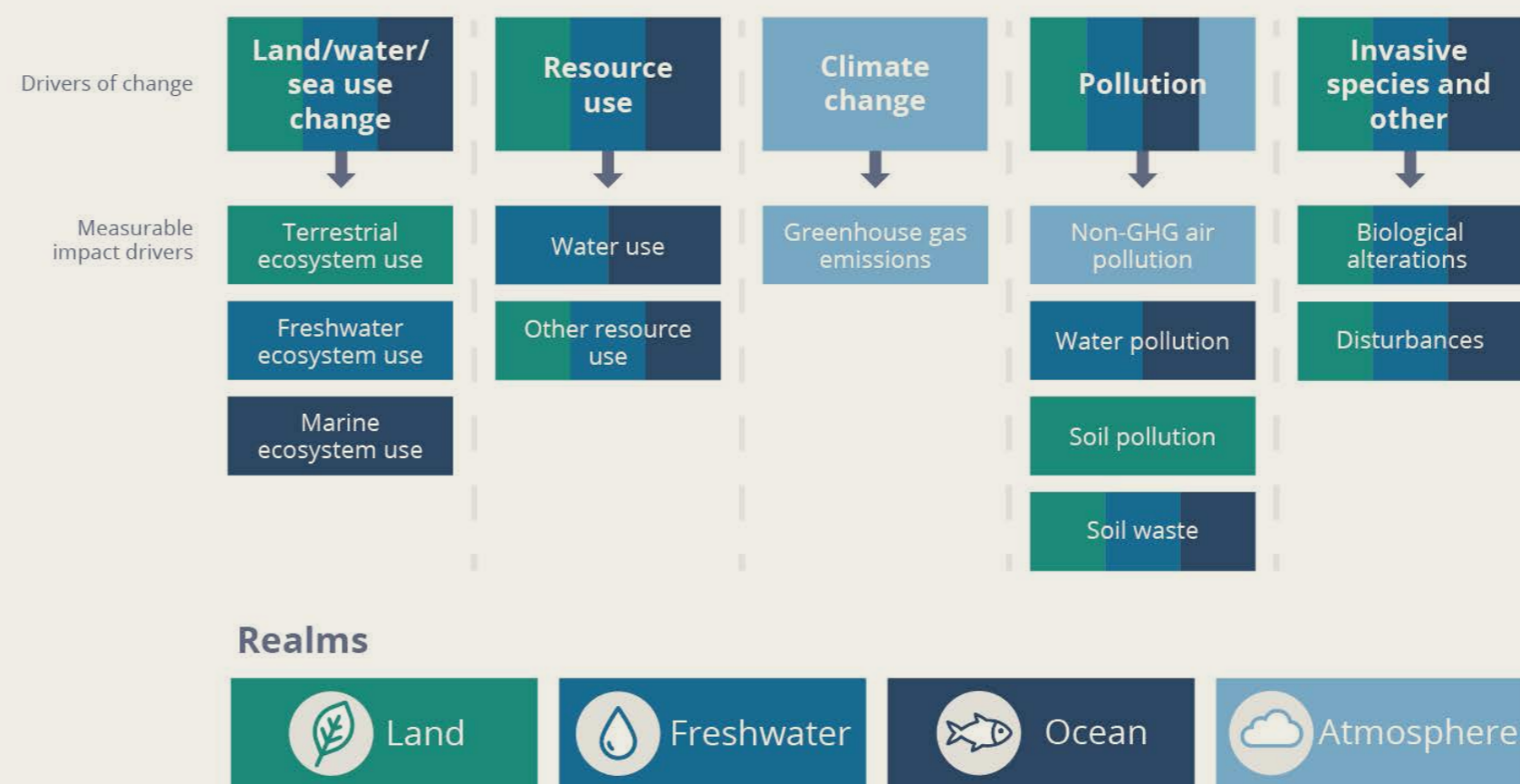
Nature presents companies with specific challenges: unlike carbon, it is not possible to measure it with a single metric or methodology. Furthermore, nature is location-specific and is not replaceable or fungible (e.g., a ton of carbon has equal atmospheric impact regardless of where it is emitted, whereas the ecological value of a tree in the Amazon differs from that of a tree in a boreal forest).

To take nature action, businesses need to understand how their activities impact and depend on nature (see key concepts in Annex 1) across their spheres of control and influence. This in turn informs efforts to reduce pressures on the five drivers of nature loss (see key concepts in Annex 1), also referred to as “drivers of change” (see Figure 4). This logic, focusing on drivers of nature loss as an entry point for business action, underpins key frameworks, including SBTN and TNFD.

Table 1: WBCSD summary maturity levels for nature action

Starting	Developing	Advancing	Leading
The company <b>identifies nature-related issues</b> & presents <b>stand-alone actions</b> for nature.	The company <b>assesses its impacts &amp; dependencies</b> & has set a <b>high-level ambition</b> or targets for nature.	The company <b>integrates nature into strategy</b> , sets <b>measurable commitments</b> for nature & implements <b>strategic actions</b> along priority parts of the <b>value chain</b> .	The company assesses <b>impacts &amp; dependencies for all potentially relevant realms</b> , structuring <b>business models &amp; value chains</b> in ways that address their impacts & dependencies & are commensurate with the achievement of global nature goals.

Figure 4: Realms of nature, drivers of nature change and measurable impact drivers



Source: Taskforce on Nature-related Financial Disclosures (2022). [TNFD Beta Framework v0.2](#)



### WBCSD approach to nature positive for business

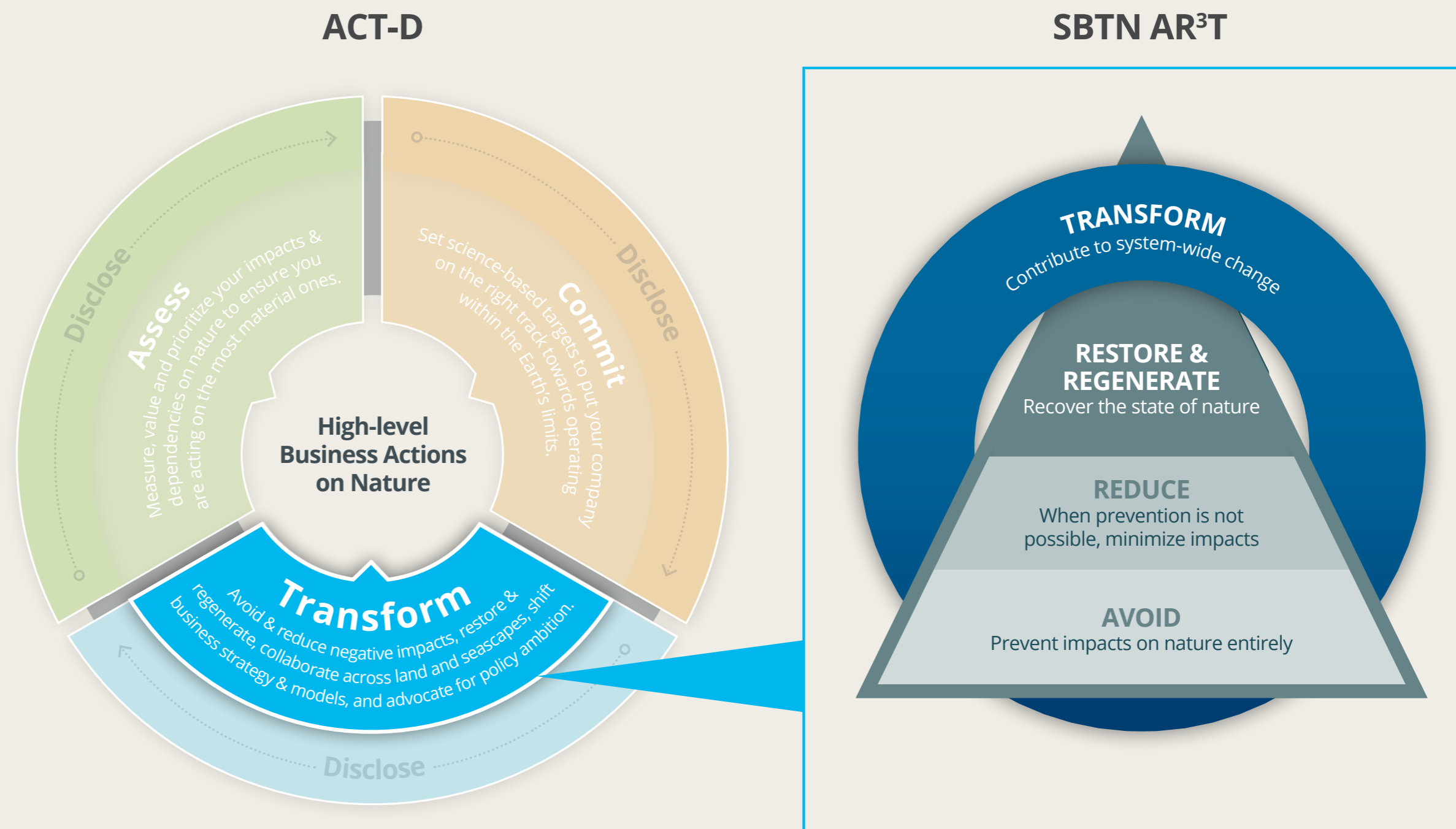
Nature positive is gaining traction among the business community, yet lack of consensus around the term remains the subject of confusion. WBCSD's approach is based on key principles shared by leading organizations in this space, including SBTN, TNFD, Business for Nature and others (see [Annex 1](#)).

In addition to understanding the company's relationship with nature and setting commitments that credibly contribute to nature positive, the collective impacts from regenerative and restorative business actions (doing "more good") must outweigh those from avoiding and reducing nature loss (doing "less harm") as guided by SBTN's Avoid, Reduce, Restore & Regenerate, Transform (AR3T) Action Framework (see Figure 5).

This means that individual companies must urgently accelerate action to halt nature loss while simultaneously bringing back more nature. Actions that reduce harm will help to collectively reverse nature loss by 2030, while restorative, regenerative and transformative actions are critical to achieving full recovery by 2050.

**In summary, rather than claiming to be nature positive themselves, companies should be holistic and transparent in the approach they take to assess, commit, transform and disclose, and in doing so highlight their contributions towards a nature positive future.**<sup>15</sup>

Figure 5: SBTN's Action Framework (AR3T) defines the hierarchy of actions that companies can put in place as part of the "Transform" stage of ACT-D



Source: Business for Nature (2023). [Priority actions towards a nature-positive future](#)

## Catalyzing critical business action in support of nature positive

While the case for companies to contribute to nature positive is evident, this agenda can still be a blind spot. Ahead of CBD COP15, **McKinsey found that** while 83% of Fortune Global 500 companies have climate change targets, only 25% have freshwater consumption targets and a mere 5% have set targets related to biodiversity loss. Only 5% have assessed their impacts on nature and less than 1% understand their nature dependencies.<sup>16</sup>

WBCSD is working with **Business for Nature** and the **World Economic Forum** to develop **guidance to support companies** on their nature journeys: understanding their impacts, dependencies, risks and opportunities in order to prioritize actions which contribute to nature positive. Companies can explore an initial set of 12 sector overviews, developed by WBCSD, Business for Nature and the World Economic Forum.

**In addition, working with 75 leading companies worth more than USD \$2 trillion in market capitalization, WBCSD is developing Roadmaps to Nature Positive that offer companies deep guidance and support on their nature journeys across maturity levels. The Roadmaps provide in-depth analysis and guidance relevant for all businesses, as well as specific guidance for four high-impact systems:<sup>17</sup> land use (including the agri-food and forest sectors), built environment and energy.**

Table 2: High-level impacts of selected global value chains<sup>18</sup>

Land use	Built environment	Energy
<b>72%</b> of (near-) threatened species impacted	<b>29%</b> of (near-) threatened species impacted	<b>18%</b> of (near-) threatened species impacted
<b>33 million</b> hectares of additional forest needed to meet global demand in 2050	<b>180 billion m<sup>2</sup></b> of global building floor area added by 2050	<b>0.5-5%</b> of the total land available in 2050 will be occupied by solar energy
<b>70%</b> of global freshwater has been used for farming and irrigation	<b>37%</b> of global, energy-related carbon emissions in 2020 came from buildings	<b>&gt;70%</b> of global GHG emissions in 2017 originated from the energy sector
<b>56%</b> Increase in food demand from 2010 to 2050 due to growing global population	<b>80%</b> of the world's population lives in cities by 2050, 25% more than today	<b>50%</b> increase in global demand for affordable and secure energy by 2050
<b>24 million</b> full-time jobs generated by transitioning to a greener economy in 2050	<b>&gt;10,000</b> cities committed to drastically reducing their carbon footprints by 2050	<b>42 million</b> renewable energy jobs generated by 2050



The Roadmaps to Nature Positive provide business with guidance to progress the actions for business (Assess, Commit, Transform, Disclose: ACT-D) at all maturity levels: scaling up actions to halt and reverse nature loss, preparing to set science-based nature-related goals and targets, and disclosing progress using quantifiable metrics.

**This initial guidance covers the foundations of nature action. It will help companies define and improve their nature strategies based on robust value chain materiality screening, identify priority actions to systematically avoid and reduce negative impacts, determine the best restoration and regeneration approaches, and prepare for initial voluntary and required disclosures. It will provide a strong foundation to help business make progress towards achieving the shared goal of a nature-positive world by 2030.**

***This publication replaces WBCSD's December 2022 draft Roadmaps to nature positive: Guidelines to accelerate business accountability, ambition and action for a nature-positive future, published for consultation ahead of CBD COP15.***

**"Action on nature matters for health, climate and business success. That's why GSK is committed to contributing to a nature positive world and we are taking action to deliver our nature targets set in 2020. We believe these Roadmaps to Nature Positive provide the practical guidance needed to support businesses in advancing their approach and accelerating action on nature"**

*Renata Scofield, Environmental Stewardship Director, GSK*





# 02. Introduction to WBCSD's *Roadmaps to Nature Positive*



# 02. Introduction to WBCSD's *Roadmaps to Nature Positive*

## **Objectives for the Roadmaps to Nature Positive**

The momentum of the nature agenda is unprecedented. Business needs support and guidance in navigating the rapidly developing system. WBCSD's Roadmaps to Nature Positive will help businesses:

- Systemically approach the understanding of nature-related dependencies and impacts, risks and opportunities (DIRO);
- Accelerate the implementation of nature target-setting, financial risk assessments and nature-related disclosures;
- Establish ambitious strategies, investments and transition plans aligned with nature positive across value chains.

## **How**

Development of the Roadmaps brought WBCSD member companies together to understand and develop their nature journeys, creating an evidence-based approach to identify pain points supported by clear guidance on how to address them, both individually and collectively.

The Roadmaps provide tailored guidance to the different stages of nature "maturity". Building on its [nature readiness assessment](#), WBCSD defines actions across four levels of maturity for each element of the ACT-D framework (Assess, Commit, Transform, Disclose).

In this way, the Roadmaps help a company understand how advanced it is on each of the ACT-D elements and gain insights on how to progress the business approach. [Annex 2](#) provides an overview of the actions demonstrated by companies across the full range of ACT-D maturity levels. These maturity levels have also informed the sector guidance developed by Business for Nature and the World Economic Forum.

The Roadmaps are already helping companies navigate the rapidly maturing accountability and disclosure landscape. They intentionally align with emerging guidance from SBTN on setting science-based targets and they are preparing companies to measure and report progress on nature actions across voluntary and regulatory frameworks such as TNFD and the EU's Corporate Sustainability Reporting Directive (CSRD).

## **Outputs**

In addition to high-level guidance for all sectors, WBCSD has developed specific guidance across high-impact systems and sectors, working initially with members, in land-based (agri-food and forest sectors), built environment and energy systems. WBCSD is also leading the development of complementary work, including pilots, tools and supporting advocacy. These efforts strengthen the general and system-specific Roadmaps, offering companies a consistent and integrated approach to their nature-positive journeys.





## Outcomes

Supported by WBCSD's Roadmaps to Nature Positive, companies will be prepared to comply with regulatory expectations and able to engage with the emerging corporate performance and accountability system, accelerating nature action and investment and ensuring that business ultimately contributes to halting and reversing nature loss by 2030, in line with the Global Biodiversity Framework (GBF).

- **Individual company action:** By 2025, WBCSD's member companies (particularly those operating in the high-impact systems and sectors covered by the Roadmaps) are advancing on their nature journey from a 2021 readiness baseline. In addition, companies are engaging with a comprehensive business performance and accountability system that unites climate and nature action across company value chains, including: corporate target-setting, transition planning, accounting and disclosures. This end-to-end system will allow businesses to engage with and will enable more effective tracking by governments and society.
- **Resource mobilization:** Between now and 2030, companies will mobilize resources for nature impact mitigation and nature restoration across key value chains (and, as a result, into the key markets and jurisdictions that they touch) to implement the GBF

and accompanying policy measures. Companies that undertake clear and transparent nature action and accountability processes across their value chains will be able to access lower costs of capital when it comes to the investments required in their value chains, thereby attracting additional finance to the global nature agenda.

- **Collective action:** By 2030, companies have come together to define and take action to halt and reverse nature loss across key systems, bridging the divide between nature action and investment to radically accelerate investment in solutions.

→ [The Roadmaps to Nature Positive webpage](#) provides further resources and background information



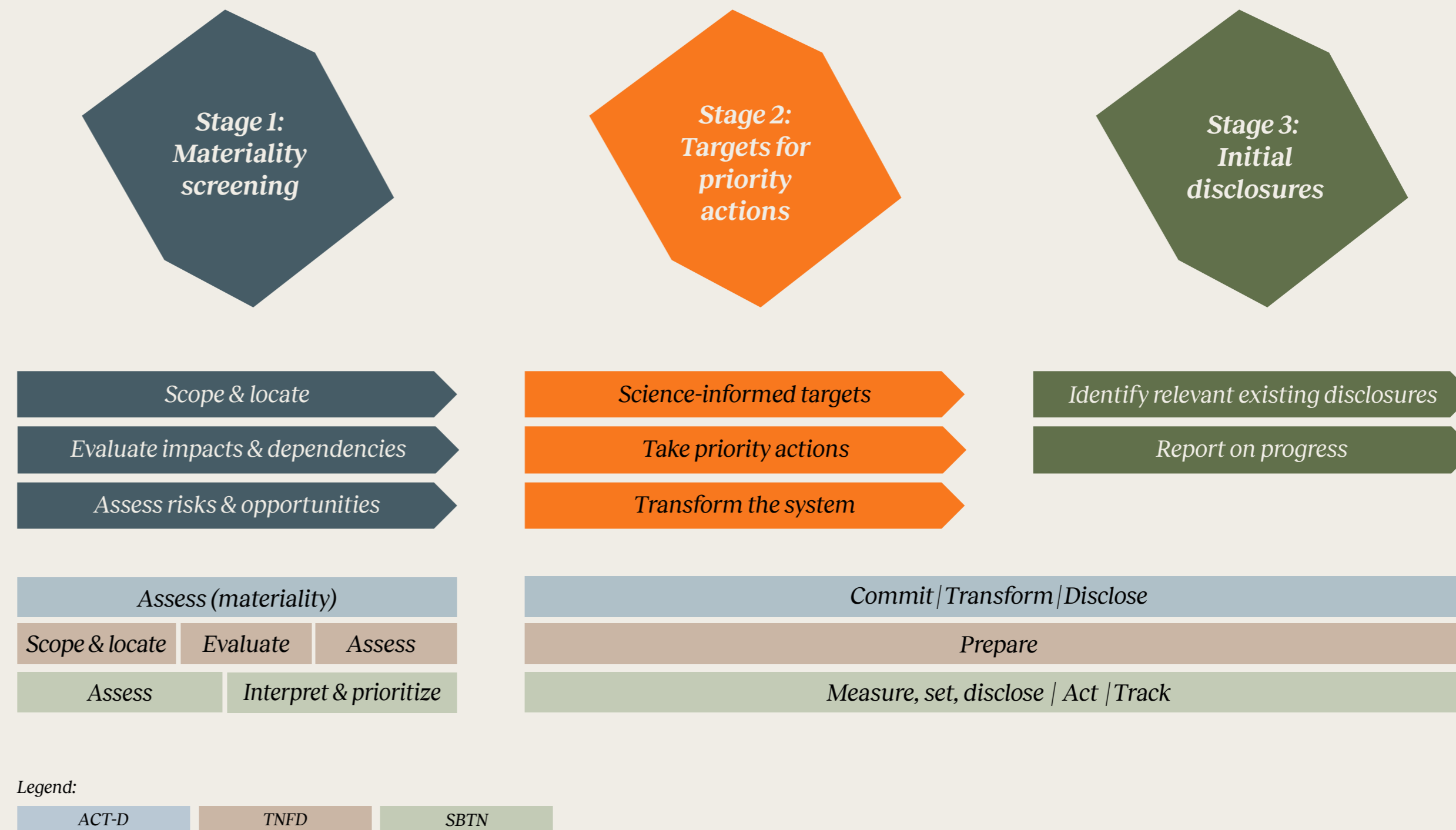


## Overview of the foundations for all businesses

Companies are under increasing pressure to have robust plans on nature. A company cannot make credible commitments or take effective actions without first having an understanding of its priority impacts and dependencies on nature and the associated risks and opportunities.

This guidance for all businesses covers the foundations of nature action. It is designed primarily to help sustainability professionals tasked with defining and improving their company's nature strategy. Aligned with SBTN and TNFD (see Figure 6), the guidance recommends robust value chain materiality screening, the identification of priority actions to systematically avoid and reduce negative impacts, the determination of the best restoration and regeneration approaches and preparation for initial voluntary disclosures.

Figure 6: Roadmaps to Nature Positive – a common approach for credible strategic action on nature

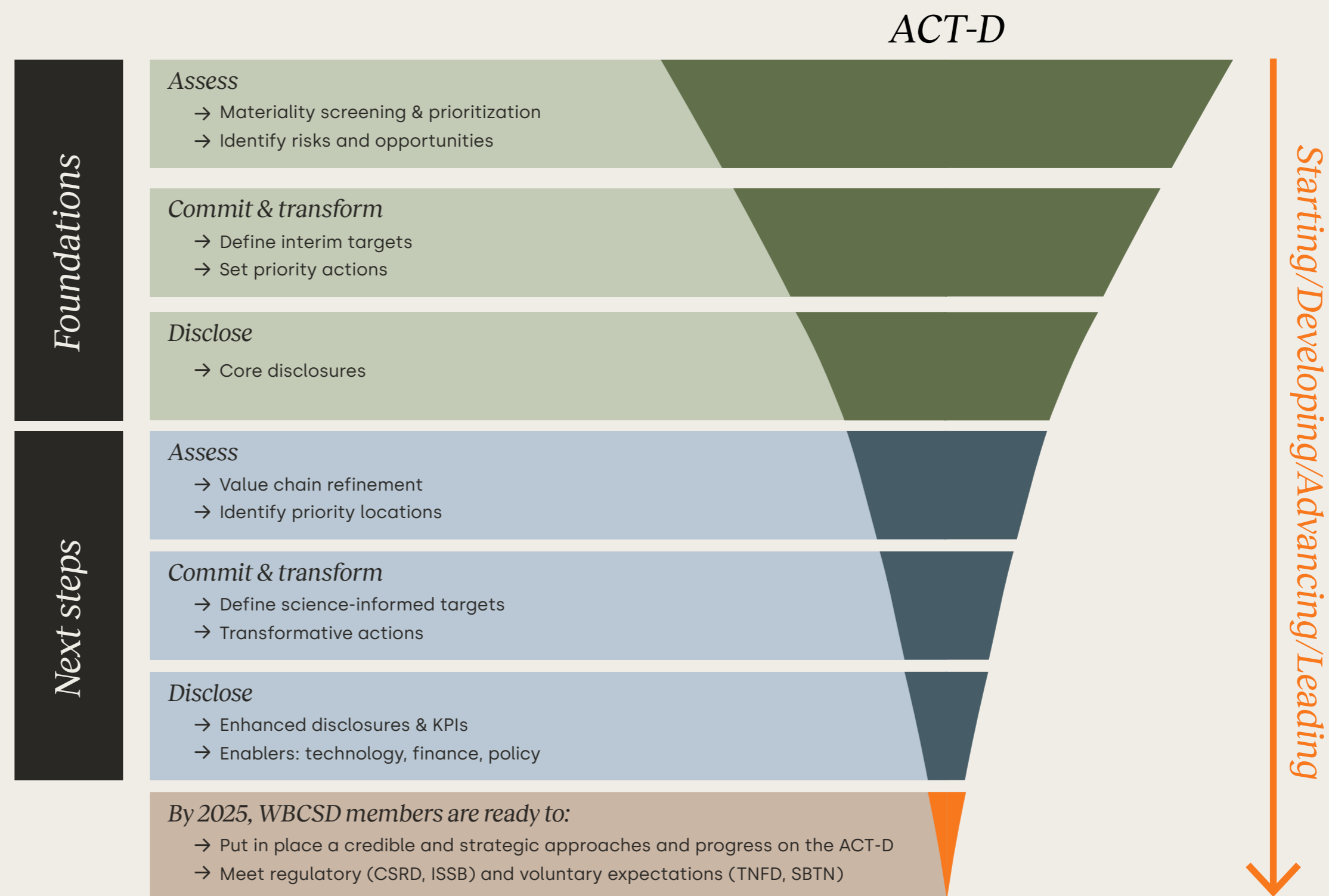


**A company that undertakes these foundational steps will already be on the right path to contributing to the shared goal of a nature-positive world by 2030 and will have put in place the building blocks for a robust and credible strategy on nature:**

- A list of potentially high and very-high priority impact drivers from the value chain;
- The identification of priority actions to systematically avoid and reduce negative impacts and the determination of approaches to restore and regenerate, including associated targets and indicators;
- Content to prepare for initial voluntary disclosures on strategy, metrics and targets, and risk and opportunity management.

To fulfill the rising expectations and credibly contribute to the societal goal of nature positive, companies embark on a journey, much as they did for climate. As they embed the stages included in this guidance, businesses should already consider what comes next on their journey. Subsequent roadmap iterations will build on these foundations, providing companies with a comprehensive toolkit that evolves in line with their maturity (see Figure 7).

Figure 7: Schematic of the Roadmaps to Nature Positive – foundations and future iterations, aligned with ACT-D elements and corporate maturity progression





# 03. Foundations *for all businesses*



# 03. Foundations *for all businesses*

## → *Stage 1: Assess (materiality screening)*

Materiality screening is at the heart of an impactful nature journey as it enables a business to identify the most material nature-related issues that credible targets need to cover, including associated actions to address those issues. Companies should conduct a materiality screening as a participatory process with experts and stakeholders from within and outside the company.

### Assess: Foundations – System materiality screening

A materiality screening based on typical system impacts and dependencies can help identify and prioritize the parts of the business with the highest potential risks and opportunities. By making dependencies, impacts, risks and opportunities (DIROs) more explicit, the business case for action on nature (with benefits for the business, communities and other stakeholders) becomes more straightforward.

A materiality screening should take place at the beginning of the corporate nature journey to identify priority issues for further, more detailed, assessment. More advanced companies can also use such a screening to check that they have covered their priority issues. This step is feasible regardless of system, geographic location or level of sustainability experience. Major frameworks – including CSRD, SBTN and TNFD – require it.

The foundational steps to “Assess” include:

- 1. Scope and locate:** Identify the company's main sectors, sub-sectors and parts of the value chain and where they are located;
- 2. Evaluate impacts and dependencies:** Prioritize potentially high impacts and dependencies on nature typical for the business and associated value chains for further assessment;
- 3. Assess risks and opportunities:** Assess associated risks and opportunities for the business and for key stakeholders in order to prioritize further action.

Together, these steps can feed into a corporate materiality assessment and help prioritize those areas that require deeper analysis.





## Stage 1.1 - Scope and locate

### Identify the company's main sectors and sub-sectors and key parts of the value chain and their location.

#### Why do this:

For many companies, the main impacts and dependencies on nature will come from direct operations (sourcing of raw materials, production processes and sites) and the use of produced goods and services. The company needs to identify and address the value chain components that represent the greatest potential risks and opportunities in order to have a credible and impactful approach to nature, even if these components may not be under the company's direct control.

#### What to do:

- Identify sectors and sub-sectors that represent the company's activities and key components throughout the value chain. This is necessary to extract typical impacts and dependencies from relevant tools (for example, if the company lists aluminium packaging as a key component, it should identify the aluminium mining sector as a relevant sector);
- Identify direct operations or parts of the system where these typical impacts and dependencies are present.

#### Key tools for scoping and locating:

- **ENCORE** (Exploring Natural Capital Opportunities, Risks and Exposure) to identify relevant sectors and sub-sectors (note this is currently based on the **Global Industry Classification Standard (GICS)** classification; adaptation to the **International Standard Industrial Classification of All Economic Activities (ISIC)** will be conducted to align with the TNFD and other frameworks following the next ENCORE release, due in early 2024.
- **SBTN**
  - **SBTN Step 1a – materiality screening guidance**;
  - **Materiality Screening Tool** to identify a combination of production processes;
  - **High Impact Commodity List** to identify science-informed priority parts of the value chain.
- WBCSD's **Circular Transition Indicators** help companies scope and assess which parts of their supply chain they should prioritize for potential circularity actions based on drivers related to resource use and GHGs (and land-use change, currently being piloted).
- TNFD – **Scoping phase of the Locate, Evaluate, Assess, Prepare (LEAP) approach**.
- **Natural Capital Protocol**, in particular Scoping.
- Others in **TNFD's Tool Catalogue**.

For further guidance on scoping, see [WBCSD's TNFD pilot – Lessons from TNFD piloting with 23 global companies](#).

Explore examples of scoping for specific systems:

- [Land use: agri-food \(including agri-food and forest products\)](#)
- [Built Environment](#)
- [Energy](#)

Overviews for additional sectors are available from [Business for Nature](#).

## Stage 1.2 - Evaluate impacts and dependencies

**Prioritize potentially high impacts and dependencies on nature typical for the business and associated value chains for further assessment.**

### Why do this:

The starting point for materiality assessments on nature should not be subjective but informed by what data and science indicate are typical impacts and dependencies for a given sector. A company can then refine this within its risk assessment processes. In this way, it can identify and address strategically important issues and reduce exposure to accusations of greenwashing.

### What to do:

- Carry out a system materiality screening:
  - Develop a list of typical nature-related impacts and dependencies based on existing materiality screening tools, in addition to expertise from the business and its partners;
  - Prioritize impacts and dependencies rated as potentially “high” or “very high” risk for further analysis and action.

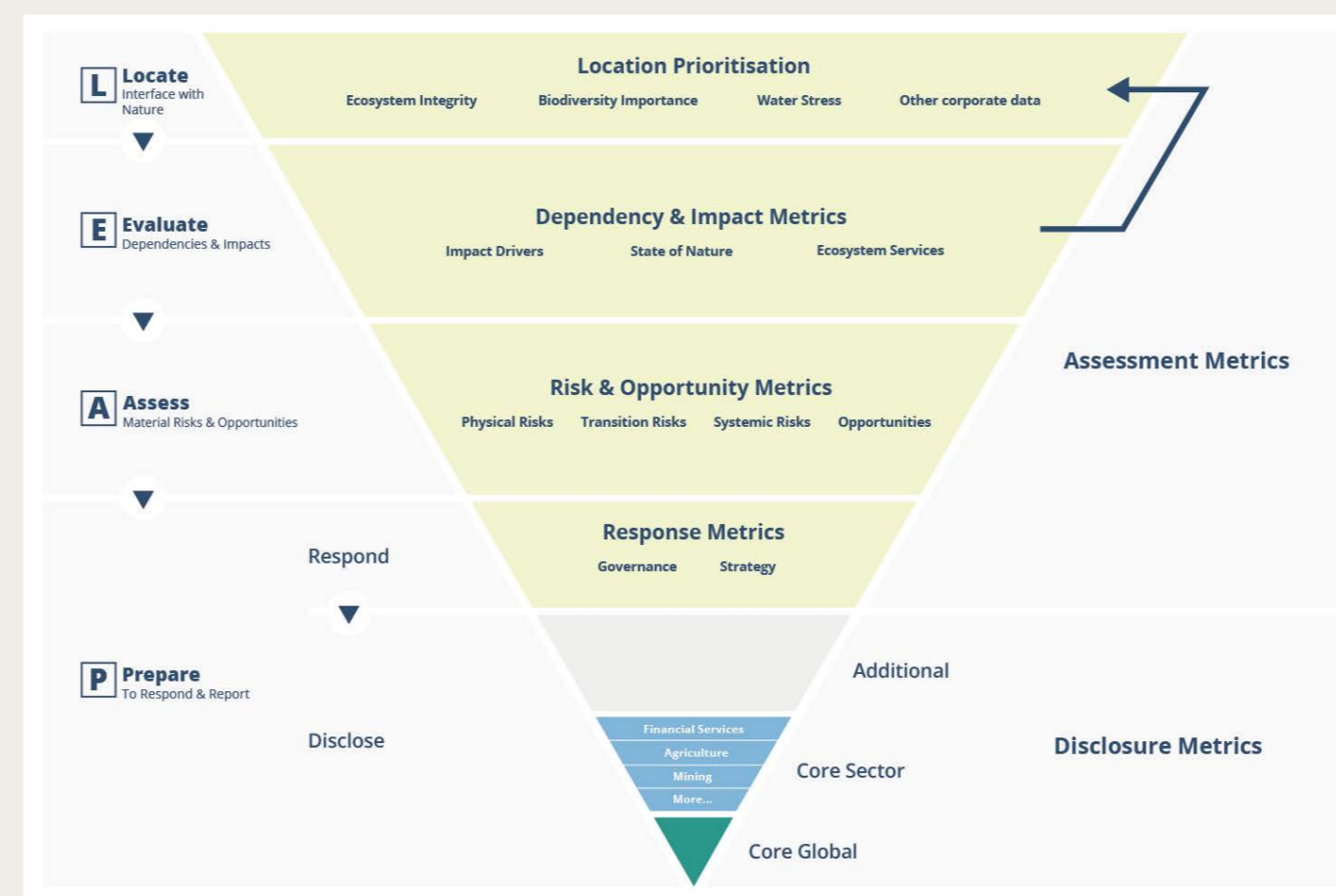
As companies advance on their nature journey, the “Assess” stage becomes narrower but also more granular and robust, supported by data (see Figure 8):

- Companies can make further prioritization and assessments based on the location of direct operations;
- They can identify important locations using the [WWF Biodiversity](#) and [Water Risk Filters](#), with further prioritization possible through [Integrated Biodiversity Assessment Tool \(IBAT\) services](#).
- [The International Union for Conservation of Nature \(IUCN\) Species Threat Abatement and Restoration \(STAR\) guidance](#) can help prioritize locations based on their potential to address species extinction.

### Key tools:

- [ENCORE](#) – A high-level screening tool that companies can use to aggregate and identify typical impacts and dependencies across different sectors and sub-sectors (in advance of business, partner and stakeholder refinement);
- [SBTN Materiality Screening Tool](#) – A tool that builds on ENCORE data to allow a more detailed assessment of impacts (but not as yet dependencies) across a combination of production processes;
- [WWF Biodiversity Risk Filter](#) and [Water Risk Filter](#).

Figure 8: TNFD metrics – indicator and metric types



Source: Taskforce on Nature-related Financial Disclosures (2023). [TNFD Beta Framework v0.4](#)



## Data availability and how companies should conduct the “Assess” stage

Data availability and capacity are a challenge when starting the “Assess” stage. Less mature companies should first determine, through the scoping step, which priority areas (such as a specific location, geography or technology) they want to focus on, depending on their strategy and ambition level.

Then, they should identify the data already available and evaluate its quality – how old is it, how was it collected, does it align with the latest methodologies, is it science-informed, does it use recognized assessment tools such as the [Integrated Biodiversity Assessment Tool \(IBAT\)](#), [EXIOBASE](#), [ENCORE](#), etc.?

Collecting and comparing available data with data needs already places companies in a good position to start a materiality assessment. More mature companies can increase granularity and scope, for example by including more or all locations, and assessing location-specific materiality of impacts and dependencies. The major frameworks and standards are developing further guidance as well as metrics.

Following the guidance of the [Natural Capital Protocol](#) (see page 59 in the protocol), a company should answer the following questions when planning the “Assess” stage:

- What is the availability and quality of our data?
- Where time or budget do not allow for the collection of primary data, will implications of relying on secondary, potentially proprietary data and on subject-matter expert knowledge need to be considered?
- Does the company have people with appropriate expertise and capacity to undertake the assessment?
- Are there budget or time constraints that may affect what is achievable?

	<i>Primary Data</i>	<i>Secondary Data</i>
Definition	Data collected specifically for the assessment being undertaken. Collected from site-level assessments on a specific impact driver through the use of direct measurement (e.g., volume of freshwater used to irrigate a wheat field each month).	Data that were originally collected and published for another purpose or a different assessment. Derived from modeled or proxy-level data. This could include data averaged from commodity sourcing (e.g., kg of pollutants for a given volume of leather purchased, hectares of land use per tons of timber purchased) at the national or regional level, or the use of input- output data models to provide estimates of impact drivers. Uncertainties in the quality of data used will need to be considered and disclosed.
Site-level assessments and targets	<b>Collection of primary</b> data is often the most appropriate approach for site-level impacts and targets (field monitoring for biodiversity state, water flows and scarcity) and pressure measurement (internal company data).  <b>Remote sensing</b> can be applied for large sites.	<b>Secondary data</b> (models of impacts, past assessments, literature values) can be applied in certain cases where primary data are unavailable or measurement is unfeasible. The appropriateness of secondary data will vary by issue area and SBT methods will provide further detail.
Company-wide assessments and targets	<b>Remote sensing</b> is a suitable approach for some issue areas-e.g., assessing deforestation.	Use of <b>models</b> linking economics activities and pressures to state are most appropriate (environmentally extended input-output (EEIO) models, life-cycle assessment (LCA) models) for estimation and may remain the best data source after refinement.



**For further guidance on evaluating impacts and dependencies, see [WBCSD's TNFD pilot – Lessons from TNFD piloting with 23 global companies](#).**

***Explore examples of impacts and dependencies for specific systems:***

- [Land use: agri-food \(including agri-food and forest products\)](#)
- [Built Environment](#)
- [Energy](#)

Overviews for additional sectors are available from [Business for Nature](#).





## Stage 1.3 – Assess risks and opportunities

**Prioritize further action based on risks and opportunities for the business and stakeholders.**

### Why do this:

Increasing numbers of businesses are making the connection between the health of ecosystems and their bottom line. Risks and opportunities originate from business impacts on nature and associated impacts on stakeholders, as well as corporate and societal dependencies on ecosystem services. Risks, as defined by the TNFD, can be physical risks (typically linked to material nature-related dependencies), transition risks (linked to nature-related impacts that an organization may face in the changing regulatory, policy or societal landscape) and systemic risks (arising from the breakdown of the entire system, rather than the failure of individual parts). [Annex 1](#) provides more information on nature-related risks. Opportunities can result from avoided risks, and from innovation and market strategies arising from an approach that contributes to nature positive.

### What to do:

- Refine the list of prioritized impacts and dependencies by scoring for potential risks and opportunities based on likelihood versus magnitude of risks and other relevant criteria;
- Engage with stakeholders to refine the list of issues;
- Carry out a further qualitative assessment by considering how DIRO may evolve in the future; TNFD provides different scenarios for consideration.<sup>19</sup>

**For further guidance on assessing risks and opportunities, including scenarios, see [WBCSD's TNFD pilot – Lessons from TNFD piloting with 23 global companies](#).**

**Explore examples of impacts and dependencies for specific systems:**

- [Land use: agri-food \(including agri-food and forest products\)](#)
- [Built Environment](#)
- [Energy](#)

Overviews for additional sectors are available from [Business for Nature](#).



## Outputs of Stage 1: Assess (materiality screening); and links to other frameworks

How does this stage fit into existing and emerging frameworks and recommendations?

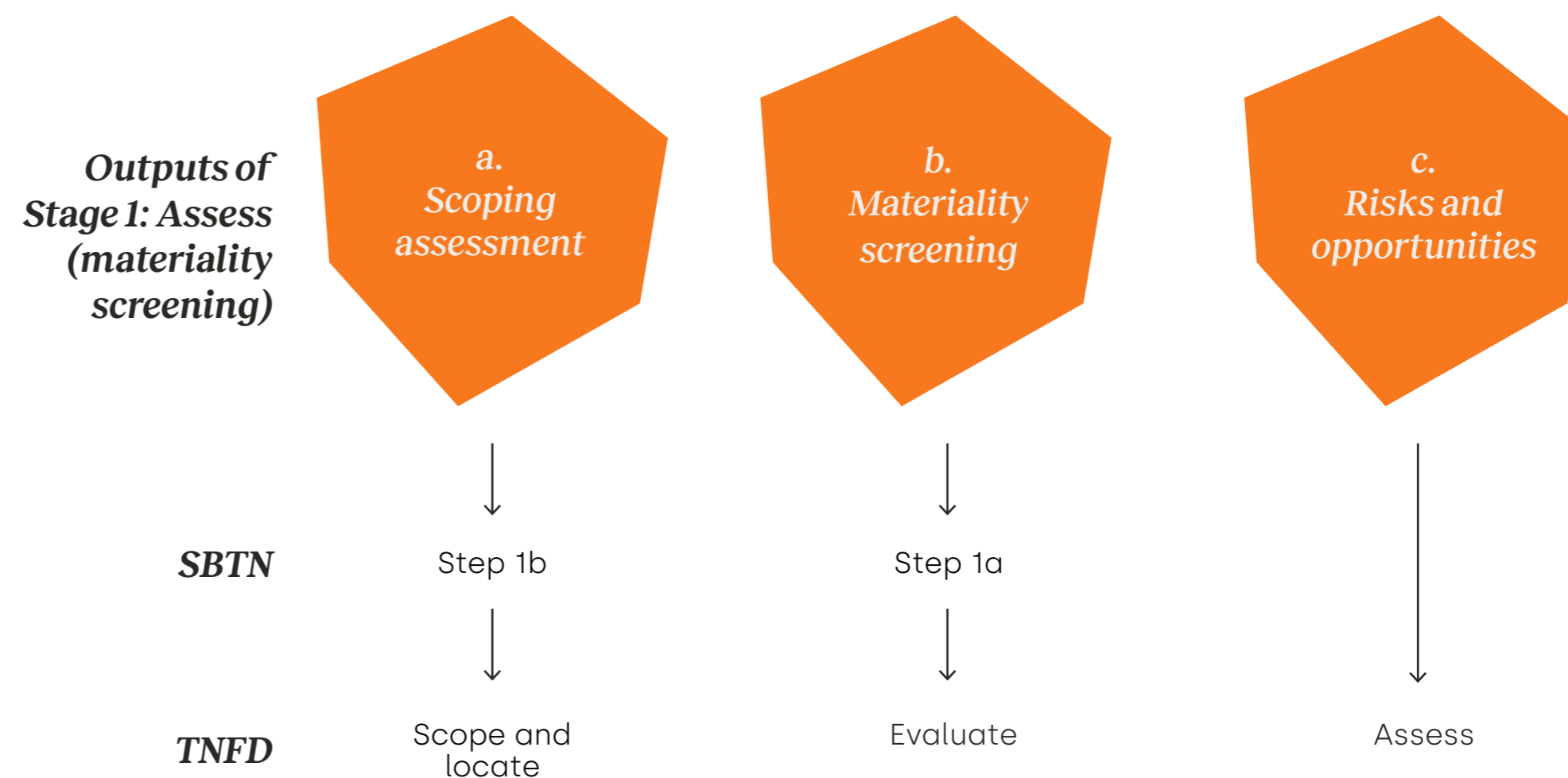
The Natural Capital Protocol, SBTN and TNFD all require companies to complete a materiality screening.

- **Natural Capital Protocol**: Stages 1-3 (Frame, Scope, Measure & Value)
- **SBTN: Steps 1-2** (Assess, Interpret & Prioritize)
- **TNFD: (S) LEAP approach** (Scope, Locate, Evaluate, Assess)

### What next

The materiality screening is an important first step as a company identifies potential priority issues, which it can then feed into a corporate materiality assessment. These issues can also inform relevant and credible target-setting and the identification of priority actions to halt and reverse nature loss.

Companies should build upon the initial assessment, with subsequent assessments drawing on modelled and primary data in priority operations and value chains (see [Annex 3](#) for a detailed overview of each level of the maturity journey, including relevant tools).





→ **Stage 2: Commit and Transform (targets for priority actions)**

Having completed an initial materiality screening, companies should prioritize the impacts and dependencies that play a key role in informing their commitments and actions.

Credible, realistic and impactful nature commitments (including their associated targets) require a company to understand the actions it can take to address its priority impacts and dependencies on nature.

Note that, to contribute to the system-level goal of nature positive, companies need to take action at the level of their direct operations as well as in their wider sphere of influence, such as priority supply chains, landscape-specific stakeholders and customers and beyond (see [Figure 2](#)). They can establish initial high-level commitments based on materiality screening and can focus on targets related to corporate responses, such as tracking impact drivers. However, to set measurable, science-aligned targets, further assessment is required to gather data, set baselines, align with planetary boundaries, and track and report progress over time.

The Science-Based Targets Network’s (SBTN) initial land and freshwater targets and accompanying guidance and validation process are establishing the framework to make this possible.

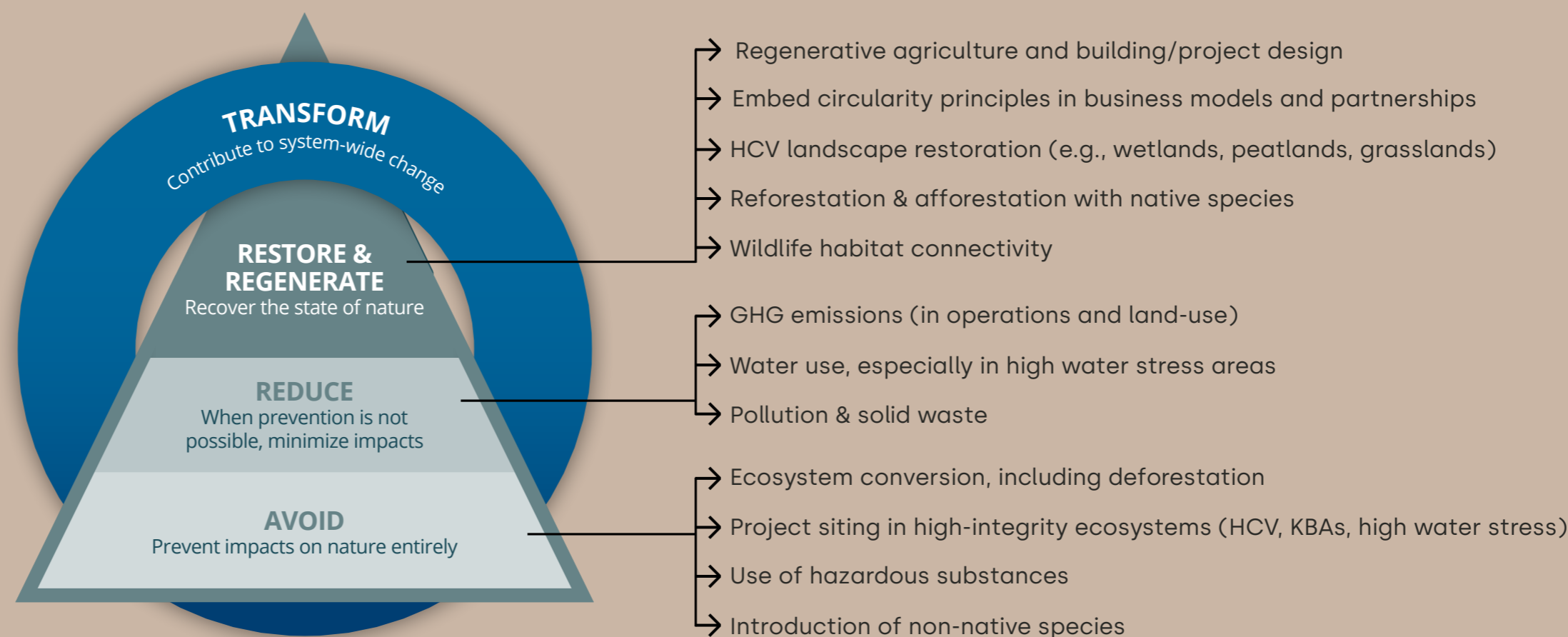
The foundational steps to “Commit and transform” include:

**1. Set science-informed targets:** Set time-bound, specific science-informed corporate-level targets and linked indicators to track progress on reducing priority impact drivers on nature;

**2. Take priority actions:** Identify existing and additional priority actions needed to avoid and reduce negative impacts, and promote opportunities to restore and regenerate;

**3. Transform the system:** Identify additional actions needed that transform business models and business activities to address barriers and improve the enabling environment (policy, financing, technology, infrastructure).

Figure 9: SBTN’s Action Framework with examples of actions



Source: Adapted from WBCSD (2021). [What does nature-positive mean for business?](#)

## Stage 2.1 - Set science-informed targets

**Set time-bound, specific science-informed corporate-level targets and linked indicators to track progress on reducing priority impact drivers on nature.**

### Why do this:

Companies need to set targets according to a scientific assessment of where their main sectors' general impact drivers on nature are. They can then strengthen science-informed targets and add to them over time on the journey to science-based targets, which they articulate at a local level.

### What to do:

- Consider the activities throughout the value chain that typically cause the priority impact drivers and the actions the company is already taking to avoid and reduce these negative impacts (or could take in the near future);
- Set targets, either at the impact driver level or the company response level. Identify priority land-, sea- and freshwater-scapes in direct operations to set baselines for impact drivers and eventual science-based targets;
- Build on what the company has done so far, set targets accordingly, and always be transparent regarding methodology.

A logical sequence for setting commitments includes consideration of:

- Impact drivers, for example, a general commitment to reduce wastewater pollution and a linked percentage reduction;
- Company responses to avoid, reduce, restore or regenerate, such as water treatment facilities to avoid wastewater pollution;
- State of nature (aggregated from specific landscapes), such as a commitment to keep pollution levels within local carrying capacity limits (meaning a science-based target).

### Explore examples of impacts and dependencies for specific systems:

- [Land use: agri-food \(including agri-food and forest products\)](#)
- [Built Environment](#)
- [Energy](#)

Overviews for additional sectors are available from [Business for Nature](#).

### Key definitions (in increasing order of granularity)

**Goal:** A high-level statement of direction/ambition, including a timeframe.

**Target:** A specific, quantitative, and time-bound objective, preferably with a defined means of measurement.

**Science-based target (SBT):** A measurable, actionable and time-bound objective based on the best available science, that allow actors to align with Earth's limits and societal sustainability goals.

Source: Science Based Targets Network (2020).



## Stage 2.2 - Take priority actions

**Identify existing and additional priority actions needed to avoid and reduce negative impacts and promote opportunities to restore and regenerate nature.**

### Why do this:

Companies need to take action to address priority impact drivers of nature loss. Companies often have actions in place that are already addressing some of the impact drivers, but which may not have been evaluated against the materiality assessment.

### What to do:

- Map existing actions against the impact drivers prioritized through the materiality assessment and course-correct: understand what actions the company is already undertaking and should continue, which ones can be deprioritized, and which ones need to be put in place;
- These actions should align with the emerging ambition for target-setting (even if the methodology for science-based approach is not yet finalized);
- For any action, systematically consider and apply the principles of the action framework to avoid and reduce negative impacts and have positive contributions through restoration and regeneration and wider system transformation (see [Figure 9](#));
- Consider these actions where the company has direct control and in areas where it has influence, including with suppliers and customers and the broader landscapes within which they operate.

Actions should be considered across three main levels:

1. Corporate
2. Operations and priority value chains
3. Broader system change (see [Stage 2.3 – Transform the system](#)).

### Corporate

Mainstreaming nature across key business functions, including procurement, operations, finance, marketing, human resources, governance, strategy (comprising risk management, and corporate affairs), is a critical long-term goal to support business transformation. For example, while companies usually consider operational interventions first, systemic solutions are also effective in avoiding negative nature impacts (for example, circular economy solutions, building design, responsible procurement standards).

### Operations and priority value chains

As a priority, corporate and operational actions should avoid and reduce pressures on nature, especially related to a company's impacts and dependencies. To reverse nature loss, companies should also consider restorative and regenerative activities. Especially for projects in critical habitats, companies should aim for a net-positive impact in priority operational and sourcing sites.

To ensure high-credibility solutions, it is important to work with other actors in key operational and sourcing landscapes to jointly identify and invest in opportunities to protect, restore and sustainably use critical ecosystems for nature, climate and people.

Companies can invest in nature-based solutions (NbS); meaning actions to protect, restore and sustainably manage natural ecosystems to address societal challenges with benefits for people, climate and nature.<sup>20</sup> By leveraging these solutions, companies can take leading action in line with the outcomes of their materiality assessments – as a key means of empowering and incentivizing actors in the value chain towards actions such as nature-positive farming, landscape restoration, avoided deforestation/conversion and more, both within (known as insetting)<sup>21</sup> and beyond the company's value chain.<sup>22</sup>

### Explore examples of impacts and dependencies for specific systems:

- [Land use: agri-food \(including agri-food and forest products\)](#)
- [Built Environment](#)
- [Energy](#)

Overviews for additional sectors are available from [Business for Nature](#).



## Stage 2.3 - Transform the system

### Identify further actions to transform the system

#### Why do this:

Individual company actions alone will not deliver nature-positive outcomes. Therefore, companies should also consider what further actions they can take in their value chains, priority landscapes and in the broader enabling environment to encourage collaboration with other stakeholders, and transform the parts of the system that they are embedded in.

#### What to do:

- Consider what the key barriers to speed and scale up action are (such as a lack of supporting government policies, financing, technology);
- Consider trade-offs (such as balancing conservation priorities against regional food security needs) and what collaborative actions can be taken to address these;
- Identify who needs to do what to address the systemic barriers and plan to engage with stakeholders, such as peers in the sector, suppliers, those in operational or priority sourcing landscapes;
- Advocate for a supportive enabling environment, such as publicly demonstrating support for key policies and financing for infrastructure, institutions and technology.

### Collaborative action, key barriers and trade-offs

When companies are identifying actions to put in place, they may be faced with a number of trade-offs – across nature, climate and social equity imperatives – and barriers to change.

To deal with trade-offs and overcome barriers to change, companies need to take a stakeholder-orientated approach, informed by prior steps outlined in these foundations, including their materiality assessment, and priority actions identified. This will help the company to understand why they are not progressing at the rate required, and what needs to be done to overcome barriers.

In their approach to implement priority actions, companies must identify who needs to do what to address systemic barriers and develop a plan to engage peers in the sector, suppliers, and stakeholders in operational or priority sourcing landscapes. Ultimately, to overcome trade-offs and barriers, companies must engage other key stakeholders and invest in collaboration.





## Business engagement with global and national policies

To maintain credibility, it is important to align external advocacy and engagement efforts with stated commitments and actions. Companies should publicly support policies that encourage ambitious business action to level the playing field and promote a shift of financing away from nature-negative outcomes. They should also actively engage to evolve relevant laws, policies and institutions. Companies should disclose their membership in industry groups or lobbying groups and leave those that seek to undermine or delay action on the climate and nature crises or to undermine regulations supporting social justice.

Companies can also actively engage in developing, updating and contributing to **National Biodiversity Strategies and Action Plans** (NBSAPs) in priority countries.<sup>23</sup> These provide strategic direction at a national level on the management and protection of biodiversity and, where possible, companies should integrate them into relevant sectoral or cross-sectoral plans, programs and policies.<sup>24</sup>

Given the interdependence of climate and nature policies and actions, it is important to integrate advocacy on these issues. **Business for Nature** and the **We Mean Business Coalition** have developed integrated **policy recommendations to address the twin crises of climate change and nature loss**. In addition to recognizing the interdependence of nature and climate policies, companies should also address social aspects, including those focusing on inequality. Beyond engaging with NBSAPs, companies should also engage with and contribute to Nationally Determined Contributions (NDCs) where appropriate for nature-related advocacy and actions.



### Explore examples of barriers and transformation actions for specific systems:

- **Built environment**
- **Land use: agri-food (row crops) and forest sectors**
- **Energy**

Overviews for additional sectors are available from **Business for Nature**.

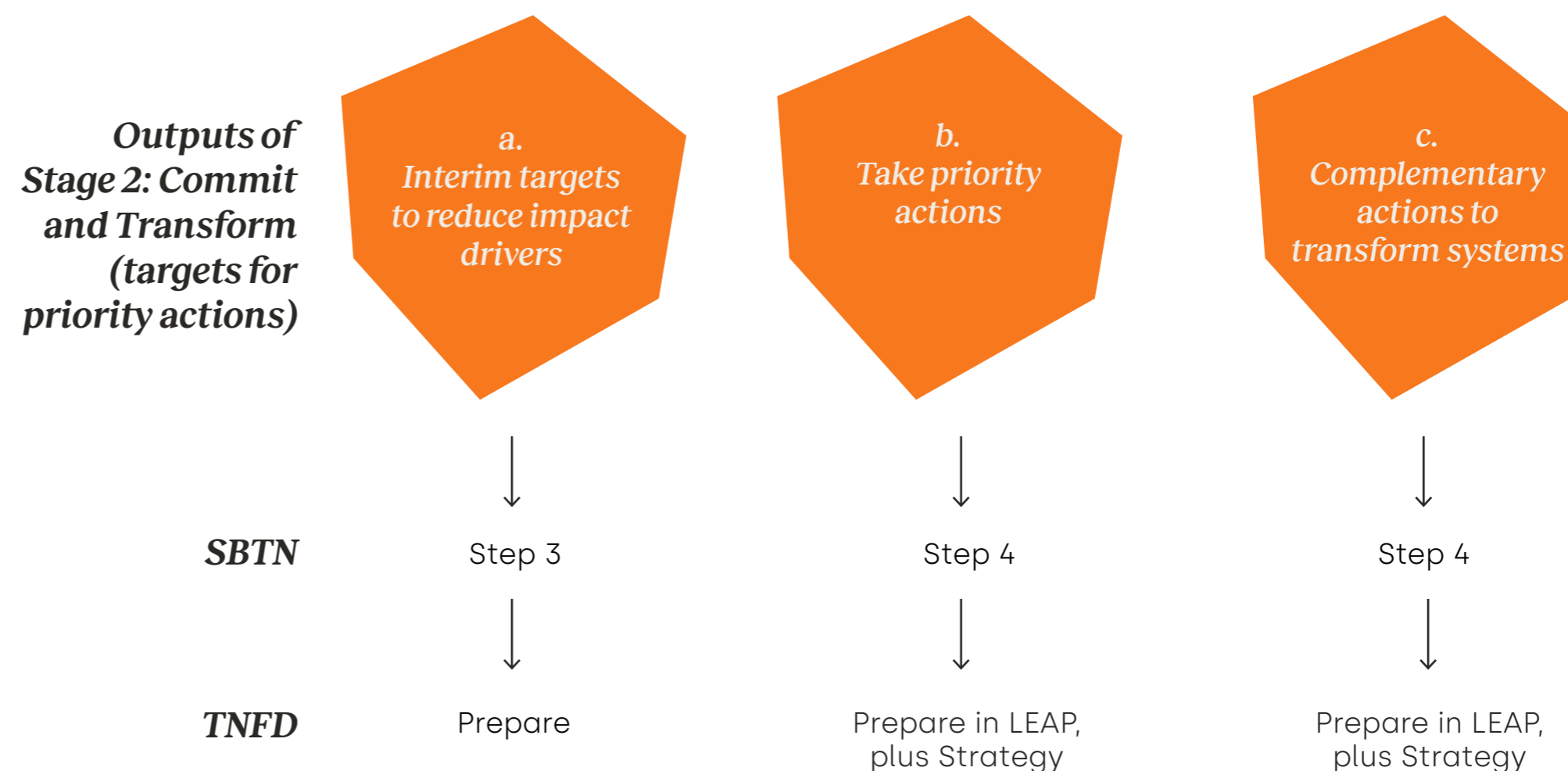
## Outputs of Stage 2: Commit and Transform (targets for priority actions); and links to other frameworks

This stage aligns with the [SBTN's interim targets](#) and also with TNFD's Prepare stage: P1 & P2 on [setting strategy and resource allocation \(P1\)](#) and [performance measurement \(P2\)](#).

### What next

While initial targets and associated actions should focus on the priority impact drivers, a company should systematically start building its approach to nature for targets on all major impact drivers, with aligned targets related to corporate responses, detailing how it will reduce impact drivers overall. It should set baselines for these indicators. For priority land- and seascapes, a company can establish baseline data with stakeholders as a starting point in identifying science-based targets for those locations, aiming to have targets and associated action plans validated by third-party stakeholders.

WBCSD will provide further guidance on how to account for priority and transformative actions, as tools and requirements continue to develop (see [Annex 3](#) for a detailed overview of each level of the maturity journey for "Commit and Transform" at corporate, operations and value chain levels as well as policy engagement, including relevant tools).





## → **Stage 3: Disclose (initial disclosures)**

**Nature-related disclosures help companies communicate how they are acting on nature-positive outcomes. Disclosure will directly contribute to the achievement of GBF Target 15, and will increasingly be required by both voluntary and mandatory accountability mechanisms.**

### **Why do this:**

Increasingly, companies are expected to monitor their progress and be transparent on the steps taken to advance on their nature journey. When companies disclose this information systematically, for example according to the TNFD Framework, then investors and society are able to make informed decisions about the comparative sustainability performance of companies and sectors.

Investors will judge whether a company is creating additional enterprise value through its management of nature-related risks and opportunities. They will also consider the collective actions of companies to address systemic risks. Other stakeholders may focus on the total impact of a company or sector from the perspective of a social license to operate, including its alignment with societal goals for nature. Disclosures therefore provide an opportunity for a company to highlight its nature-related strategy, the progress made on its delivery and the value it creates.

### **What to do:**

- Monitor progress and be transparent about the nature journey, to meet increasing expectations from stakeholders;
- Initial disclosures can include the methodologies and outputs of a company's materiality assessment, value chain mapping, interim target-setting and progress on actions. As a company's nature journey matures, disclosure ambitions and granularity will increase. The structure of the TNFD's reporting framework reflects this reality, providing both "core" and "enhanced" disclosures across the four disclosure framework pillars.

### **The foundational steps to "Disclose" include:**

- Leverage existing disclosures that are relevant to nature;
- Report on the foundational "Assess" and "Commit and Transform" stages (methodologies and outputs).





## Stage 3.1 - Identify relevant existing disclosures

### Identify existing disclosures that are relevant to nature.

Initial disclosures should draw on existing data and metrics, where possible.

Companies should leverage existing disclosures, such as the [Global Reporting Initiative \(GRI\)](#), [Sustainability Accounting Standards Board \(SASB\)](#), [IFC Performance Standard 6](#), and the EU Non-Financial Reporting Directive, as well as environmental data aggregators such as [CDP](#).

These disclosures may include data and metrics that the company is already reporting that are relevant to nature. For example, in relation to [TNFD](#), much of the governance, strategy and risk and impact disclosures can build on information used to report for [Task Force on Climate-related Financial Disclosures \(TCFD\)](#), [GRI](#), [CDP](#), etc.

A review of the existing data and metrics the company is already reporting will help determine what can be re-allocated to enable initial nature disclosures.

## Stage 3.2 - Report on progress

### Report on progress on the foundational "Assess" and "Commit and Transform" stages and the initial outputs and methodologies.

While the need for data and metrics receives a lot of attention, investors are primarily interested in the quality of a company's understanding of their impacts, dependencies and associated risks and opportunities.<sup>25</sup>

Companies can use a range of indicators to feed into the narrative of how its actions are leading to change in impact driver levels that, in priority landscapes, are resulting in an improved state of nature, driving benefits for the business and stakeholders.

TNFD's expectation is for companies to begin with disclosing on the core, [global metrics](#). As the companies approaches to nature mature, so should its disclosures. For example, companies can add sector- and biome-specific disclosures to reporting. It should be a goal for the company to make this progression in the short-term, given the urgency to address biodiversity and climate goals by 2030.

Companies will need to develop datasets and metrics for dependencies and value chains. Development and testing of these will take time. Companies should develop suitable indicators on these that they can disclose. Companies should also consider if they can disclose more qualitative-type data. For example, this may include screening-level datasets such as heat maps ([WWF Biodiversity Risk Filter](#)) to identify priority nature-related impact drivers in operations and value chain locations.

Doing so demonstrates the first steps towards credible action for nature, despite the lack of more quantitative data and metrics being available.

### Minimum disclosures for all companies:

#### Assess

- Value chain mapping: Disclose which parts of the business are covered
- Materiality screening: Disclose associated typical priority impacts and dependencies and associated potential risks and opportunities

#### Commit and transform

- Disclose interim targets and associated corporate responses (ideally with baseline totals for key impact drivers)

#### General

- Disclose the methodologies and processes applied to determine the above
- Explain any deviations from disclosure recommendations – where there is a plan to increase alignment, the company should state timeframes and actions to achieve this.



### ***Lessons from the WBCSD TNFD pilot***

WBCSD ran a TNFD pilot with 23 member companies from the energy, land use (agriculture & food sector as well as forest sector) and built environment systems from September 2022 to June 2023. Through a series of individual and group work sessions, companies explored assessments and disclosures relating to metrics and targets, risks and opportunities, scenarios, scoping and location.

Companies can leverage existing experience with different processes relating to risk registers, financial impact pathways, environmental impact assessments, life-cycle analyses, protected areas, board and management roles, stakeholder engagement and impact drivers. However, newer recommendations and guidance related to ecosystem services, state of nature, connecting site- and corporate-level assessments, nature scenarios and transition plans will likely require iterative, exploratory approaches.

A key enabler to prepare for TNFD is internal collaboration, which could involve bringing together risk, finance, communications, operations, procurement, environmental management and nature expertise.

For more lessons, see the PwC/WBCSD joint blog post on "[Five things you should know about the TNFD](#)".

For further guidance, recommendations and specific use cases, see [WBCSD's TNFD pilot – Lessons from TNFD piloting with 23 global companies](#).





## Outputs of Stage 3: Disclose (initial disclosures); and links to other frameworks

This stage aligns with [SBTN step 5 on tracking performance](#) and also with the [TNFD Reporting framework pillars](#) on strategy, risk management, governance and metrics and targets.

### What next

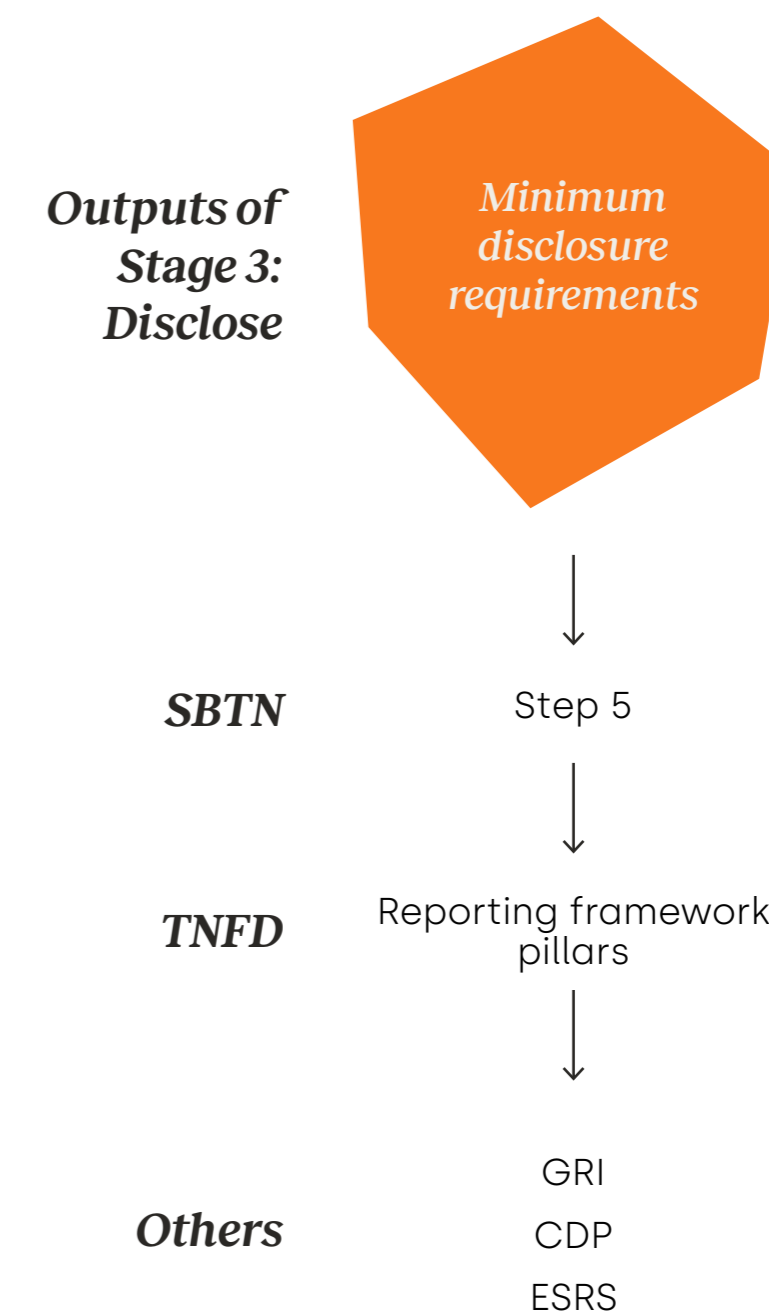
While companies are unlikely to fully align with all TNFD disclosure recommendations in the short-term, this should not preclude initial disclosures commencing now. Such disclosures should aim to align with the TNFD and transparently acknowledge any gaps. Companies should communicate meaningful efforts to close those gaps and progressively improve alignment in initial disclosures. Companies should develop an action plan with the timeframes and resources needed to address any gaps.

As maturity on disclosure develops, companies should seek independent validation and verification to assure the company's processes and share lessons learned (see [Annex 3](#) for a detailed overview of each level of the maturity journey, including relevant tools).

For further guidance on preparing for TNFD disclosure requirements, see [WBCSD's TNFD pilot – Lessons from TNFD piloting with 23 global companies](#).

Explore examples of barriers and transformation actions for specific systems:

- [Built environment](#)
- [Land use: agri-food \(row crops\) and forest sectors](#)
- [Energy](#)





# 04. The emerging corporate *performance and accountability system*

# 04. The emerging corporate performance and accountability system

The foundational stages described in this document are particularly important in light of the emerging corporate accountability system for nature, based on the ACT-D framework. For that reason, companies must go through these steps whether they are starting or revisiting their approach on nature. WBCSD is leading efforts to develop a holistic corporate sustainability performance and accountability system, that nature action will be central to.

## Context

Following the recommendations of the High-Level Expert Group (HLEG) in November 2022, WBCSD presented a vision to strengthen the Corporate Performance and Accountability System (CPAS) for carbon at the United Nations Climate Change Conference (COP27) in Sharm El-Sheikh.<sup>26</sup> Supporting implementation of a fit-for-purpose system so that hundreds of thousands of companies engage, compared to the thousands today, is a priority area of work for WBCSD. This work supports the HLEG recommendations to transform the scale and ambition of corporate carbon performance and accountability and generate greater transparency and alignment across voluntary initiatives and mandatory requirements.

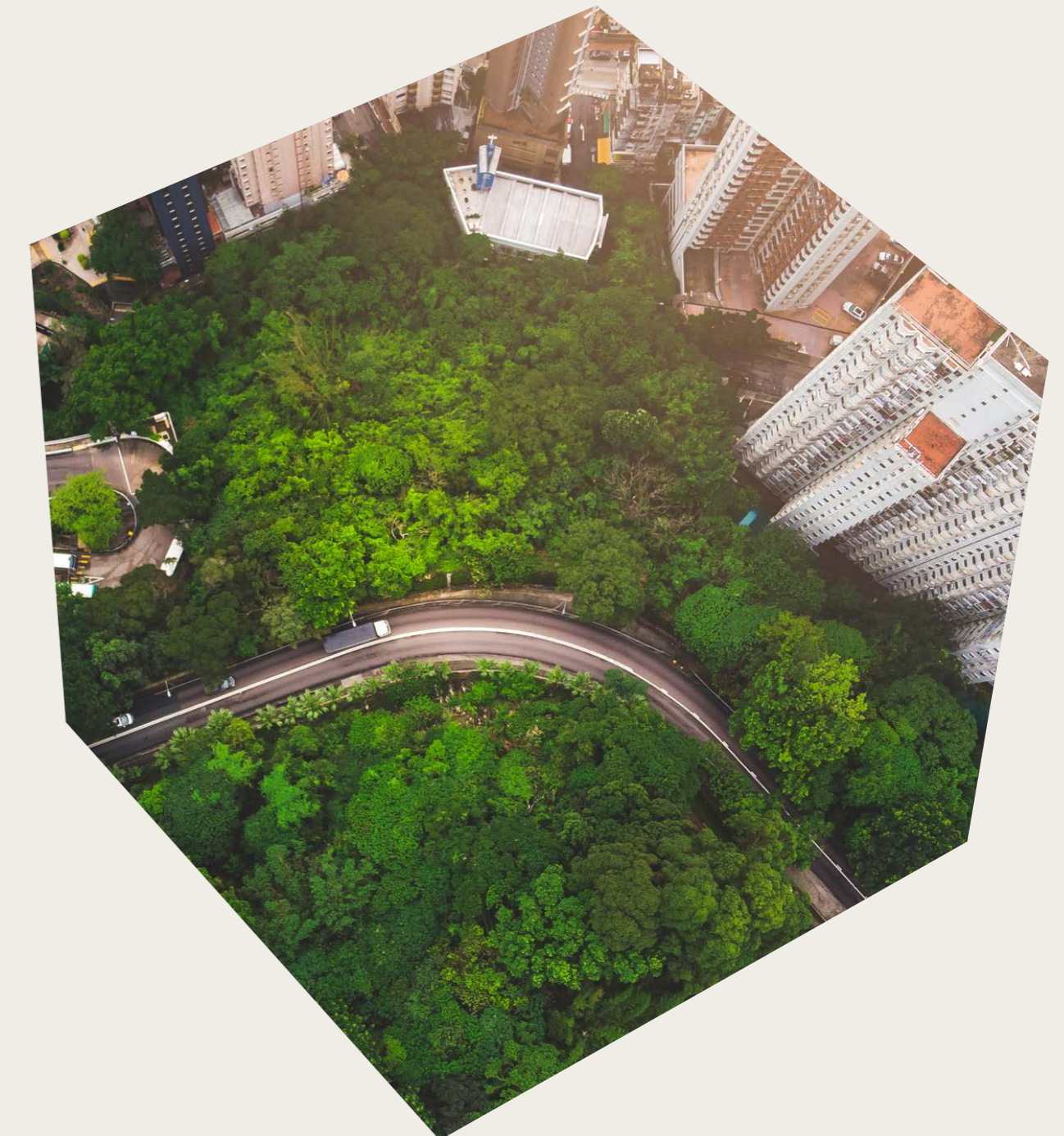
The CPAS for carbon is a four-stage system to help companies manage their carbon performance.

The system comprises existing tools, standards and frameworks active in the marketplace, and its structured as follows:

1. Set a net-zero target, typically via the [Science Based Targets Initiative](#);
2. Develop a transition plan that outlines the actions a company plans to implement to fulfil its net-zero target;
3. Account for carbon performance using the carbon accounting standards developed by the [Greenhouse Gas Protocol](#);
4. Report and disclose progress on carbon performance on an annual basis, in line with international frameworks such as the [International Sustainability Standards Board](#), via either voluntary initiatives, including [CDP](#), or increasingly in response to regulation, for example, the [European Union's Corporate Sustainability Reporting Directive](#) (CSRD).

The development of the Corporate Performance and Accountability System for Carbon will build the foundation for the holistic corporate sustainability performance system over time to encompass nature, equity and circularity. Business needs a coherent system that addresses complexity, clarifies accountabilities and aligns incentives across all areas of sustainability performance.

Ultimately, as the corporate performance and accountability system for nature emerges, an end-to-end value-chain accounting system for nature (similar to the Greenhouse Gas Protocol) will be needed. The disclosure guidelines in [WBCSD's TNFD pilot – Lessons from TNFD piloting with 23 global companies](#) can provide a starting point.





## Next steps for the Roadmaps to Nature Positive

To support companies as they advance on their nature journeys, subsequent iterations of the Roadmaps to Nature Positive will build on the 2023 Foundations guidance, focusing on performance and accountability.

WBCSD will work with members to implement aligned measurement methods to support more detailed assessments.

The work will support WBCSD members in testing and using commonly agreed indicators for nature disclosures, both general and system-specific, with key pathways. Activities will include mapping core and enhanced [TNFD v1.0 indicators](#) against current member practices (TNFD mapping has already started for the forest sector), and identifying and addressing gaps (including metrics for reporting on interim and science-based targets). This work will build on and connect to related indicator work within WBCSD, including [Regenerative Agriculture Metrics](#), the [Wastewater Impact Assessment Tool \(WIAT\) Initiative](#), and [Nature-based Solutions](#) and the [Circular Transition Indicators v4.0 \(CTI\)](#). It will also build on the work of other related initiatives, including the [Align](#) project (recommendations for a standard on corporate biodiversity measurement and valuation) and the [Transparent project](#) (standardized natural capital accounting and valuation principles for business in line with the ambition of the [European Green Deal](#)).

In addition, other emerging work to support the Nature Positive Roadmaps includes:

- Putting in place science-informed target-setting and supporting companies that are further along on their journey as they prepare to set science-based targets for nature;
- Mobilizing resources needed for transformative actions;
- Working with WBCSD's Equity Action imperative to clearly identify when and how to bring stakeholders effectively into corporate and landscape engagements (to be scoped);
- Working with the WBCSD's Climate Action imperative to build on related work on actions to deliver resilient systems.



# 05. Conclusion



# 05. Conclusion

**A company that has completed the steps outlined in this business guidance will be on the right path to contributing to the shared societal goal of halting and reversing nature loss by 2030.**

Importantly, the company will have covered the foundational stages needed for a robust and credible strategy on nature, based on:

- A list of potentially high and very-high priority impact drivers from the value chain;
- The identification of priority actions to systematically avoid and reduce negative impacts, approaches to restore and regenerate, and associated targets and indicators;
- Content to prepare for initial voluntary disclosures on strategy, metrics and targets, and risk and opportunity management.

As companies embark on their journey to nature positive and advance their maturity across the ACT-D high-level actions, there will be an inevitable shift in the corporate mindset – moving from risk mitigation to a mindset of restoration, and ultimately moving to a “just and regenerative” mindset as laid out in WBCSD’s Vision 2050.<sup>27</sup>

In addition to a mindset shift, as companies engage with the Roadmaps to Nature Positive, their scope, range of nature issues addressed and integration with other sustainability issues will mature in parallel (see [Annex 3](#) for a detailed overview of each level of the maturity journey, including relevant tools).

The next iteration of the Roadmaps to Nature Positive will focus on advancing performance and accountability, covering in greater depth the sector-specific metrics, indicators and data considerations needed to transform these high-priority economic systems. This work is developed in parallel to advancements in the key nature frameworks for corporates such as TNFD v1 publication and market testing/uptake of ESRS and SBTs for freshwater and land. Having covered the Assess, Commit & Transform and Disclose stages in this foundational guidance, WBCSD will continue to support its members to further embed nature into corporate strategies.





# Annexes

## Annex 1: Key definitions

### Drivers of nature loss versus drivers of change versus pressures

The [Global Assessment report on Biodiversity and Ecosystem Services](#) published in 2019 by the [Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services](#) (IPBES) identifies the main direct drivers (natural and anthropogenic) that unequivocally influence biodiversity and ecosystem processes (also referred to as “pressures”).

The five direct drivers of change in nature with the largest global impacts are (starting with those with most impact):

- Changes in land and sea use
- Direct exploitation of organisms
- Climate change
- Pollution
- Invasion of alien species.

These drivers result from an array of underlying causes – the indirect drivers of change. In turn, societal values and behaviors – including production and consumption patterns, human population dynamics and trends, trade, technological innovations and global governance – underpin them. The rate of change in the direct and indirect drivers differs among regions and countries.

Comparison of how different organizations define drivers of nature change:

<b>WBCSD ROADMAPS TO NATURE POSITIVE</b>	<b>IPBES (2019) Pressure drivers</b>	<b>SBTN (2020) Pressures</b>	<b>TNFD (2022) Drivers of change</b>
Land-/water-/sea-use change	Changes in land and sea use	Land-/water-/sea-use change	Land-/water-/sea-use change
Resource use, e.g., freshwater use	Direct exploitation of organisms	Resource exploitation	Resource use
Climate change	Climate change	Climate change	Climate change
Pollution (i.e., plastic, nitrogen)	Pollution	Pollution	Pollution
Invasive species & others	Invasion of alien species	Invasion of alien species	Invasion of alien species
<b>SUMMARY OF MAIN DIFFERENCES</b>	Does not include water-use change or other disturbances beyond invasive species	Framed to include oceans and other disturbances	Framed to allow for positive or negative changes



## Impacts and dependencies

All companies impact and depend on nature.  
Key frameworks mostly align on their definitions.

**TNFD's Beta v0.2** report defines impacts as changes in the state of nature that may result in changes to the capacity of nature to provide social and economic functions and therefore changes to the value to business and society. Changes in the state of nature can be positive or negative.

The report also refers to impacts as the result of a company's actions, which create impact drivers, and can be direct, indirect, or cumulative. The five main drivers of nature change (see "drivers" definition above), which can also be positive or negative, typically cause changes to state of nature.

**TNFD** also defines dependencies as aspects of ecosystem services that an organization or other actors rely on to function. Dependencies include an ecosystem's ability to regulate water flow, water quality and hazards like fires and floods; provide a suitable habitat for pollinators (who in turn provide a service directly to economies); and sequester carbon (in terrestrial, freshwater and marine realms).

	<i>Impacts</i>	<i>Dependencies</i>
<b>SBTN</b>	<p>Changes in the state of nature, which may result in changes to the capacity of nature to provide social and economic functions. Impacts can be positive or negative. They can be the result of an organizations or another party's actions and can be direct, indirect or cumulative.</p> <p>SBTN (2022), Working Definitions [unpublished]; Climate Disclosure Standards Board (CDSB) (2021), <a href="#">Framework application guidance for biodiversity-related disclosures</a>.</p>	<p>Aspects of ecosystem services that an organization or other actor relies on to function. Dependencies include an ecosystem's ability to regulate water flow, water quality and hazards like fires and floods; provide a suitable habitat for pollinators (who in turn provide a service directly to economies) and sequester carbon (in terrestrial, freshwater and marine realms).</p> <p>SBTN (2022), Working Definitions [unpublished].</p>
<b>TNFD</b>	<p>A change in the state of nature, which may result in changes to the capacity of nature to provide value to business and society and instrumental, relational and intrinsic value. The TNFD recognizes that impacts on nature can be both negative and positive.</p>	<p>Same as the SBTN working definition above</p>

## Materiality

**WBCSD** defines materiality and the materiality assessment process as vital stage for companies to effectively identify, manage and report on significant environmental, social and governance (ESG) risks and opportunities. Different frameworks take different approaches to materiality given different primary audiences (see table).

WBCSD recommends that companies use their own judgement to identify material sustainability-related information, meaning information that would reasonably affect the decision-making of the target audience (investors and all stakeholders), and should also use publicly available information, namely typical system impacts and dependencies of business activities on nature.

Importantly, companies must disclose the process they used to conduct their materiality assessment and should be prepared to disclose why they have decided some issues are not material, as this is essential information for stakeholders to understand the completeness and credibility of the materiality assessment.

Framework	Approach to materiality
<b>Natural Capital Protocol</b>	Identifies which impacts and dependencies are both fundamental to business longevity as well as which are critically important to stakeholders.
<b>Science Based Targets for Nature (SBTN)</b>	A change in the state of nature, which may result in changes to the capacity of nature to provide value to business and society Defines materiality according to two broad dimensions: (1) importance of an issue to stakeholders; (2) importance of an issue for companies. The SBTN focus on the nature approach is one of societal materiality: actors are expected to take voluntary actions (at times above and beyond what is regulated) to contribute to a more livable Earth for all. <sup>28</sup>
<b>Taskforce on Nature-related Financial Disclosures (TNFD)</b>	TNFD does not endorse one approach to materiality over another, preferring to align with the emerging global baseline (under development by the ISSB) in order to enable the reporting of those companies and financial institutions that may want, or need, to disclose to a different set of requirements. <sup>29</sup>
<b>European Sustainability Reporting Standards (ESRS)</b>	The primary audience for ESRS reports is “affected stakeholders”, meaning anyone who could be affected (positively and negatively) by the actions of the company across its value chain. The ESRS takes a double materiality approach in order to meet the requirements of a wide range of stakeholders. This means that information disclosed under ESRS is designed to illustrate potential financial impacts on a company (financial materiality) but also impacts on the environment and society (impact materiality).
<b>International Sustainability Standards Board (ISSB)</b>	The principal audience for ISSB reports is investors. Hence, ISSB uses the same definition of “material” as used in the International Financial Reporting Standards (IFRS) Accounting Standards: information is material if omitting, obscuring or misstating it could be reasonably expected to influence investor decisions. <sup>30</sup>

References: WBCSD (2023). [Implementation Guidance for the International Sustainability Standards Board \(ISSB\) Standards and the European Sustainability Reporting Standards \(ESRS\)](#)



## Nature, realms and biodiversity

Nature comprises all living entities and their interactions with other living or non-living physical entities and processes – which provide (1) resources that every living being needs to survive, thrive and prosper and (2) services to society and the economy that underpin prosperity and wellbeing.

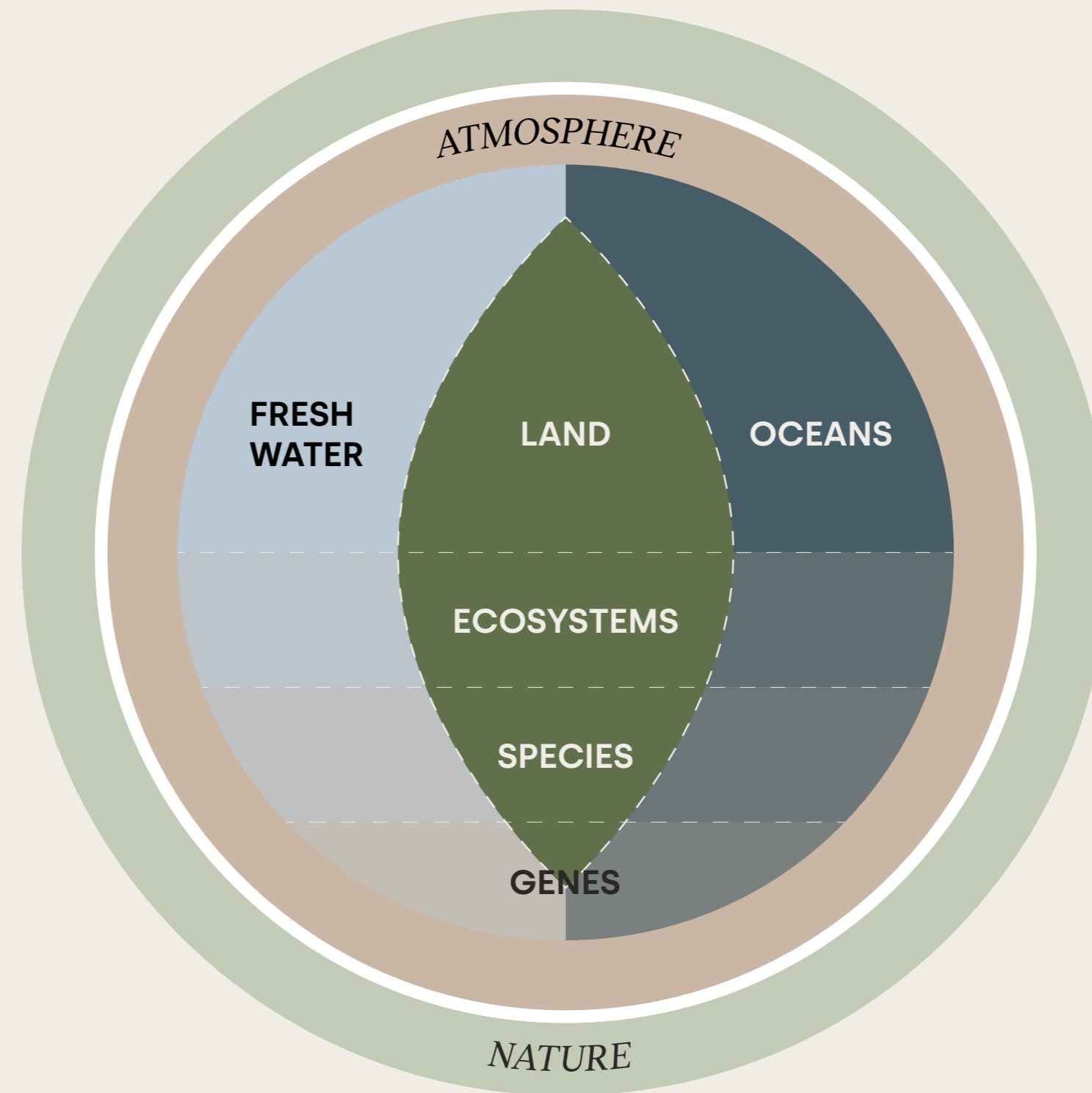
These resources include the “realms” of nature – land, ocean, freshwater and atmosphere – and the variety of life on Earth – biodiversity, a subset of nature that reflects the health and resilience of Earth’s systems.

“Biological diversity” – or “biodiversity” – means the variability among living organisms from all sources, including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

“Biological resources” includes genetic resources, organisms – or parts thereof – populations or any other biotic component of ecosystems with actual or potential use or value for humanity.

People rely on nature for its services without which their lives would not be possible, such as clean air and water, fertile soil for food, and pest and disease regulation. The interactions between the different elements of nature provide “services” or contributions to society and the economy.

Figure 10: Breaking down “nature” and related terms



References: All terms in this section come from Convention on Biological Diversity (CBD) (2006). [Article 2. Use of Terms](#)

## Nature positive

“Nature Positive” is a concept that reflects the necessary vision and ambition to counter the lack of action to address nature loss. It gained additional strength following the adoption of the [Kunming-Montreal Global Biodiversity Framework](#) (GBF) at the 15<sup>th</sup> United Nations Biodiversity Conference (COP15) in December 2022. This landmark UN agreement sets the global plan to “halt and reverse biodiversity loss by 2030” – in line with the [Global Goal for Nature](#).

The concept refers to the collective societal goal to which all parts of society must contribute through collective action – this means an organization by itself cannot “achieve” or “be” nature positive. All stakeholders, including governments and business, need to collectively contribute to bringing back more nature by 2030 than exists in 2020. And it's the responsibility of each actor, including business, to identify, implement and disclose on the actions in place and track progress on their contributions.

The societal goal should inform companies in the process of setting their credible and strategic approach to contribute to nature positive. While it seems tempting to use this concept for corporate target-setting, companies need to understand that nature positive is an approach that guides and informs them in identifying and mapping material issues (impacts, dependencies, risks and opportunities) and the respective actions to

address their negative impacts on nature across the full value chain – following the ACT-D Framework (Assess, Commit, Transform, Disclose). Ultimately, the goal is to strengthen business accountability in halting and reversing nature loss.

While the definitions and interpretations of the term remain the subject of confusion, WBCSD's interpretation of nature positive for business, reflected in the Roadmaps to Nature Positive approach, is based on key principles shared by leading organizations in this space, and aligns with ACT-D:

- Companies must understand their relationship with nature, including impacts, dependencies, opportunities and risks;
- All companies must urgently accelerate action to slow and halt nature loss while simultaneously bringing back more nature through regenerative and restorative actions;
- To credibly contribute to nature positive, the collective impacts from regenerative and restorative business actions must outweigh those from avoiding and reducing nature loss (guided by SBTN's Action Framework – see Figure 9);
- Actions that reduce harm will help bring the world collectively to no net loss, while restorative, regenerative and transformative actions are critical to halt and reverse nature loss by 2030 and achieve full recovery by 2050.

In summary, rather than claiming to be nature positive themselves, companies should be holistic and transparent in the approach they take to assess, commit, transform and disclose, and in doing so highlight their contributions towards a nature positive future.

References:

- SBTN (2021). [“Nature-positive” — an opportunity to get it right](#)
- Business for Nature et al. (2022). [How business and finance can contribute to a nature positive future now.](#)
- EU B@B Platform (2022). [Thematic report: How positive will “nature positive” be?](#)



## Risks and opportunities

### Nature-related risks

Nature-related risks are potential threats posed to an organization linked to their own and wider society's dependencies on nature and nature impacts. These can derive from physical, transition and systemic risks (see Figure 11).

### Nature-related opportunities

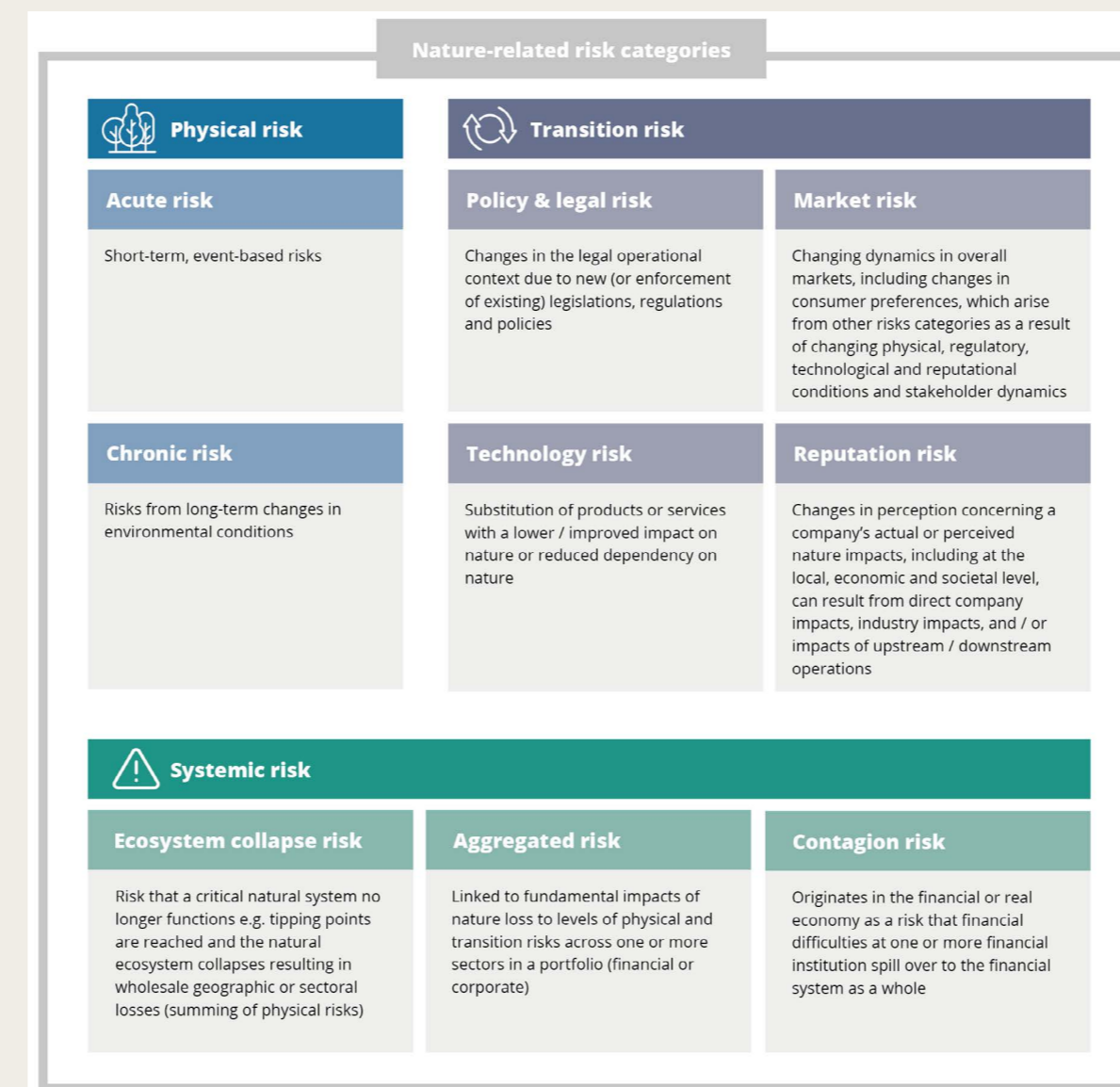
Companies generate nature-related opportunities through impacts and dependencies on nature. They can occur:

- When organizations **avoid, reduce, mitigate or manage nature-related risks**, for example, connected to nature loss and ecosystem services that the organization and society depend on;
- Through the **strategic transformation** of business models, products, services, markets and investments that actively work to reverse nature loss, including by nature restoration and regeneration and the implementation of nature-based solutions.

References:

- Climate Disclosure Standards Board (CDSB) (2021). [Framework application guidance for biodiversity-related disclosures](#).
- Task Force on Climate-related Financial Disclosures (TCFD) (2017). [Final Report: Recommendations on Climate-Related Financial Disclosures](#).
- Taskforce on Nature-related Financial Disclosures (TNFD) (2021). [Nature in Scope](#). Adapted from: WWF (2022). [A Biodiversity Guide for Business](#).
- Science Based Targets Network (SBTN) (2020). [Initial Guidance for Business](#). Adapted from: WWF (2022). [A Biodiversity Guide for Business](#).

Figure 11: TNFD's nature-related risks categories



Source: Taskforce on Nature-related Financial Disclosures (TNFD) (2022). [TNFD Beta Framework v0.3](#)

## Targets

The Science Based Targets Network defines **science-based targets** as measurable, actionable and time-bound objectives, based on the best available science, that allow actors to align with the Earth's limits and societal sustainability goals. In a future with cascading risks, science-based targets (or SBTs) offer a pathway for sufficiently ambitious corporate action.

We refer to science-informed targets when the target includes measurable, actionable and time-bound objectives, based on the best available science – but a third-party such as the SBTN does not validate them.

References: Science Based Targets Network (SBTN) (2020). [Science-Based Targets for Nature Initial Guidance for Business](#)

## Annex 2: ACT-D Framework

High-level actions on nature and associated rationale

	<i>High-level (high ambition) corporate action</i>	<i>The rationale</i>
<b>Assess</b>	Measure, value and prioritize impacts and dependencies on nature, <i>both within direct operations and priority parts of the value chain, both up and downstream.</i>	To ensure that a company is acting on the most material issues from a business and societal perspective and in order to inform credible target-setting and identify impactful actions.
<b>Commit</b>	Set transparent, time-bound, specific, science-based targets (i.e., <i>based on local limits</i> ).	To ensure that a company is taking action in the right places at the right time, using a fair share of resources, in order to be on the right track to operate within the Earth's limits.
<b>Transform</b>	Avoid and reduce negative impacts, restore and regenerate, collaborate across landscapes and seascapes, shift business strategy and models, and advocate for policy ambition.	To ensure that a company is systematically taking action to address the key impacts and dependencies to start halting and reversing nature loss across all its spheres of control and influence in order to contribute to systems transformation.
<b>Disclose</b>	Track performance and prepare to publicly report material nature-related information throughout the journey ( <i>aiming to track performance across all actions and publicly (and verifiably) report on all disclosure requirements</i> ).	Disclosure helps drive action as accountability is an important lever for change both within a company and externally: investors, regulators, customers and other stakeholders can use the information to reward good performance and punish poor performance.



### Annex 3: Maturity tables for the high-level actions (ACT-D)

WBCSD's nature action maturity framework provides tailored guide to help companies progress their nature positive journeys and accelerate meaningful and credible actions to halt and reverse nature loss. It breaks down high-level nature actions in terms of maturity and references relevant frameworks and resources.

It builds on the initial framework developed in 2021<sup>31</sup> and brings together other maturity frameworks.<sup>32</sup> Users should read them as being cumulative, meaning each maturity level builds on the previous level.

NOTE: The maturity levels presented here reflect the guidance and recommendations of several existing frameworks and those under development. We will update the action levels to reflect the latest developments and lessons learned.

#### Assess

To ensure that companies address their priority impacts and dependencies and related risks and opportunities, they should complete or revisit their materiality assessment (depending on where they are on their journey). Companies can use a sector materiality screening as they start their journey to contribute to nature positive and if they are more advanced, they should still use the guidance available to check back on their approach.

See table for the full "Assess" maturity journey, including key tools and resources.

Assess: Corporate-level actions (cumulative)				
	Starting	Developing	Advancing	Leading
Depth	High-level <b>screening</b> identifies priority impact(s) on nature (based on sector averages)	Materiality <b>assessment</b> measures at least one or more priority impacts and dependencies on nature	Company refinement of sectoral materiality based on in-depth measurement of priority impacts and dependencies on nature  Baseline estimation, plus assessment of ongoing impacts	In-depth valuation of all priority impacts and dependencies, including trade-offs
Data	Sectoral averages used	Secondary data/modelling used	Primary data from direct operations used	Primary data from value chains used
Indicators to demonstrate progress	Corporate responses (i.e., policies, implementation) e.g., water treatment facilities at x% of facilities	Pressures on nature, e.g., amount of pollution entering watershed	State of nature indicators in priority locations (e.g., state of watershed, in collaboration with other actors)	Value for business and society (e.g., cost/benefit to business and watershed stakeholders)
Key tools & resources	<ul style="list-style-type: none"> <li>→ <a href="#">Sector Actions Towards a Nature-Positive Future through Business for Nature, with the World Economic Forum, WBCSD and others</a></li> <li>→ High-level sectoral overviews through Business for Nature, with World Economic Forum, WBCSD and others (forthcoming in Sep. 2023)</li> <li>→ <a href="#">SBTN step 1a – Materiality screening and 1b Pressure assessment</a></li> <li>→ <a href="#">TNFD – Scoping phase</a> of the LEAP Approach (locate, evaluate, assess, prepare – available for business and financial institutions)</li> <li>→ <a href="#">Natural Capital Protocol</a></li> <li>→ <a href="#">Life-cycle assessments</a></li> <li>→ SBTN high-impact commodity list (forthcoming in 2023; available to Corporate Engagement Program members.)</li> <li>→ <a href="#">Global Reporting Initiative (GRI) Biodiversity Standard GRI-304</a> (the <a href="#">revised version</a> is due in Q2 2023)</li> <li>→ <a href="#">Integrated Biodiversity Assessment Tool (IBAT) Proximity Report</a></li> <li>→ <a href="#">WBCSD risk resources</a></li> </ul>		<ul style="list-style-type: none"> <li>→ <a href="#">Natural Capital Project NatCap Toolkit</a> to identify specific tools</li> <li>→ Modeling and primary data</li> <li>→ <a href="#">TNFD "Locate, Evaluate, Assess, Prepare"</a> plus disclosure recommendations for <a href="#">scenarios</a> and <a href="#">metrics and target-setting</a></li> <li>→ <a href="#">Integrated Biodiversity Assessment Tool (IBAT) Proximity Report</a></li> <li>→ <a href="#">SBTN 2a Target Boundary</a></li> </ul>	

## Commit and measure progress

Companies need to put in place commitments, including goals and associated targets, that contribute to halting and reversing nature loss. As companies advance on their journey, they should set ambitious, science-informed goals aligned with societal and planetary boundaries, with short- and medium-term targets that contribute to nature positive by 2030 and nature recovery by 2050.

See table for the full "Commit" maturity journey, including key tools and resources.

<b>Commit: Corporate-level actions (cumulative)</b>				
	<b>Starting</b>	<b>Developing</b>	<b>Advancing</b>	<b>Leading</b>
<b>Robustness</b>	High-level nature-related goal(s) with no measurable targets identified	Nature-related goal(s) include measurable targets identified on a timeline (SMART)	Nature-related goal(s) with measurable targets identified on a timeline	Nature-related goal(s) with measurable targets for priority locations identified on a timeline based on a documented, science-informed approach
<b>Ambition</b>	Goal to <b>avoid</b> priority negative impacts (i.e., avoided deforestation)	Goal and targets aim to <b>avoid and reduce</b> priority negative impacts (i.e., sustainable production practices)	Goal and targets aim additionally to <b>restore and regenerate</b>	Goal and targets aim to avoid and reduce, restore and regenerate and <b>transform</b> systems
<b>Assurance</b>	Goals and targets not validated nor assured	Goals and targets validated by third-party stakeholders or single-aspect assured	Reasonable third-party assurance of commitments	Live assurance processes with developmental dialogue between company and assurers
<b>Key tools &amp; resources</b>	<ul style="list-style-type: none"> <li>→ <a href="#">SBTN's interim-targets</a></li> <li>→ <a href="#">Act 4 Nature International</a></li> <li>→ Commodity-specific certification schemes</li> <li>→ GRI <a href="#">revised biodiversity standard</a> (forthcoming)</li> </ul>		<ul style="list-style-type: none"> <li>→ <a href="#">SBTN Step 3: Measuring baselines and target-setting</a></li> <li>→ <a href="#">TNFD Metrics and Targets + LEAP (measure success)</a></li> </ul>	



## Transform

Companies need to identify the actions they should put in place to actively address their priority impacts and dependencies on nature. These actions need to be implemented across all spheres of direct control (corporate, product and site levels) and spheres of influence, including the value chain – upstream, downstream, and beyond, into adjacent landscapes and seascapes. Ultimately, actions should contribute to transforming the systems where the company operates in.

See tables for the full “Transform” maturity journey – for each level of the sphere of control and influence – including key tools and resources.

	<b>Transform: Corporate-level actions (cumulative)</b>			
	<b>Starting</b>	<b>Developing</b>	<b>Advancing</b>	<b>Leading</b>
<b>Strategy</b>	Compliance drives strategy	Resource and operational efficiencies drive strategy, e.g., circularity	Aim to “do good” drives strategy	Just and regenerative principles drive strategy
<b>Risk management</b>	Nature risks not recognized as material to business performance	Risks related to impacts and dependencies on nature integrated into enterprise risk management (ERM) processes	Risks related to impacts and dependencies on nature integrated into ERM processes	Risks and opportunities related to impacts and dependencies on nature integrated into ERM processes and action plans in place
<b>Product traceability</b>	Procurement/ supply chain policy in place	Traceability mechanisms for tier 1 suppliers of priority supply chains and products	Traceability mechanisms to source priority raw materials/ products	Full traceability mechanisms for full life cycle of priority products
<b>Management priority and reward</b>	Nature managed through environmental management systems (EMS) and processes	Operational targets measured and rewarded through operational level assessment	Nature aspects in all parts of business performance and management, reward partially weighted on nature	Nature aspects in all parts of business performance and management, reward partially weighted on nature
<b>Financing</b>	Investments are ad hoc	Investments aligned with prioritized risks and opportunities	Investments for nature and climate integrated where relevant and impactful	Debt and equity capital linked to nature-positive performance
<b>Extent of employee/ internal engagement</b>	Engagement within environment, health and safety (EHS)/ sustainability department	Engagement with some additional functions	Engagement across main business functions, including leadership	Engagement across all business functions, including leadership
<b>Key tools &amp; resources</b>	→ <a href="#">We Value Nature introductory training resources</a> and <a href="#">Capitals Coalition training course</a>		→ <a href="#">Redefining Value resources</a> , including <a href="#">Future Proof</a> and <a href="#">Enterprise Risk</a> → <a href="#">TNFD LEAP Prepare P1: Strategy and resource allocations</a> → <a href="#">Compass for a just and regenerative business</a>	

<b>Transform: Value chains and beyond (cumulative)</b>				
	<b>Starting</b>	<b>Developing</b>	<b>Advancing</b>	<b>Leading</b>
<b>Supplier engagement</b>	Ad hoc engagement of suppliers on nature	Controlled engagement of suppliers on minimum standard specifications, e.g., for sustainable production practices	Managed engagement of suppliers with process metrics in place to track goals to avoid and reduce negative impacts	Optimized supplier engagement allows for innovation, including joint investments with stakeholders in adjacent landscapes
<b>Customer engagement</b>	Ad hoc customer engagement on nature-related issues	Customer engagement partially aligned with nature strategy to avoid and reduce negative impacts	Customer engagement fully aligned with nature strategy, with metrics beyond sales	Customer engagement aims to transform customer behaviors into agents for positive change and a culture shift
<b>Landscape stakeholder engagement</b>	Priority landscapes identified	Initial engagement with stakeholders in priority landscapes	Meaningful engagement with stakeholders in priority landscapes	Meaningful engagement with stakeholders with shared outcomes for nature, climate and people
<b>Key tools &amp; resources</b>	<ul style="list-style-type: none"> <li>→ SBTN high-impact commodity list (forthcoming in 2023; available to Corporate Engagement Program members.)</li> <li>→ UN Global Compact <a href="#">Guide to Traceability</a></li> <li>→ <a href="#">Supply chain transparency network</a></li> </ul>		<ul style="list-style-type: none"> <li>→ Natural Climate Solutions (NCS) Alliance's <a href="#">Natural Climate Solutions and the Voluntary Carbon Market</a></li> <li>→ WBCSD's <a href="#">Insetting and Scope 3 climate action: applying and accounting for Natural Climate Solutions (NCS) in land sector value chains</a></li> <li>→ IUCN's <a href="#">Global Standard for Nature-based solutions</a></li> <li>→ Forum for the Future's <a href="#">Guide to Critical Shifts</a></li> </ul>	



<b>Transform: Global and national policies (cumulative)</b>				
	<b>Starting</b>	<b>Developing</b>	<b>Advancing</b>	<b>Leading</b>
<b>NBSAPs</b>	Awareness of NBSAPs at a corporate level	Identification of opportunities to actively engage in NBSAPs in priority countries	Active engagement in NBSAPs in priority countries	Active contribution to NBSAPs in priority countries and linking to relevant NDCS
<b>Policy engagement approach</b>	Does not engage against science- and risk-based environmental regulations	Policy engagement clearly based on reduction of environmental impact	Policy engagement additionally focus on nature-positive outcomes, with rationale, and are consistent across all company advocacy activities	Policy engagement additionally discloses about trade-offs within the environmental dimension and minimize those trade-offs; actively disengages with industry associations that do not align with its advocacy positions
<b>Integration of policy engagement strategy</b>	Policy engagement on nature is separate from climate efforts	Advocacy efforts recognize the interdependence of nature and climate	Advocacy efforts support integration of nature and climate policy and reforming environmentally harmful subsidies to ensure positive outcomes for nature, climate and people	Advocacy efforts support integration of nature and climate policy, with social outcomes considered, and support reforming environmentally harmful subsidies to ensure positive outcomes for nature, climate and people
<b>Key tools &amp; resources</b>	<ul style="list-style-type: none"> <li>→ <a href="#">Business for nature Call to Action</a></li> <li>→ <a href="#">Business for Nature policy recommendations</a></li> <li>→ <a href="#">Metabolic Nature-based Solutions Policy Tracker</a></li> </ul>			

## Disclose

Companies need to publicly disclose on material nature-related information throughout their journey. Voluntary and mandatory expectations are rising from governments, investors, consumers and other stakeholders. Companies face increasing demands for information and transparency on their understanding of the impacts and dependencies of their activities, methodologies used, and the strategies put in place to address them.

Companies can follow the recommendations of reporting frameworks such as TNFD, that aim to support decision-making, focusing on the organization's immediate financial performance, as well as the longer-term financial risks. This relates to how positively or negatively the company impacts and depends on nature in different scenarios. While the financial implications of nature loss may not be fully understood yet, leading companies are already integrating nature into their disclosures at different levels.

See table for the full "Disclose" maturity journey, including key tools and resources.

Disclose					
		Starting	Developing	Advancing	Leading
Level of internal disclosure		Minimum reporting/mention of nature-related actions	Partial reporting on progress on nature	Proactive reporting on progress on nature includes results and methodology	Advanced, robust reporting includes lessons learned
Key tools & resources		→ <a href="#">GRI revised Biodiversity Standard, co-constructed with European Financial Reporting Advisory Group (EFRAG)</a> (due Q2 2023) → CDP Disclosure on <a href="#">Water</a> and <a href="#">Forests</a>		→ <a href="#">TNFD Reporting Recommendations (2023)</a> → Climate Disclosure Standards Board (CDSB) application guidance on <a href="#">biodiversity</a> and for <a href="#">water-related disclosures</a>	



### Cross-cutting dimensions of maturity for strategy and actions on nature

Embarking on the journey to nature positive requires a high level of ambition, reflected in a shift in the company's **mindset**, moving from risk mitigation, to "restoration", ultimately to "just and regenerative," as laid out in WBCSD's Vision 2050: Time to Transform.<sup>33</sup>

As ambition and nature maturity progress, companies will consider the **scope**, the **range of nature issues**, the integration with sustainability issues and the **corporate mindset** for each high-level action: assess, commit, transform and disclose.

To credibly align with the global goal for nature, **companies must reach the "advanced" and "leading" maturity levels on nature**, as indicated in the maturity table.

See table for the full "Cross-cutting dimensions" maturity journey, including key tools and resources.

	<i>Cross-cutting dimensions for strategy and actions on nature</i>			
	<b>Starting</b>	<b>Developing</b>	<b>Advancing</b>	<b>Leading</b>
<b>Scope</b>	Site(s) and product(s) considered	Direct operations considered	Partial upstream and downstream considered	Both upstream and downstream considered
<b>Range of nature issues addressed</b>	One impact across one realm (freshwater, land, coastal, oceans) considered	Several impacts across one realm considered	Several impacts and dependencies across several realms considered	All material impacts and dependencies across all realms considered
<b>Integration of nature, climate and equity agendas</b>	Nature actions considered separately from climate and equity actions	Equity and climate considerations in some ad hoc nature actions	Partial integration of nature, climate and equity in relevant corporate strategies and action plans	Fully integrated strategy with demonstrated outcomes for nature, climate and equity
<b>Mindset and purpose</b>	Overall aim is pursuing efficiency gains to do less harm and achieve better value returns (risk mitigation)	Overall aim is sustaining the current status quo by doing no harm (net-zero)	Overall aim is pursuing an ideal that heals past harm (restorative)	Overall aim is building capacity for self-sustaining abundance of life (regenerative)
<b>Key tools &amp; resources</b>	<ul style="list-style-type: none"> <li>→ <a href="#">Natural Capital Protocol</a>, <a href="#">Natural Capital Toolkit</a>, and <a href="#">guides</a></li> <li>→ <a href="#">Encore tool</a></li> <li>→ <a href="#">SBTN Initial Guidance For Business</a></li> </ul>		<ul style="list-style-type: none"> <li>→ <a href="#">Protocols for natural, human and social capitals</a></li> <li>→ <a href="#">Integrated capitals protocol (forthcoming)</a></li> <li>→ <a href="#">WBCSD Vision 2050: Time to Transform</a></li> </ul>	

# Endnotes

- 1 Rockström, J., Gupta, J., Qin, D. et al. (2023). Safe and just Earth system boundaries. *Nature* 619, 102–111. Retrieved from: <https://doi.org/10.1038/s41586-023-06083-8>.
- 2 Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) (2019). Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Brondizio, E. S., Settele, J., Díaz, S. & Ngo, H. T. (editors). IPBES Secretariat, Bonn, Germany. 1148 pages. Retrieved from: <https://doi.org/10.5281/zenodo.3831673>.
- 3 World Economic Forum (2020). New Nature Economy Report II: The Future of Nature and Business. Retrieved from: <https://www.weforum.org/reports/new-nature-economy-report-ii-the-future-of-nature-and-business/>.
- 4 Rockström, J., Gupta, J., Qin, D. et al. (2023). Safe and just Earth system boundaries. *Nature* 619, 102–111. Retrieved from: <https://doi.org/10.1038/s41586-023-06083-8>.
- 5 World Economic Forum (2020). Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy. Retrieved from: [https://www3.weforum.org/docs/WEF\\_New\\_Nature\\_Economy\\_Report\\_2020.pdf](https://www3.weforum.org/docs/WEF_New_Nature_Economy_Report_2020.pdf).
- 6 European Financial Reporting Advisory Group (EFRAG) (n.d.). Public consultation on the first set of Draft ESRS. Retrieved from: <https://www.efrag.org/lab3?AspxAutoDetectCookieSupport=1>.
- 7 Ramos, J. & Sedilekova, Z. (2022). Biodiversity Risk: Legal Implications for Companies and their Directors. Commonwealth Climate and Law Initiative (CCLI). Retrieved from: [https://commonwealthclimatelaw.org/wp-content/uploads/2022/12/CCLI\\_Biodiversity\\_risk\\_paper\\_2022.pdf](https://commonwealthclimatelaw.org/wp-content/uploads/2022/12/CCLI_Biodiversity_risk_paper_2022.pdf).
- 8 Segal, M. (2022). ISSB to Add Biodiversity, Just Transition Disclosures to Climate Reporting Standard. *ESG Today*. Retrieved from: <https://www.esgtoday.com/issb-to-add-biodiversity-just-transition-disclosures-to-climate-reporting-standard/>.
- 9 Davies, P. Fortt, S. & Huber, B.M. (2023). ESG Insights: 10 Things That Should Be Top of Mind in 2023. Latham & Watkins. Retrieved from: <https://www.globalelr.com/2023/01/esg-insights-10-things-that-should-be-top-of-mind-in-2023/>.
- 10 Deloitte UK (2022). How consumers are embracing sustainability. Retrieved from: <https://www2.deloitte.com/uk/en/pages/consumer-business/articles/sustainable-consumer.html>.
- 11 McKinsey and NielsenIQ (2023). Consumers care about sustainability—and back it up with their wallets. Retrieved from: <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/consumers-care-about-sustainability-and-back-it-up-with-their-wallets>.
- 12 Deloitte (2022). Deloitte Gen Z and Millennial Survey 2022. Retrieved from: <https://www.deloitte.com/global/en/issues/work/genzmillennialsurvey-2022.html>.
- 13 Business for Nature et al. (2022). How business and finance can contribute to a nature positive future now. Retrieved from: <https://www.businessfornature.org/news/nature-positive-discussion-paper>.
- 14 WBCSD (2022). Business readiness to step up action on nature – trends & insights on corporate reporting. Retrieved from: <https://www.wbcd.org/Imperatives/Nature-Action/Nature-Positive/Resources/Business-readiness-to-step-up-action-on-nature-trends-insights-on-corporate-reporting>.
- 15 Business for Nature (2022). How business and finance can contribute to a nature positive future now. Retrieved from: <https://www.businessfornature.org/news/nature-positive-discussion-paper>.
- 16 McKinsey (2022). Where the world's largest companies stand on nature. Retrieved from: <https://www.mckinsey.com/capabilities/sustainability/our-insights/where-the-worlds-largest-companies-stand-on-nature>.
- 17 World Economic Forum (2020). New Nature Economy Report II: The Future of Nature and Business. Retrieved from: <https://www.weforum.org/reports/new-nature-economy-report-ii-the-future-of-nature-and-business/>.
- 18 Proof points on global value chains:
  - World Economic Forum (2020). New Nature Economy Report II: The Future Of Nature And Business. Retrieved from: <https://www.weforum.org/reports/new-nature-economy-report-series>.
  - Food and Agriculture Organization of the United Nations (2022). Global forest sector outlook 2050: Assessing future demand and sources of timber for a sustainable economy. Retrieved from: <https://www.fao.org/family-farming/detail/en/c/1633694/>.
  - Food and Agriculture Organization of the United Nations (2021). AQUASTAT - FAO's Global Information System on Water and Agriculture. Retrieved from: [fao.org/aquastat/en/overview/methodology/water-use/](http://fao.org/aquastat/en/overview/methodology/water-use/).
  - World Resource Institute (2018). How to Sustainably Feed 10 Billion People by 2050, in 21 Charts. Retrieved from: <https://www.wri.org/insights/how-sustainably-feed-10-billion-people-2050-21-charts>.
  - Food and Agriculture Organization of the United Nations (2023). Decent Rural Employment: Green Jobs. Retrieved from: <https://www.fao.org/rural-employment/work-areas/green-jobs/en/>.
  - International Energy Agency IEA (2022), Global buildings sector CO2 emissions and floor area in the Net Zero Scenario, 2020-2050. <https://www.iea.org/data-and-statistics/charts/global-buildings-sector-co2-emissions-and-floor-area-in-the-net-zero-scenario-2020-2050>.
  - Global Alliance for Building and Construction & United Nations Environmental Program (2021). 2021 Global Status Report for Buildings and Construction: Towards a Zero-emission, Efficient and Resilient Buildings and Construction Sector. Retrieved from: [https://globalabc.org/sites/default/files/2021-10/GABC\\_Buildings-GSR-2021\\_BOOK.pdf](https://globalabc.org/sites/default/files/2021-10/GABC_Buildings-GSR-2021_BOOK.pdf).
  - World Economic Forum (2022). This chart shows the impact rising urbanization will have on the world. Retrieved from: <https://www.weforum.org/agenda/2022/04/global-urbanization-material-consumption/>.
  - National Geographic (2019). This is what cities need to do by 2050 to meet climate goals. Retrieved from: <https://www.nationalgeographic.com/environment/article/zero-carbon-cities-future>.
  - van de Ven, D.J., Capellan-Peréz, I., Arto, I., et al. (2021). The potential land requirements and related land use change emissions of solar energy. *Sci Rep* 11, 2907 (2021). Retrieved from: <https://www.nature.com/articles/s41598-021-82042-5.pdf>.
  - World Economic Forum (2020). 3 charts that show countries and sectors with the highest greenhouse gas emissions. Retrieved from: <https://www.weforum.org/agenda/2020/12/climate-change-greenhouse-gas-emissions-environment-paris-agreement/>.



- U.S. Energy Information Administration (2021). International Energy Outlook 2021 – Consumption. Retrieved from: <https://www.eia.gov/outlooks/ieo/consumption/sub-topic-03.php>.
- International Renewable Energy Agency IRENA (2020). Global Renewables Outlook: Energy transformation 2050. Retrieved from: <https://www.irena.org/publications/2020/Apr/Global-Renewables-Outlook-2020>.
- 19** Taskforce on Nature-related Financial Disclosures (TNFD) (2023). Nature-related Risk and Opportunity Management and Disclosure Framework Beta v0.4 Annex 4.10 Additional guidance on scenario analysis. Retrieved from: <https://tnfd.global/publication/tnfd-v0-4-annex-4-10/>.
- 20** WBCSD (2022). The role of Nature-based Solutions in strategies for Net Zero, Nature Positive and addressing Inequality. Retrieved from: <https://www.wbcsd.org/Programs/Climate-and-Energy/Climate/Natural-Climate-Solutions/Resources/Nature-based-Solutions-for-Net-Zero-Nature-Positive-and-addressing-Inequality>.
- 21** WBCSD (2022). Insetting and Scope 3 climate action: applying and accounting for Natural Climate Solutions (NCS) in land sector value chains. Retrieved from: <https://www.wbcsd.org/Programs/Climate-and-Energy/Climate/Natural-Climate-Solutions/Resources/Insetting-and-Scope-3-climate-action-applying-and-accounting-for-Natural-Climate-Solutions-NCS-in-land-sector-value-chains>.
- 22** Natural Climate Solutions Alliance (2023). A Buyer's Guide to Natural Climate Solutions Carbon Credits. Retrieved from: <https://www.wbcsd.org/Imperatives/Nature-Action/Nature-based-Solutions/The-Natural-Climate-Solutions-Alliance/Resources/A-Buyer-s-Guide-to-Natural-Climate-Solutions-Carbon-Credits>.
- 23** Business for Nature (2023). Business for Nature's recommendations for governments on how to include the role of business and finance in updated National Biodiversity Strategies and Action Plans (NBSAPs). Retrieved from: <https://www.businessfornature.org/news/nbsap-recommendations>.
- 24** Convention on Biological Diversity (n.d.). National Biodiversity Strategies and Action Plans (NBSAPs). Retrieved from: <https://www.cbd.int/nbsap/>.
- 25** Finance for Biodiversity Pledge (2022). Guide on Engagement with Companies. Retrieved from: <https://www.financeforbiodiversity.org/publications/guide-on-engagement-with-companies/>.
- 26** WBCSD (2022). The Business of Climate Recovery: Accelerating Accountability, Ambition and Action Retrieved from: <https://www.wbcsd.org/Overview/Policy-Advocacy-and-Member-Mobilization-PAMM/Resources/Business-of-Climate-Recovery-Accelerating-Accountability-Ambition-and-Action>.
- 27** WBCSD (2021). Vision 2050: Time to Transform. Retrieved from: <https://www.wbcsd.org/Overview/About-us/Vision-2050-Time-to-Transform>.
- 28** Science Based Targets Network (2020). Science-Based Targets for Nature Initial Guidance for Business. <https://sciencebasedtargetsnetwork.org/resource-repository/#companies>.
- 29** Taskforce on Nature-related Financial Disclosures (TNFD) (n.d.). Retrieved from: <https://tnfd.global/faq/>.
- 30** International Financial Reporting Standards (IFRS) (n.d.). Retrieved from: <https://www.ifrs.org/groups/international-sustainability-standards-board/issb-frequently-asked-questions/>.
- 31** We have developed a nature dashboard in checklist format to analyze maturity based on public disclosures. We identified the different action areas in the nature-positive building blocks and broke them down into the realms used by the Science-Based Targets Network Initial Guidance: freshwater, land, and oceans and biodiversity cutting across these realms. Note also that that we excluded the atmosphere from the analysis to allow for an initial emphasis on nature readiness but we could integrate it in the future. Global Network Partners and industry associations have since adapted and adopted the assessment framework. See: WBCSD (2022). Business readiness to step up action on nature – trends & insights on corporate reporting. Retrieved from: <https://www.wbcsd.org/Imperatives/Nature-Action/Nature-Positive/Resources/Business-readiness-to-step-up-action-on-nature-trends-insights-on-corporate-reporting>.
- 32** Frameworks used as the basis for the levels of maturity on nature actions:
  - WBCSD (2021). Future Proof matrix. Retrieved from: <https://www.wbcsd.org/Programs/Redefining-Value/What-does-stakeholder-capitalism-mean-for-business/Resources/Future-Proof-Business>.
  - WBCSD (2021). Nature readiness assessment v1.0. Retrieved from: <https://www.wbcsd.org/download/file/13343>.
- WBCSD (2021). Getting ready to reach new heights of sustainable business leadership (membership criteria on nature). Retrieved from: <https://www.wbcsd.org/Overview/News-Insights/WBCSD-insights/Getting-ready-to-reach-new-heights-of-sustainable-business-leadership>.
- Forum for the Future and WBCSD (2021). Compass for a Just and regenerative business. Retrieved from: <https://www.forumforthefuture.org/just-and-regenerative-business>.
- Capitals Coalition, WBCSD, eftec and PwC (2019). Natural capital checker. Retrieved from: <https://capitalscoalition.org/capitals-approach/the-capitals-checker/>.
- 33** WBCSD (2021). Vision 2050: Time to Transform. Retrieved from: <https://www.wbcsd.org/Overview/About-us/Vision-2050-Time-to-Transform>.







# Acknowledgements

## Disclaimer

This publication has been developed in the name of WBCSD. Like other WBCSD publications, it is the result of collaborative efforts by representatives from member companies and external experts. A wide range of member companies reviewed drafts, thereby ensuring that the document broadly represents the perspective of WBCSD membership. Input and feedback from stakeholders listed above was incorporated in a balanced way. This does not mean, however, that every member company or stakeholder agrees with every word.

The report has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, legal or other professional advice.

## Acknowledgements

WBCSD would like to thank the following partners for providing their insights and collaboration:

Business for Nature, Capitals Coalition, Global Canopy, International Union for Conservation of Nature (IUCN), Principles for Responsible Investment (UN PRI), The Nature Conservancy (TNC), Science-Based Targets Network (SBTN), Taskforce on Nature-related Financial Disclosures (TNFD), United Nations Environment Programme Finance Initiative (UNEP-FI), Wildlife Conservation Society (WCS), World Benchmarking Alliance (WBA), UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), World Economic Forum (WEF), World Wildlife Fund (WWF).

## About Nature Action Imperative

WBCSD's Nature Action Imperative supports members to accelerate credible corporate action, and mainstream nature in business strategies & decision-making: building the tools and guidance needed to define credible business contributions to Nature Positive (halt and reverse nature loss by 2030); preparing to engage with the emerging performance and accountability system for nature; and catalyzing investments into nature assets. To learn more about the Imperative and related projects, visit <https://www.wbcd.org/Imperatives/Nature-Action>.

## About WBCSD

The World Business Council for Sustainable Development (WBCSD) is a global community of over 220 of the world's leading businesses, representing a combined revenue of more than USD \$8.5 trillion and 19 million employees. Together, we transform the systems we work in to limit the impact of the climate crisis, restore nature and tackle inequality.

We accelerate value chain transformation across key sectors and reshape the financial system to reward sustainable leadership and action through a lower cost of capital. Through the exchange of best practices, improving performance, accessing education, forming partnerships, and shaping the policy agenda, we drive progress in businesses and sharpen the accountability of their performance.

Follow us on [LinkedIn](#) and [X](#).

[www.wbcd.org](http://www.wbcd.org)

Copyright © WBCSD, September 2023



Geneva | Amsterdam | London | New York City | Singapore