Embedded Strategies for the Sustainability Transition
Setting Priorities and Goals Aligned with Systems Resilience
Embedded Strategies for the Sustainability Transition

Setting Priorities and Goals Aligned with Systems Resilience

Prepared by Stephanie Bertels and Rylan Dobson


Copyright © 2020 Embedding Project.

This document is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License. You are free to share (copy and redistribute the material in any medium or format) or adapt (remix, transform, and build upon) the material with appropriate attribution. You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests that the authors or The Embedding Project endorse you or your use of our work product.
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>4</td>
</tr>
<tr>
<td>Introduction</td>
<td>9</td>
</tr>
<tr>
<td>Why Context and Systems Resilience Matter</td>
<td>11</td>
</tr>
<tr>
<td>How Much Is Enough?</td>
<td>14</td>
</tr>
<tr>
<td>Understanding Systems Thresholds</td>
<td>15</td>
</tr>
<tr>
<td>Targeting Systems Regeneration</td>
<td>22</td>
</tr>
<tr>
<td>Developing Credible Embedded Strategies and Contextual Goals</td>
<td>23</td>
</tr>
<tr>
<td>A Resource for Goal Setting: Our Goals Database</td>
<td>49</td>
</tr>
<tr>
<td>What Next?</td>
<td>51</td>
</tr>
<tr>
<td>Other Resources</td>
<td>52</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>57</td>
</tr>
</tbody>
</table>
Executive Summary

Embedded strategies respond to the growing calls for businesses to articulate their purpose and their strategy in alignment with a rapid climate transition, reducing systemic inequality, preserving biodiversity, and the elimination of waste. The concepts and tools outlined in this guide are a result of over a decade of research and experience working with companies worldwide alongside over 300 interviews with senior executives, CEOs, and corporate directors. The guide was designed to support companies as they shift to an embedded view of strategy that harnesses the generative potential of business to contribute to resilient communities and societies.

Why context and systems resilience matter

Recent events have highlighted the need for companies to view their operations as part of a nested system, bounded by, and embedded within, the environmental, social, and economic systems in which they operate – a systems view.

The three key benefits to adopting an embedded approach include:

1. Managing disruptive risk and the potential opportunities that arise from it;
2. Enhancing social acceptance by articulating a credible social purpose and a credible response; and
3. Setting credible limits to your involvement, prioritising where it makes the most sense to allocate your resources.

Figure 1: Embedded strategies
Developing credible embedded strategies and contextual goals

When supporting companies as they explore embedded strategies, we found it helpful to focus on five iterative steps:

1) **SCAN**: Gather data on relevant political, economic, social, technological, legal, and environmental forces, their underlying systemic drivers, and the interactions between them. Explore key systems thresholds to identify a set of issues that may be particularly relevant to your company, including those that require urgent action and those that should be monitored on an ongoing basis.

![Figure 2: Eight issue categories to support scanning](Image)

2) **UNDERSTAND**: Consult with employees, communities, stakeholders, rights holders, subject matter experts, and organisations in your value network to deepen your understanding of:

- How particular issues may impact your business strategy;
- How your activities may directly or indirectly impact relevant environmental, social, and economic systems; and
- What role your business could play in positively influencing system outcomes.
3) PRIORITISE: Transparently determine where you will direct your efforts based on the strategic relevance of particular issues to your business, where your organisation has the greatest operational or value chain impacts, and where you are best positioned to positively influence the underlying systems.

We created a comprehensive, rigorous, and systematic Radar tool to support companies as they explore emerging sustainability issues and to help them to prioritise among them.

Figure 3: Embedding Project Radar
4) **ACKNOWLEDGE**: Articulate a clear, contextually grounded position with respect to your most relevant environmental, social, economic, and governance issues.

![Figure 4: Creating a Credible Position Statement](image)

**KEEP IT SHORT AND ACCESSIBLE**

5) **SET GOALS AND INTERIM TARGETS**: Set goals aligned with doing your part to contribute to systems resilience. These goals should signal the action required; clearly outline the timeframe; and include realistic interim targets for how you will get there.

![Figure 5: Setting credible goals and interim targets](image)
Benchmarking performance

To support companies in articulating a credible public position and setting contextual goals, we have assembled two publicly available databases. You can search for positions or goals based on issue, sector, SDG target, company, or using your own search terms. For each position or goal included in the databases, we note our criteria for assessment and provide a link to the supporting evidence that we used in assessing it.

Going forward

Detailed directions for achieving each of the iterative steps can be found on the following pages. We hope this guidance will help your company to shift your strategy process in a way that takes your environmental and social context into account and aligns your strategy with contributing to systems resilience.

We also hope that this process will help you to articulate a clear narrative of where you are directing your efforts and why, including your decision to prioritise actions where you can have the greatest potential for positive systems impact, whether it be within your direct operational control, by supporting changes in your value chain, or through your broader systems influence. Clarity about this internal and external narrative is a crucial part of ‘living your purpose’.
Introduction

“[…] when we get past this crisis—which we will—we will face a choice. We can go back to the world as it was before or deal decisively with those issues that make us all unnecessarily vulnerable to crises. […] The recovery from the COVID-19 crisis must lead to a different economy. Everything we do during and after this crisis must be with a strong focus on building more equal, inclusive and sustainable economies and societies that are more resilient.”

- (António Guterres, Secretary-General of the United Nations)

It is time for companies to take a very different approach to corporate strategy. Our collective approach to economic recovery cannot be conceived in isolation from the regeneration needed in the social and environmental systems upon which every business depends. We must go beyond business strategy isolated from these social and environmental systems, with “sustainability strategies” tacked on the side. We need an embedded view of business strategy – one that contributes to the transition to regenerative economies and systems resilience. Embedded strategies respond to the growing calls for businesses to articulate their purpose and their strategy in alignment with the need to shift the global economy towards the reduction of inequality, a rapid climate transition, the preservation of biodiversity, and the elimination of waste.

This guide will support your company as it shifts to an embedded view on strategy and harnesses the generative potential of business to contribute to resilient communities and societies.

This guide explains the importance of systems resilience and thresholds, outlines why context matters for your business, describes a five-step process to develop contextual goals and embedded strategies, and summarises other helpful resources on this topic. The ideas outlined in this guide build on a decade of research helping companies take a more contextual and embedded approach to setting their corporate strategy in alignment with what is needed to ensure the resilience of the communities in which they operate. Our early thoughts were outlined in our Road to Context Guidebook, which explored how companies could factor the needs of their environmental, social, and economic context into their core strategy and goal-setting processes. Here, we build on these experiences, including in-depth work with dozens of companies working at the cutting edge of developing embedded strategies. We have also gleaned insights from over 300 interviews with senior executives, CEOs, board chairs, and directors about they recognised the need to contribute to systems resilience and how this realisation is shaping their company’s strategy and goal setting going forward. Finally, we have engaged in rich conversations with the organisations developing key concepts and tools and with companies piloting these tools. In this guide, we also aim to fill some gaps by introducing some new tools specific to corporate strategy, including our new Radar tool.

It is our hope that this guide is useful in supporting your effort to develop an embedded strategy. Please reach out to us with suggestions, additions, and improvements.
Why Context and Systems Resilience Matter

“I would say that most companies and boards are still stuck in [...] that compliance mentality of minimising one’s footprint, rather than reimagining the very mission of the business in terms of planetary boundaries, in terms of the opportunities that those factors may create around the definition of the business.”

- (Non-Executive Director, global oil and gas company)

Prior to the global pandemic, many companies were recognising the need to shift from a shareholder view that focused exclusively on maximising shareholder return to a stakeholder view of capitalism that recognises the need to consider the needs of a range of stakeholders, including employees, customers, suppliers, and local communities. They were implementing concepts like ‘triple bottom line’\(^2\) thinking or ‘shared value’.\(^3\) Despite this, the last few years - and more recent events - have highlighted the need for companies to view their operations as part of a nested system, bounded by, and embedded within, the environmental, social, and economic systems in which they operate – a systems view. This shift in thinking around value creation is depicted below.


\(^3\) [https://www.isc.hbs.edu/creating-shared-value/csv-explained/pages/default.aspx](https://www.isc.hbs.edu/creating-shared-value/csv-explained/pages/default.aspx)
Almost 40 years ago, companies were told to look beyond their own corporate borders by factoring their industry environment into their strategy-making process.\(^4\) Fast forward to the present, and increasing resource scarcity, heightened social uncertainty, and continued instability in the financial markets are driving executives and boards to broaden their understanding of systemic issues and the constraints they place on their businesses. As illustrated below, companies will need to consider two additional forces in their strategy-making: social resilience and environmental resilience.

While many companies now disclose their exposure to environmental, social, and governance (ESG) risks, a growing number are publicly committing to do their part to contribute to the resilience of the communities in which they operate, whether it is in their goal setting or through board position statements. For instance, nearly one fifth of Fortune Global 500 companies have committed to set science-based emissions reduction targets. A growing number of boards are issuing position statements on climate change and other topics that include commitments to respect environmental limits and contribute to building social resilience.

In our interviews with senior executives and directors, they articulated three key benefits to adopting an embedded approach:

**MANAGING DISRUPTIVE RISK AND THE POTENTIAL OPPORTUNITIES THAT ARISE FROM IT** – Anticipating complex and potentially disruptive risks requires thorough, inclusive engagement and proactive scanning. By including systems resilience as a key part of your long-term risk conversation, you are better able to surface potential sources of disruption, helping to ensure a more proactive approach to mitigating them.

**ENHANCING SOCIAL ACCEPTANCE** – Understanding systems resilience will also help your company anticipate shifting social needs and expectations, helping you to maintain and enhance your social acceptance by articulating a credible social purpose and a credible response.

**SETTING CREDIBLE LIMITS TO YOUR INVOLVEMENT** – Through adopting a more systemic approach to understanding your company’s relevant impacts and its biggest levers for positive change, you can prioritise where it makes the most sense to allocate scarce resources, helping you to develop a clear narrative about where you will direct your efforts and why.

---

5 [https://sciencebasedtargets.org](https://sciencebasedtargets.org)
How Much Is Enough?

Companies face a myriad of demands and expectations when it comes to their ‘corporate social responsibility’ or ‘sustainability’ activities. They can find themselves overwhelmed by requests that appear unrelated to their business; beyond their current capabilities; or beyond the resources that they have available.

Increasingly, communities and other stakeholders are asking companies to put their goals and their performance ‘in context’ by explaining how their corporate strategies are aligned with supporting environmental and social resilience.

When speaking with boards and CEOs, a question that comes up again and again is: how much is enough?

“It’s about institutionalising, in the strategic planning process, key global mega-trends including trends around planetary boundaries and social sustainability. Then … make sure that on an ongoing basis you communicate them, measure them, and then link your reward systems to the delivery of strategy”

- (CEO, banking)

A contextual approach means moving beyond asking “what could we do” and instead understanding “what do we need to do to play our part in maintaining and enhancing the resilience of the environmental, social, and economic systems in which we operate?”

This means both considering and disclosing your company’s understanding of the resilience of the systems in which it operates; disclosing the risks and opportunities that these systems conditions present to your business; disclosing your company’s impacts on these systems conditions; and discussing your efforts to respect and operate within key systems thresholds in a way that addresses the concerns of both shareholders and stakeholders.
Understanding Systems Thresholds

A key concept in systems science is the notion of a threshold. Thresholds describe the point at which the resilience of an environmental, social, or economic system becomes compromised. You might think of this as the ‘tipping point’ of a system where the current system is fundamentally altered and experiences a profound shift (often called a regime change). As illustrated below, thresholds are often marked by sudden and non-linear shifts in systems dynamics, where crossing the threshold brings about a sudden, large and dramatic change. But this need not always be the case as the shift may be more gradual.

It can be challenging to precisely define key environmental and social thresholds because non-linear underlying systems dynamics may be difficult to model and predict. Often thresholds are only truly identified once they have been surpassed. For instance, in the same way that one can speculate about the conditions that might spur an economic recession, we can only truly identify a recession after experiencing economic decline over two successive quarters. For this reason, it is common to use scenarios as a means of modeling systems, identifying the potential for regime shifts, and the thresholds at which they are most likely to occur.

Figure 9: Thresholds and Systems Resilience.
We can conceptualise systems as having either upper or lower thresholds. An upper threshold occurs at the point in which the total impacts imposed on a system exceed its capacity to assimilate those impacts. For instance, the Planetary Boundaries framework depicts a set of upper limits for nine human–environmental coupled systems beyond which we see functional collapses of key systems. Already, at least three of these environmental thresholds have been surpassed: climate change; nitrogen loading; and biodiversity loss.

![Planetary Boundaries](https://www.stockholmresilience.org/research/planetary-boundaries/planetary-boundaries/about-the-research/the-nine-planetary-boundaries.html)

Building on this framework, the Doughnut of Planetary Boundaries and Social Foundations combines these upper environmental thresholds (described as ceilings) with a set of lower thresholds (called social foundations) beneath which the resiliency of social and economic systems are threatened. These include issues such as access to energy, access to decent work, and access to appropriate nutrition. Operating within these upper and lower thresholds is meant to help maintain resilience by avoiding compromising systems or, better yet, to enhance systems resilience by contributing to system regeneration and repair.

---


Several further resources attempt to help define crucial systems thresholds. For instance, the UN Sustainable Development Goals (SDGs) have been articulated as a blueprint to achieve a better and more sustainable future for all. The goals help codify a global consensus on the need to end poverty, protect the planet, and ensure all people enjoy peace and prosperity by the year 2030. While designed for action by governments, companies are being asked to articulate how they are contributing to the goals.

The Future-Fit Business Benchmark draws on the principles articulated in The Natural Step’s System Conditions to outline a set of expectations that help companies ensure that their actions do not breach system conditions. All of the resources mentioned here are referenced further in our final section on ‘Other Resources’.

---

Acknowledging the value of traditional and Indigenous knowledge

While the western conceptualisations of thresholds presented in the preceding pages represent one way of thinking about systems resilience, it is important to recognise that these ideas are anchored in biases and assumptions about the primacy of science, reason, and economic rationality. Indigenous wisdom has a key role to play in our understanding of systems resilience. The deep, complex, and holistic knowledge held within traditional cultures has been generated based on these communities’ own traditions, explorations, observations, trial and error, and situated lived experiences over long periods of time. Finding ways of acknowledging, respecting, and incorporating traditional and Indigenous knowledge will be crucial to our collective understanding of resilience.

Around the globe, there have been encouraging efforts by companies to recognise land rights, engage in reconciliation, and honour and incorporate indigenous knowledge into business decision-making, including in the form of integrated management agreements.

Systems interactions

In this guide, we discuss social and environmental systems, which are broad categories for the systems that encompass issues such as climate change, water scarcity, and income disparities. Social and environmental systems are inherently interconnected and interact in various ways, and thus are often “called socio-ecological systems.” Particular components of socio-ecological systems respond to changes in other components, sometimes triggering feedbacks that can amplify, reduce or stabilise effects throughout the whole system. These interconnections and interdependencies can make mapping and managing systems a challenge, but they also provide adaptability and opportunities for reorganisation and recovery. As you consider one aspect of systems resilience, it is important to reflect on the processes that connect to other aspects of systems resilience.

Applying the notion of thresholds to key socio-ecological systems

Climate

How should a company determine what it means to do its part to maintain the resilience of the climate system?

Our societal understanding of the climate change threshold has been shaped profoundly by the work of the United Nations’ Intergovernmental Panel on Climate Change (IPCC). As global greenhouse gas (GHG) emissions accumulate in the atmosphere, global average temperatures continue to rise. As we move to higher global average temperatures, a point is reached where Earth’s climate system is no longer able to adapt and there is a sudden adverse change in the stability of the global climate – this mechanism has come to define the key threshold for climate change.

In the 1990s, the IPCC proposed a threshold of 2°C average global rise in temperature relative to pre-industrial levels as the point beyond which it would be impossible to avert the worst consequences of climate change. In 2018, the IPCC announced that additional research and data (including the incorporation of Indigenous knowledge) has shifted our understanding of this threshold to 1.5°C, emphasising that exceeding 1.5°C of warming and hitting the 2°C limit would put millions more people at risk of death, poverty, water and food shortages, and displacement from rising sea levels, while increasing the odds of irreversible changes in our climate system.10

Thus, instead of asking “how much could we reduce our emissions?” the question becomes “how much do we need to reduce our GHG emissions (and in what timeframe) to do our part to restrict the increase in global average temperature to less than 1.5°C above pre-industrial levels?”.

---

In the wake of the IPCC’s announcement about the urgency of holding temperature rise below 1.5°C, leading companies have now committed to doing their part to reduce global emissions by 45 per cent below 2010 levels by 2030 and reaching net zero by 2050. Some have gone further, taking a more regenerative view, by committing to make these reductions more quickly or even aiming to sequester more carbon than they produce.

Several different approaches have been proposed for companies to understand how to apply this threshold to their own operations. In particular, the Science Based Targets Initiative (SBTi) was formed to encourage and support companies to set goals aligned with a 1.5°C or well-below 2°C pathway (what they refer to as science-based goals). We discuss the SBTi and other resources in a later section on goal setting and in our final section on ‘Other Resources’.

Other environmental issues

Companies have also started to take a contextual approach with respect to other environmental issues like water, biodiversity and land use. It is clear that companies will not be able to simply replicate the approaches taken with respect to greenhouse gas emissions because these issues operate at a more local scale, often at the scale of watersheds or biomes. Companies are starting to consider their water use in the context of the watersheds in which they operate; commit to regenerative and nature-based solutions for ecosystem health; explore circular approaches to product design and value chain configuration; and set zero-waste goals.

Recently, the Science-Based Targets Network (SBTN) was formed to help companies and cities develop methodologies to set goals related to maintaining the resilience of freshwater, biodiversity, land, and oceans.¹¹ As an early part of this effort, WWF, WRI, The Nature Conservancy, and CDP are collaborating to develop approaches for setting science-based water targets that address the needs of a given watershed or catchment area.

Social issues

Companies have also started exploring a contextual approach to social issues, sometimes proactively, and sometimes at the request of regulators demanding that they demonstrate that they are not eroding the resilience of the communities in which they operate. Companies are committing to paying a living wage, ensuring their workforces are reflective of the societies in which they operate, and contributing to local economic resilience. To see examples of how companies are articulating these kinds of commitments, you can search the free contextual goals database on our website (described in more detail on page 44).

Your understanding of systems needs to be responsive and grounded in your context

As the previous examples illustrate, our collective understanding of systems resilience and systems thresholds is evolving rapidly. Your understanding of the system dynamics and appropriate thresholds must be grounded in the particular ecosystems and social systems in which you operate. Your process of building this understanding should be broad and inclusive, incorporating and valuing different forms and sources of knowledge, including the experiences of those most familiar with your local context. During this process, it is important to also recognise differences in the perceptions and risk tolerances of the various parties involved in the conversation as well as the uncertainty and biases inherent in the knowledge, data, and analyses that you are relying upon to support your understanding.

Your understanding can, and should, evolve over time as new knowledge becomes available and as your operating context changes over time (including changes in environmental baselines or community values and priorities). As a result, embedded strategies need to be dynamic and iterative, adjusting to new understandings of systems drivers and key thresholds and lessons learned along the way.
Targeting Systems Regeneration

While leading companies continue to set goals to bring their own direct operational performance in line with what is needed, they are also realising that a significant portion of the impact of their business lies in their value chain; in what their customers do with their products and services; or in the impact of their investments.

More companies are asking “what role could we play in helping others contribute to positive systems change?”

As a result, it is becoming more common to see companies set value chain and systems influence goals. For instance, in January 2020, Microsoft committed to help its suppliers and customers around the world reduce their own carbon footprints, including committing to a new $1 billion climate innovation fund to accelerate the global development of carbon reduction, capture, and removal technologies.12
Developing Credible Embedded Strategies and Contextual Goals

As your company begins to recognise the crucial link between its own business resilience and the resilience of the social and environmental systems in which it operates, its strategy development process will need to shift. Our conversations with senior leaders and boards in global companies have pointed to crucial moments where these system dependencies became apparent and the accompanying realisation that business as usual is no longer an option.

When supporting companies as they explore embedded strategies, we have found it helpful to structure our conversations around five iterative steps, as illustrated in Figure 6. We describe each step in more detail in the pages that follow. At the end of this guide, we provide a list of additional resources that you may find helpful as you develop your own embedded strategy and contextual goals.

Figure 11: Five key steps to develop an embedded strategy.
1 SCAN
Gather data on relevant political, economic, social, technological, legal, and environmental (PESTLE) forces, their underlying systemic drivers, and the interactions between them. Explore key systems thresholds to identify a set of issues that may be particularly relevant to your company, including those that require urgent action and those that should be monitored on an ongoing basis.

Many corporate strategy processes now include a scanning process that reviews emerging environmental and social trends. Too often though, this work is limited to tracking the potential for regulatory shifts and benchmarking against the disclosure and goal setting of industry peers or perceived sustainability leaders in other industries. While a useful starting point, this approach often does not provide enough information to make sense of the specific challenges and opportunities that may apply to your unique operating context or, as the global pandemic has illustrated for many, help you to understand the full implications of emerging risks.

So, how should you gather the information you need to take an embedded approach to strategy? Building an embedded strategy begins with looking beyond those issues that have traditionally been addressed in your sector. We suggest that you start by gathering data on underlying systems trends – shifts in political, economic, social, technological, legal, and environmental (PESTLE) forces – their drivers, and the interactions between them.

In the course of our research, heads of strategy and risk often shared that their scanning processes were still reactive instead of proactive. They relied on issues being experienced, recognised, and elevated-up from front-line operations. As a result, emerging issues often went unnoticed until the business was facing them first-hand, limiting their strategic options. Several mentioned that it would be helpful to have access to a more comprehensive list of environmental, social, economic, and governance issues that could be a starting point for their scanning process.
To fill this gap and assemble this list, we scanned hundreds of sustainability reports across a broad range of sectors to see what issues companies were already addressing. We spoke with subject matter experts, reviewed issue-specific resources, and consulted key frameworks like the UN Sustainable Development Goals, the Doughnut of Planetary Boundaries and Social Foundations, the Future Fit Business Benchmark, and over a dozen frameworks used by communities to assess their own resilience. While each of these frameworks contributes important insights, none on its own yields a complete picture. Working with companies from our regional peer groups, we refined and sorted the emerging list into 8 issue categories depicted in Figure 7 below. We tried to make this list as inclusive as possible to ensure its broad applicability to a range of industries. Not all sub-issues will be relevant to your business. But as you explore the list, take the time to consider sub-issues that have the potential to become more salient in the future. We have observed that issues that start in one industry can sometimes leap quite quickly to another.

Figure 12: Eight issue categories to support scanning.
## RIGHTS AND WELL-BEING AT WORK

Includes the human and group rights to which workers are entitled and which companies must respect ‘within the gate’ and should not infringe upon ‘outside of the gate’ (i.e. post-employment health and well-being; family supports). This also includes the conditions companies must create to enable workers’ enjoyment of their rights.

<table>
<thead>
<tr>
<th>Safe and Healthy Working Conditions</th>
<th>Right to safe and healthy conditions of work; Occupational hygiene; Occupational health and safety; Industrial hygiene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respectful and Inclusive Workplace Culture</td>
<td>Freedom from discrimination; Freedom of opinion and expression; Freedom of thought, conscience, and religion; Right to privacy</td>
</tr>
<tr>
<td>Respect for Group Rights and Protections</td>
<td>Rights of Indigenous Peoples; Persons with disabilities; Children; Women and girls; Persons belonging to national or ethnic, religious, and linguistic minorities, Migrant workers, LGTBQIA2S+, Older workers, and Other groups</td>
</tr>
<tr>
<td>Healthy and Inclusive Workplace Design</td>
<td>Natural lighting and airflow; Health promotion; Healthy and culturally appropriate nutrition; Access to leisure and exercise; Accessible design; Appropriate and safe work in the home</td>
</tr>
<tr>
<td>Good Health and Well-being</td>
<td>Right to leisure and paid time off; Right to reasonable working hour limitations; Healthcare benefits</td>
</tr>
<tr>
<td>Human Dignity and Integrity</td>
<td>Freedom from torture, cruel, inhuman, or degrading treatment, or punishment; Freedom from violence or exploitation; Freedom from child labour, forced or compulsory labour, debt bondage, prison labour, or other forms of modern slavery</td>
</tr>
<tr>
<td>Decent Work/Income and Work-Life Balance</td>
<td>Fair compensation; Equal pay for equal work; Living wage; Paid time off; Predictable work hours and payment timing; Flexible and/or remote work arrangement</td>
</tr>
<tr>
<td>Right to Organize</td>
<td>Freedom of association; Right to collective bargaining</td>
</tr>
<tr>
<td>Family Supports</td>
<td>Paid maternity leave; Parental benefits; Compassionate leave; Flexible work and/or remote work arrangement</td>
</tr>
</tbody>
</table>
## RIGHTS AND RESILIENCE IN COMMUNITIES

Includes the conditions that support community resilience and the human and group rights that help ensure their realization. Companies should take care not to infringe on rights and should aim to support self-defined community resilience and support the community’s enjoyment of their human and group rights.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Safety and Emergency Services</td>
<td>Public safety; Emergency services; Emergency Preparedness and disaster response capacity</td>
</tr>
<tr>
<td>Respectful and Inclusive Community</td>
<td>Freedom from discrimination; Freedom of opinion and expression; Freedom of thought, conscience, and religion; Right to privacy; Respect for Group Rights (including Indigenous Peoples; Persons with disabilities; Children; Women and girls; Persons belonging to national or ethnic, religious, and linguistic minorities, Migrant workers, LGBTQIA2S+, Older workers, and Other groups); Accessible design</td>
</tr>
<tr>
<td>Respect for Indigenous Rights, Sovereignty, and Self-Determination</td>
<td>Rights of Indigenous Peoples; Sovereignty; Right to Self-Determination as a people, Free Prior and Informed Consent</td>
</tr>
<tr>
<td>Healthy and Natural Spaces</td>
<td>Environmental quality; Access to safe and natural public spaces for leisure, exercise, culture, and subsistence</td>
</tr>
<tr>
<td>Good Health and Well-being</td>
<td>Access to Healthcare and social services; Food security, including culturally appropriate foods; Social security; Ending poverty by assuring an adequate level of living; Addressing disparities in health outcomes and well-being</td>
</tr>
<tr>
<td>Human Dignity and Integrity</td>
<td>Freedom from torture, cruel, inhuman, or degrading treatment, or punishment; Freedom from (gender-based) violence or exploitation; Freedom from child labour, forced or compulsory labour, debt bondage, prison labour, or other forms of modern slavery</td>
</tr>
<tr>
<td>Decent Local Work/Income and Work-Life Balance</td>
<td>Fair compensation; Right to a decent living for families; Right to leisure and paid time off; Right to reasonable working hour limitations; Access to elder and childcare; Local hiring; Local procurement; Local job creation; Local investment and business partnerships; Worker displacement; Migrant workers</td>
</tr>
<tr>
<td><strong>RIGHTS AND RESILIENCE IN COMMUNITIES (CONT.)</strong></td>
<td><strong>DESCRIPTION</strong></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td><strong>Social and Cultural Connections and Civil Engagement</strong></td>
<td>Freedom of association; Access to and freedom of cultural activities and artifacts; Participative decision-making; Connection to people and place; Support for local community development plans</td>
</tr>
<tr>
<td><strong>Education, Knowledge, and Skills</strong></td>
<td>Universal access to education; Respect for local knowledge and traditional knowledge holders; Training, skills development, and capacity building</td>
</tr>
<tr>
<td><strong>Water, Sanitation, and Waste Management</strong></td>
<td>Access to clean drinking water; Residential sewage systems and sanitation; Appropriate management of waste; Recycling and material recovery</td>
</tr>
<tr>
<td><strong>Housing and Land</strong></td>
<td>Land rights; Resettlement; Sufficiency and cultural suitedness of housing; Home ownership and tenure; Housing and land availability and affordability</td>
</tr>
<tr>
<td><strong>Energy</strong></td>
<td>Access to clean, modern, and affordable energy; Energy security</td>
</tr>
<tr>
<td><strong>Inclusive Banking, Credit, and Insurance</strong></td>
<td>Access to banking (personal and business); Access to financing (personal and business), credit, and loan guarantees; Access to insurance; Recognition of informal banking systems</td>
</tr>
<tr>
<td><strong>Information, Innovation, and Telecommunication Services</strong></td>
<td>Access to information, including local news; Access to the benefits of innovation; Access to affordable telecommunication services; Infrastructure development and sharing</td>
</tr>
<tr>
<td><strong>Transportation and Mobility</strong></td>
<td>Infrastructure development and sharing; Transportation and transit; Mobility, including waterway navigation</td>
</tr>
</tbody>
</table>
#### GOVERNANCE AND ETHICS

Includes the operational principles that support embedded sustainability and the achievement of positive outcomes in each of the other interconnected social and environmental issues outlined in this framework.

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respect for Rule of Law</td>
<td>Respect for rule of law; Respect for the spirit of the law; Respect for international conventions and guidelines for business enterprises</td>
</tr>
<tr>
<td>Respecting Traditional and Community Knowledge</td>
<td>Respect for different ways of knowing; Respect for and integration of traditional and community knowledge in decision-making</td>
</tr>
<tr>
<td>Reconciliation</td>
<td>Intentional awareness building; Acknowledgement of historic injustices and their legacy; Support for the advancement of equality; Support for the elimination of barriers that prevent this</td>
</tr>
<tr>
<td>Fair Distribution of Resources, Benefits, and Opportunities</td>
<td>No discrimination or unjust preferential treatment of communities, groups, families; Local systems focus; Community partnerships or profit-sharing</td>
</tr>
<tr>
<td>Fair Tax and Royalty Payments</td>
<td>Tax payment in appropriate (not tax-preferential) jurisdictions; Appropriate amounts, timing, and jurisdictions; Fair royalty payments</td>
</tr>
<tr>
<td>Fair and Equitable Dispute Resolution</td>
<td>Equitable dispute resolution; Transparent and fair process; Appropriate redress</td>
</tr>
<tr>
<td>Accessible and Transparent Grievance Mechanisms</td>
<td>Accessible mechanism and transparent processes to receive and address grievances or concerns, with timely and effective resolution</td>
</tr>
<tr>
<td>Accountability, Transparency, and Disclosure</td>
<td>Comprehensive (not selective) sustainability disclosure; Raw data vs curated content; Method and source transparency; Data comparability; Compensation; Corporate Tax; Political contributions and lobbying</td>
</tr>
<tr>
<td>Anti-Corruption and Anti-Bribery</td>
<td>Policies and processes; Prevention and detection; Fit for purpose data collection; Transparency; Enforcement mechanisms</td>
</tr>
<tr>
<td>Cybersecurity and Data Protection</td>
<td>Protection of employee, customer, supplier and other data; Prevention of data misuse or unauthorized use; Data ownership; Records and Data Management; Ethical implications of machine learning</td>
</tr>
<tr>
<td>Wealth Disparity and Excess Compensation</td>
<td>Intra-organisational pay disparities; Community wealth disparity (including impacts on available and affordable community resources)</td>
</tr>
</tbody>
</table>
## POLLUTANTS

Includes contaminants that result from industrial activities and consumption patterns, which are accumulating in the air, soil, waterways, and the plants and animals we eat. Companies should take a risk-based approach and work to eliminate processes and materials that result in pollutants and seek to understand the rates at which pollutants can be safely assimilated by the environment.

<table>
<thead>
<tr>
<th>Pollutant Type</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen and Phosphorous</td>
<td>Nutrient pollution from runoff and leachate</td>
</tr>
<tr>
<td>Hazardous Chemicals</td>
<td>Acids; Caustic substances; Disinfectants; Glues; Pesticides; Solvents; Flame retardants; PCBs; Fluorides; Persistent organic pollutants</td>
</tr>
<tr>
<td>Particulates</td>
<td>Dust; Silica; Particulate matter 2.5 and 10; Diesel particulate matter; Microfibres; Microplastics; Asbestos</td>
</tr>
<tr>
<td>Emissions</td>
<td>Volatile organic compounds; Carbon monoxide; Sulphur and Nitrogen oxides; Ozone</td>
</tr>
<tr>
<td>Heavy Metals</td>
<td>Lead; Arsenic; Cadmium; Mercury; Other toxic metals</td>
</tr>
<tr>
<td>Radiation</td>
<td>Microwaves; Gamma-rays; Radio waves</td>
</tr>
<tr>
<td>Noise Pollution</td>
<td>Unwanted or disturbing sounds that affect people and animals</td>
</tr>
<tr>
<td>Light Pollution</td>
<td>Excessive and/or inefficient lighting; Inappropriate use of outdoor lighting</td>
</tr>
</tbody>
</table>

## MATERIALS AND WASTE

Includes the acknowledgement that the Earth’s resources are finite, and that we must move away from a linear take-make-waste economy and towards a more thoughtful, regenerative economy that preserves the use and value of resources for as long as possible.

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Use</td>
<td>Material stewardship; Resource efficiency in processes and value chain; Sustainable procurement; Achieving maximum use from resources</td>
</tr>
<tr>
<td>Process Residuals</td>
<td>Tailings; Slag; Sludge; Waste heat; Fibres; Shavings; Dust; Fly ash; Overage; Defective products; Unsold goods; and Other process residuals</td>
</tr>
<tr>
<td>Product Stewardship</td>
<td>Product lifecycle; Product longevity; Design for repair and disassembly; Circularity; Beneficial reuse for surplus</td>
</tr>
<tr>
<td>Packaging and Post Life Waste</td>
<td>Single-use and multi-material packaging; Plastics; Textiles; Pharmaceuticals; Medical waste; Electronics; Batteries; Food Waste, Building and construction waste; and Other</td>
</tr>
</tbody>
</table>
ECOSYSTEMS

Includes the cumulative effects of rapid urbanization, industry, and other human activities that threaten ecosystems. Companies should seek to operate in ways that support the ongoing resilience of ecosystems. Harm should be avoided or minimized, and when not possible, companies should offset residual impacts so that natural spaces are healthy and functioning when activities cease.

<table>
<thead>
<tr>
<th>Biodiversity</th>
<th>Habitat loss and degradation; Species loss (i.e. reductions in population, distribution, traits, and diversity between species and of ecosystems)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resource Management</td>
<td>Management of ecosystems and their services; Culturally significant species and landforms; Direct goods and services that provide value to communities; Cumulative and secondary impacts from development</td>
</tr>
<tr>
<td>Invasive Species</td>
<td>Prevention, control, and removal</td>
</tr>
<tr>
<td>Land Use and Relinquishment</td>
<td>Developing, using, and vacating spaces so that future regeneration is not necessary</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>Rehabilitation of ecosystems, including the pace and quality of rehabilitation; Soil health; Restoring wildlife and plant communities</td>
</tr>
<tr>
<td>Protected Spaces</td>
<td>Limiting human occupation and resource exploitation; Preserving key biological diversity and distinctive features</td>
</tr>
</tbody>
</table>

WATER (FRESH AND MARINE)

Includes ensuring water quality and quantity in line with ecosystems needs, as well as ensuring access to water for the social, economic, recreational, and cultural needs of present and future generations.

<table>
<thead>
<tr>
<th>Water Quantity</th>
<th>Catchment demand; Integrated water management; Maintaining environmental flows; Discharging during peak flows; Demand during drought; Surface water levels; Aquifer draw-down; Flooding; Long-term “take”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Quality</td>
<td>Chemical; Biological; Radiological; Temperature; Turbidity; pH; Dissolved oxygen</td>
</tr>
<tr>
<td>Water Governance</td>
<td>Water rights; Integrated watershed planning; Water resource development and management; Water access for community, cultural, and navigation pu-rposes</td>
</tr>
</tbody>
</table>
## CLIMATE

Includes companies taking actions aligned with reducing atmospheric concentration of greenhouse gases (GHGs) to a level that prevents global temperatures from exceeding safe limits that, at a minimum, address their share of GHG contributions.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate Scenario Informed Decision-making</td>
<td>Understanding the behaviour of the climate system; Identifying relevant climate-related risks and opportunities</td>
</tr>
<tr>
<td>Climate Mitigation</td>
<td>Efforts to reduce or prevent emission of greenhouse gases</td>
</tr>
<tr>
<td>Climate Adaptation and Risk Preparedness</td>
<td>Resilient infrastructure; Resilient supply chains; Disaster contingency plans; Building spare capacity into systems; Flexible alternative strategies; Supporting regional and national adaptation plans</td>
</tr>
<tr>
<td>Renewable Energy Development</td>
<td>Adopting and encouraging renewable energy options</td>
</tr>
</tbody>
</table>
The aim of scanning is to begin to identify a set of issues that may be particularly relevant to your company, warranting further understanding, and a set of issues that you might just continue to monitor. Using the list on the preceding pages as a starting point, we suggest that you reflect on which issues and sub-issues are (or could be) relevant for your company over the next five to ten years. This includes situations where the issue has a significant (potential) strategic impact on the company; where your company has significant (potential) impacts associated with this issue either as a result of its direct operations or within its value chain; or where your company is well situated to support systems change. You will assess these criteria in more detail in the UNDERSTAND step.

Unless you have a strong understanding that an issue is not or will not become relevant for your company, we recommend leaving it on your radar at this stage. It is better to monitor emerging trends than to miss the opportunity to identify a potentially disruptive risk or an opportunity where your company is uniquely situated to have positive systems impact.

The most up to date list of these issues and their associated sub-issues can be found under the scan practice on our website, where we will also post further resources to help support this early assessment process in the future.
2 UNDERSTAND

Consult with employees, communities, stakeholders, rights holders, subject matter experts, and organisations in your value network to deepen your understanding of: how particular issues may impact your business; how your activities may directly or indirectly impact relevant environmental, social, and economic systems; and their perceptions of key system thresholds and of the role your business could play in positively influencing system outcomes.

When turning your attention to taking an embedded approach, you may discover that you need to gather more information to build your contextual understanding. For each issue category, this would include a better understanding of:

SYSTEM NEEDS: The health and resilience of the underlying environmental, social, and/or economic systems, including identifying key thresholds, the scope and pace of change required, and possible actions;

STRATEGIC RELEVANCE: The potential strategic business relevance of these issues for your company in terms of strategic risks and opportunities;

OPERATIONAL IMPACTS: Your company’s baseline performance, including the net impacts (post mitigation and controls) that derive from your direct operations;

VALUE CHAIN IMPACTS: The impacts that derive from your value chain (including your suppliers, your customers’ use of your products or services, and the impacts of your financing); and

SYSTEMS INFLUENCE: The leverage points through which your company’s actions could directly yield positive systems change, or influence or support others to do so.

---

13 We acknowledge that many Indigenous Peoples prefer to be identified as rights holders in recognition of their rights, title, and unceded lands and territories.
Once you have identified a set of issues that may be relevant to your company, consider convening panels or creating ongoing communities of practice that draw on internal and external knowledge holders. In selecting participants, be attentive to including diverse perspectives to avoid reinforcing existing biases. Ask participants to share their thoughts on key trends and their evolving understandings of system health, system drivers, and key thresholds; appropriate timeframes for action; and the role that your company could be playing in supporting systems resilience. Where possible, consider drawing from both Indigenous knowledge\(^{14}\) and data and analysis from the social and natural sciences as you develop your understanding of these systems needs.

As you embark on this process, you will need to develop a better understanding of your operational and value chain impacts. Other companies have found it helpful to set short-term goals that commit to gathering the data that will help them better understand their impacts. For instance, we have seen companies set short term goals to undertake biodiversity assessments, water risk assessments, or human rights assessments at all of their facilities, across their supply chains, or in the communities in which they operate.

Instead of one broad stakeholder or materiality panel convened to rank issues, developing more focused communities of practice or subject matter expert panels around salient issues panels can enrich your thinking and challenge your assumptions as you examine your direct and indirect impacts on systems resilience and where you may be best placed to positively influence system outcomes. Over time, these communities of practice can help your organisation to reflect on and adjust its strategy in response to evolving understandings of key system conditions. It is important to continue to seek out these evolving understandings of systems resilience; the appropriate role for your company to play in the system; and be willing to adjust your response.

3 PRIORITISE

Transparency determine where you will direct your efforts, based on the strategic relevance of particular issues to your business, where your organisation has the greatest operational or value chain impacts, and where you are best positioned to positively influence the underlying systems.

Strategy is about prioritisation; it is about making choices. Companies have limited resources, so it makes sense to prioritise where you will allocate them. To do this, you need to build on the knowledge that you have gained in the SCAN and UNDERSTAND steps to prioritise where you will focus your efforts.

Take a moment to reflect on your company’s prioritisation process and how you currently determine where you will direct your efforts.

With the push towards sustainability reporting came the practice of undertaking materiality assessments. The Global Reporting Initiative (GRI), the International Integrated Reporting Council (IIRC), and the Sustainability Accounting Standards Board (SASB) all emphasise that materiality is crucial to sustainability disclosure. The problem is, while the GRI notes that the process should be underpinned by a consideration of context, and the IIRC and SASB ask companies to approach their strategy from a multi-capital perspective, these reporting frameworks offer little practical guidance on how companies should consider system thresholds in their prioritisation process.

Many companies still rely on inviting internal and external stakeholders to rank issues based on their importance to stakeholders and their importance to the business. Stakeholders are asked to advocate for the relative importance of issues as the dots meant to represent the issues are moved around in an effort to break apart the cluster forming in the upper right-hand quadrant of the materiality matrix. This materiality process was originally designed to help define the content of a company’s reporting by identifying the disclosure expectations of internal and external stakeholders, not as a process to inform its core strategy. Yet over the years, because so much effort was often required to socialise this process among executive teams and boards,
many companies have come to rely on it to guide their strategy and goal setting. While the materiality process may still be helpful from a disclosure standpoint, companies lamented that it may fail to surface key issues that are not being voiced by stakeholders or detect changes in underlying systems conditions, resulting in companies making strategic decisions disconnected from their context. This could lead companies to make strategic decisions disconnected from their context, leaving them vulnerable to systemic and emerging risks.

Working together with companies in our regional peer groups, we have piloted an alternative approach to prioritisation that we call the Radar. This tool provides a systematic process to help your company to:

- Evaluate the strategic relevance of a comprehensive set of emerging environmental, social, and governance issues;
- Understand stakeholders’ and rights holders’ expectations about what it would mean for your company to contribute to systems resilience; and
- Understand where your company is best positioned to exert its influence in creating positive systems change.

Using the same issues and sub-issues we described in the SCAN step and drawing on the data assembled in the UNDERSTAND step, we encourage you to plot the relevance of each issue on the radar depicted here.
In the radar on the previous page, darker colours indicate higher degrees of relevance. The inner circle depicts the strategic relevance to the business; the second ring depicts the significance of your unmitigated operational impacts; the third ring depicts the significance of unmitigated impacts derived from your value chain, including your suppliers, your customers’ use of your products and services, and/or the impacts stemming from what you finance; and the final outer ring depicts your company’s potential to positively influence the systems in which it operates.

Start by having an internal team fill in the radar using the data that you have available. During this process, you will likely identify knowledge gaps. Once you have undertaken this process internally, it is important for you to calibrate and refine your understanding by returning to the communities of practice that you established in the UNDERSTAND step to seek their input into your rankings. Engaging in an inclusive process helps to ensure both transparency and accountability and invites feedback that can bring valuable additional insight into your understanding.

Note: you do not need to adhere to our issue categories, nor do you need to address every sub-issue in a given category. For instance, under the category of Materials and Waste, a mining company may find that it focuses most of its attention on its most material issue: tailings. The key is to be transparent in sharing how and what you prioritised. This includes addressing how different regional and operational contexts influenced your prioritisation. For instance, a company might place more of an emphasis on addressing its impacts on water quantity in water stressed regions.

Together, this information is crucial in helping you to determine what actions your organisation needs to take to help maintain and even enhance system resilience; understand what portion of this effort reasonably falls within your responsibility to address; and therefore, to help determine where best to direct your efforts.

We have undertaken a Radar assessment with several of our partner companies. If you have an interest in learning more, or in applying this approach in your own organisation, please do get in touch.
Can I adopt this approach to prioritisation and still meet the conditions for reporting assurance?

The approach to prioritisation that we outline here remains consistent with key reporting frameworks. As an example, the GRI already advises that “determining materiality for a sustainability report also includes considering economic, environmental and social impacts that cross a threshold in affecting the ability to meet the needs of the present without compromising the needs of future generations.”18 The Radar method lends additional transparency to how you prioritise among issues based on considering the strategic impact of these issues for your company; your own operational impacts; the extended impacts derived from your supply chain, the use of your products and services, and/or the companies you finance; and your potential to influence systems change. Preliminary conversations with assurance providers and with institutional investors have been supportive of this approach.

18 Global Reporting Index, Materiality, https://g4.globalreporting.org/how-you-should-report/reporting-principles/principles-for-defining-report-content/materiality/Pages/default.aspx
Take a moment to reflect on how you currently articulate your corporate position on relevant issues. Can employees, investors, other stakeholders, and rights holders easily find a concise statement?

By developing contextual position statements focused on specific issues, boards and executive teams deepen their understanding of these issues; clarify the link to the company’s overall strategy; clarify their position for other key stakeholders; and provide the direction and confidence for management and employees to act.

We are seeing more companies creating position statements on key environmental, social, or governance issues, whether proactively as part of articulating a social purpose, or in response to demands from investors or other stakeholders. For instance, we have identified over 2,000 position statements on climate change alone. Yet too often, position statements fail to make a clear strategic connection between the issue and the implications for corporate decision making.\(^\text{19}\) In conversations with over 300 CEOs, directors, and board chairs we heard that companies were looking for guidance on how to articulate a clear position.

While it is not necessary for companies to develop position statements on every issue, they benefit from doing so for their most relevant issues. Your position statement should: explain the issue (including your company’s understanding of the relevant limits); link the issue to your strategy; and clarify a credible commitment to take appropriate actions.

More detailed guidance can be found in our Next Generation Governance guide. More detailed guidance can be found in our Next Generation Governance guide. We have created specific guidance for developing climate position statements, and will feature specific guidance for developing position statements on other issues in the future.

Please consult our website for the latest resources or contact us if you are working on a position statement on a particular topic.

---

20 Ibid.
**5 SET GOALS AND INTERIM TARGETS**

Set goals aligned with doing your part to contribute to systems resilience. These goals should signal the action required; clearly outline the timeframe; and include realistic interim targets for how you will get there.

Take a moment to reflect on your company’s approach to setting goals. Do you take a contextual approach? Are your goals set in alignment with maintaining systems resilience? Are you transparent in the assumptions you used in setting your goals? Are your interim targets realistic, reflecting the key investments needed to meet your goals?

Currently, there is no ‘best way’ to set contextual goals and companies are taking different approaches. The most important thing is to be as transparent as possible in how and why you are setting your goals. This allows internal and external stakeholders to understand your methodology and provide input, and enables other companies to learn from your effort to set goals that better serve the environment and society.

When setting contextual goals, the aim is to clearly outline how your company will do its part to contribute to systems resilience. To align with other corporate goals, ideally these goals will be time-bound and have a means to assess them. For instance, climate goals commonly reference the years 2030 and 2050 to align with the milestones outlined in the 1.5°C IPCC Scenario for Climate Change.\(^{22}\) Indigenous communities may bring a different perspective on what it might mean to set an appropriate goal.

Your goals should align with your understanding of the key thresholds for systems resilience and the actions that your company needs to take to do your part in operating within them.

---

\(^{22}\) Intergovernmental Panel on Climate Change (IPCC) (2018). *Special Report: Global Warming of 1.5°C.*
As depicted below, contextual goals should:

1. **Be informed by the action required to contribute to systems resilience.**
   Ideally this will be anchored in an inclusive and consultative process and, when appropriate, informed by both traditional and community knowledge and best available science. For instance, the necessary actions could be adhering to the reduction targets set out in the 1.5 °C IPCC climate scenario, the provisions of the Universal Declaration of Human Rights, the concept of a living wage, or the community economic development plan of a community in which you operate.

2. **Clarify what proportion of the necessary response you are taking on.**
   A contextual goal outlines your company-specific actions to operate in alignment with key thresholds; in short, show that you are taking responsibility for your part of the work that needs to be done. This concept is sometimes referred to as *allocation.*

---

Most of the discussions around allocation have taken place with respect to the issue of climate change and in setting goals related to greenhouse gas emissions reductions. For instance, the Science-Based Targets Initiative outlines several different methods of goal setting that align with different allocation principles, the most dominant being *economic throughput*. Four proposed principles for allocation related to GHG emissions are described in the text box on the next page.

Outside of the issue of climate change, there is currently limited guidance on allocation. With respect to environmental issues, the Science-Based Targets Network is undertaking work to develop additional principles and methods related to allocation. When it comes to social issues, there is limited guidance. Companies should engage in open and inclusive dialogue with stakeholders and rights holders to understand what role it makes sense for them to play in systems change. In the meantime, our contextual goals database (described on page 44) may be helpful in providing examples of current approaches.
Current Principles for Allocation
(primarily with respect to climate goals)

Several principles have been proposed as a means to determine the company-specific portion of the effort required to ensure a system does not pass through a crucial resilience threshold. Each approach has unique assumptions and biases. We encourage companies to engage in an inclusive dialogue to develop an appropriate approach and to be transparent in sharing their approach. Four approaches that have been proposed to determine and justify allocation are listed below:

- **Egalitarian**: Allocation is based on the principle that every person has equal access and responsibility and so the use of resources or the impacts imposed on a system are allocated on a per capita basis.
- **Economic throughput**: Allocation is based on value creation. Those that create the most value for a system through their use of specific resources are allocated more of the remaining budget (or a lower reduction target).
- **Economic capacity & efficiency**: Allocation based on economic capacity results in those who could reduce their impacts more being allocated less of the remaining budget (or a higher reduction target). Similarly, allocation based on economic efficiency results in those who face the lowest cost to reduce impacts being allocated less of the remaining budget (or a higher reduction target).
- **Historical justice and inertia**: Allocations based on historical justice result in those who have historically contributed more to the cumulative impacts being allocated less of the remaining budget (or a higher reduction target). Allocations based on inertia results in those already creating the impact being allocated more of the remaining budget (or a lower reduction target) as they have an established “need”.24

---

Be transparent about your goal setting process and assumptions

Transparency and disclosure are crucial to establishing the credibility of the contributions you intend to make. Leading companies are transparent in sharing their journey as they come to a better understanding of their impacts and their potential for influence; the assumptions that drive their understanding of key systems limits; and the actions that they commit to take in order to adhere to them. By doing this you ensure that others can understand your methodology and provide input, and that other companies can learn from your efforts.

Setting operational, value chain, and systems influence goals

Finally, you may also want to reflect on the levels at which you set your goals. We see that companies are now setting three types of goals:

1. OPERATIONAL GOALS: These goals relate to addressing the impacts deriving from your direct operations and focus on what is within your direct operational control. Setting contextual operational goals is the foundation to an embedded strategy.

2. EXTENDED OR VALUE CHAIN GOALS: These goals involve actions that your company will take to support others, including suppliers, customers, or entities that you finance, to address a given issue. Note that this not simply about setting expectations for others, but instead, being clear about your actions to support others in your value chain to help them to operate within key thresholds. Ideally, you will consult with others in the system to establish what role it makes sense for you to play, and your goals would reflect those actions. In assessing your performance, you would report on the degree to which you met those goals. Over time, it is important to recalibrate your goals based on whether your actions ended up making positive or negative contributions to the system.
3. SYSTEMS-LEVEL OR INFLUENCE GOALS: These involve actions that your company will take to help bring about positive systems change. For instance, these may involve helping to better understand system dynamics, lobbying for policy change, or helping to coordinate system level action. Similar to value chain goals, this is about articulating what actions your company will take to help improve system dynamics. Your goals should reflect your committed actions, and you should assess your performance against these commitments, recalibrating them based on new information about system outcomes.

To see examples of goals that target each of these levels you can consult our goals database (as described later in this guide).

Set realistic interim targets

Once your company has set a contextual goal, it will be important to articulate a set of shorter-term, interim targets that allow you to monitor and manage your progress towards achieving your goal. Rather than defaulting to linear interpolations of your long-term goals, we encourage companies to lay out a realistic set of short and mid-term interim targets that spell out the realistic actions and investments required to meet the goal.

Using structured processes such as back-casting or scenario planning can be helpful in this process. Using this approach often reveals crucial step changes based on your assumptions about key social or behavioural investments, technological innovations and regulatory shifts will play important parts in shaping your trajectory.
Setting realistic ‘best estimate’ interim targets helps you convey your expectations around the pace and resources required to deliver on your goals and creates milestones to reflect, adjust your understanding and even adjust your goals to bring them back into alignment with the needs of the system.

When interim targets are in place, comparing performance becomes a matter of first evaluating the underlying trajectory and then monitoring whether the company is meeting its interim targets. When a company has set transparent, realistic interim targets, it becomes easier to track and compare progress across goals that address different relevant issues, different timeframes of goals, or goals set by different business units or companies.

Where realistic interim targets have been set, and are subsequently not met for a given period, it is good practice for companies to respond by transparently adjusting their interim targets to recalibrate their efforts to ensure they remain on track to do their part in systems change. Your company can build trust and credibility by building a strong track-record of transparently setting and reporting against interim targets, and either meeting them or making necessary adjustments to subsequent interim targets when it does not.
A Resource for Goal Setting: Our Goals Database

To support companies in setting contextual goals, we have assembled a publicly-available database of contextual goals. You can search for goals based on issue, sector, SDG target, company, or using your own search terms. For each goal included in the database, we note our assessment of the goal and provide a link to the supporting evidence that we used in assessing it.

We continue to update this database as we discover new goals. If you have suggestions to help improve the database or you are aware of goals (including your own) that should be included, please contact us.
Assess your own goals against our criteria:

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Y / N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Is your goal, commitment, or target timebound and is it possible to assess whether you have met it?</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Does it support the resilience of social and/or environmental systems through alignment with a relevant threshold or limit?</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Do you explain how your goal influences your business strategy by discussing emerging expectations, relevant risks or opportunities, and importantly, any constraints it places on future decision-making?</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Do you explain how you set this goal, such as by including the assumptions, frameworks, and learning that informed it?</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Do you explain your plan to achieve your goal, including realistic interim targets and the actions and investments required to meet it?</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Do you provide regular, transparent, accessible updates on progress against your goal and interim targets?</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Do you explain how you will contribute to broader, positive systems change, such as through data and knowledge-sharing, collaboration, advocacy, and/or through supporting standard-setting?</td>
<td></td>
</tr>
</tbody>
</table>
What Next?

We hope the guidance presented here helps your company to shift your strategy process to take your environmental and social context into account and to align your strategy with contributing to systems resilience. We also hope that it helps you to articulate a clear narrative of where you are directing your efforts and why, including your decision to prioritise actions where you can have the greatest potential for positive systems impact, whether it be within your direct operational control, by supporting changes in your value chain, or through your broader systems influence. Clarity about this internal and external narrative is a crucial part of ‘living your purpose’. If you are looking for more guidance on understanding and shaping your organisation’s narrative as part of this transition, see our guides on Storytelling and Shaping your Organisation’s Narrative Infrastructure.

We are actively working with companies to apply these principles in their businesses. As this work progresses, we will continue to develop additional resources to help support companies to take an embedded approach.

26 Embedding Project, Shaping your Organisation’s Narrative Infrastructure, https://www.embeddingproject.org/resources/narrative-infrastructure
Other Resources

In addition to the resources we have produced, the following resources may be helpful as you explore an embedded approach to strategy.

Learning more about context, systems, thresholds, and limits

**Planetary Boundaries**

The Planetary Boundaries framework identifies nine tightly-coupled processes that regulate the stability and resilience of Earth’s environmental system boundaries and, for each of these systems, attempts to quantify the boundaries at which human survival is threatened. Several companies have found that the framework helps to introduce the idea of thresholds and boundaries (or limits as referred to in the Road to Context) that have the potential to create real strategic constraints as they limit access to resources or increase weather-related risks.

**The Doughnut of Planetary Boundaries and Social Foundations**

While the Planetary Boundaries framework focuses primarily on environmental issues, The Doughnut model adds an inner ring (or Social Foundation) to the Planetary Boundaries framework that emphasises the need to maintain and enhance social foundations. This model can be useful in helping to introduce the role companies play in maintaining and enhancing social resilience or conversely, how their actions might contribute to social instability in the regions where they operate.
Global Commons Alliance

The Global Commons Alliance brings together the Earth Commission, the Science-Based Targets Network, and Earth HQ. The Earth Commission is a collection of leading global scientists who aim to synthesise the latest scientific research that can be used to define the health of planetary systems that can then inform the setting of science-based targets. The Science-Based Targets Network (SBTN) is attempting to develop the methods and guidelines that will help companies and cities translate the science into actionable targets. The Earth HQ will focus on citizenship engagement by creating access to planetary status updates and news through an Earth Dashboard and the Earth News Network.

The Natural Step’s System Conditions

The Natural Step’s System Conditions were developed and refined through multiple consultations with natural and social scientists over three decades. The framework outlines the conditions within which society must strive to operate – three conditions that are essential for natural resources that sustain human society, and a further five that identify the structural obstacles to well-being that must be overcome to maintain the resiliency of social systems.

The Future-Fit Business Benchmark

It has been widely acknowledged that The Natural Step system conditions, while written to be clear scientifically, can be confusing to non-scientists who try to apply them in a business setting. The Future-Fit Business Benchmark seeks to address this by identifying how companies must operate to ensure that their actions do not breach system conditions and that their success in no way depends on breaches elsewhere in their value chain.

Release 2 of the Future-Fit Business Benchmark (referenced earlier in the Scan step) offers a methodology guide that provides practical tools for setting goals based on system limits and a set of issue-specific Action Guides that provide guidance that can be applied to the development of a contextual goal.
The Living Planet Index

The Living Planet Index (LPI) aims to measure the state of the world’s biological diversity and uses the trends in the populations of vertebrates living in terrestrial, freshwater, and marine habitats. Its database holds time-series data for over 18,000 populations that are aggregated to produce indices of the state of biodiversity.

The UN Sustainable Development Goals

The UN Sustainable Development Goals (SDGs) are a universal call to action to end poverty, protect the planet, and ensure all people enjoy peace and prosperity by the year 2030. While the SDGs were originally designed to inform national sustainable development agendas rather than corporate strategy, they attempt to codify a global consensus on a set of future aspirations. As a result, many companies have started to use the SDGs as a starting point for scanning for issues. Including consideration of the SDGs in your scanning process can help to bring societal expectations into your strategy discussions. To engage credibly, it will be important to take a contextual approach to assessing the best points of alignment between particular SDGs and your potential to positively influence them.

The World Economic Forum Risk Report

Every year The World Economic Forum produces a Global Risks Report drawing on the perspectives of experts and global decision-makers to highlight the most significant long-term risks that the world faces. While this report does not approach issues from the perspective of environmental, social, and economic limits, it can be a useful document to help corporate leadership understand key trends.
Understanding your impacts and potential for influence

Lifecycle analysis
Using a lifecycle approach can support a systems-based identification of the environmental, social, and economic impacts of products and processes. The assessments typically account for all the inputs and outputs throughout the life cycle of a product (from design, raw material extraction, production, use, to disposal or reuse).

Scenario Analysis
Scenario analysis uses stories of what could happen in the future – and how this could affect your organisation – to inform present-day decisions. Using a scenario analysis approach can highlight key risks and opportunities that will challenge “business as usual” assumptions by identifying areas of uncertainty and necessary adaptation. On the issue of climate change, the Taskforce for Climate-related Financial Disclosures has developed comprehensive recommendations and resources to support companies with using climate change scenarios to inform their decision-making.

Natural and Social Capital Assessments
Natural and social capital are often impacted by business activities. Using frameworks such as the Natural Capital Protocol (specifically the Scope stage) and the Social & Human Capital Protocol can help your company to identify and assess its direct and indirect impacts on nature, people, and the economy. These resources aim to clarify best practices and improve business credibility by integrating the consideration of natural and social impacts and dependencies into performance management and decision-making. The Capitals Coalition has also developed case studies, sector guides, and a toolkit to complement these Protocols.

Net Positive Project
Net Positive is based on putting back more than is taken out of a system. Measuring what this means in practice is more challenging. The Net Positive Project provides guidance to companies on how to apply a net positive approach to balance their negative and positive impacts while considering their unique sustainability context. To date they have developed resources specific to carbon, water, and social impact and their work is ongoing.
Tracking and reporting on contextual performance

Global Reporting Initiative (GRI) G4 Reporting Guidelines
The [G4 reporting guidelines](#) lay out a set of reporting principles, standard disclosures, and implementation guidelines that support the development of corporate sustainability reports. GRI asks companies to report on how they contribute – or aim to contribute in the future – to the improvement or erosion of key socio-ecological issues. These reporting guidelines address the concept of contextual sustainability, but context is not yet reflected in the GRI indicators or comprehensively explained in current materiality guidance. However, reporting that focuses solely on the performance trends of a company in absence of context fails to respond to GRI’s principle of sustainability context.

CDP
[CDP](#) provides a global disclosure platform that enables companies to self-report on the environmental impacts that result from their operations. CDP offers specific disclosure platforms for Climate, Water, and Forests with companies completing and submitting their responses to CDP’s questionnaires on an annual basis. CDP is a participant in the Science-Based Targets Initiative and in work to explore context-based targets for water.

Sustainable Accounting Standards Board (SASB)
[SASB’s materiality map](#) identifies environmental, social, and economic issues that may present risks to investors. The matrix is organised across five capital dimensions (Environmental, Social, Human, Business model and Innovation, and Leadership and Governance) prioritised with respect to 79 different industries. While the SASB materiality map provides a good inventory of key issues, it is important for companies to be aware that it is not exhaustive.
Acknowledgements

We are grateful to the individuals and organisations that supported the creation of this guide:

The Embedding Project is hosted by the Beedie School of Business at Simon Fraser University in Canada and the Graduate School of Business at the University of Cape Town in South Africa.

This research was supported by the Social Sciences and Humanities Research Council of Canada.