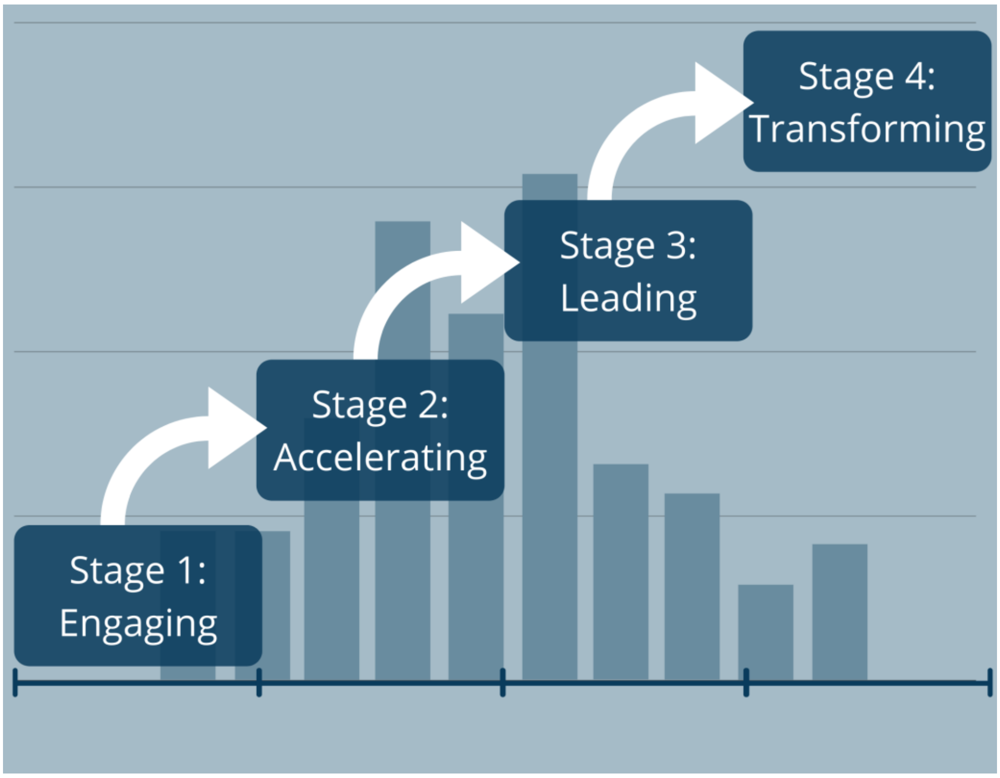
ESG Navigator Maturity Model

Version 4.2

November 27, 2021

Four-stage ESG Maturity Path; E + S + G + Strategy; 17 Elements; 114 Key Sustainability Indicators (KSIs); updated scoring criteria



Notice

This document was prepared by Hedstrom Associates as a companion document to the online rating system available to "Registered Users" on esgnavigator.com.

The *ESG Navigator Maturity Model* described in this document is intended to assist registered users of the benchmarking tool as you work through the rating system to create your company self-assessment. The criteria included in these templates and those on the website were updated during the period January to March 2021, based on considerable input from active users of ESG Navigator.

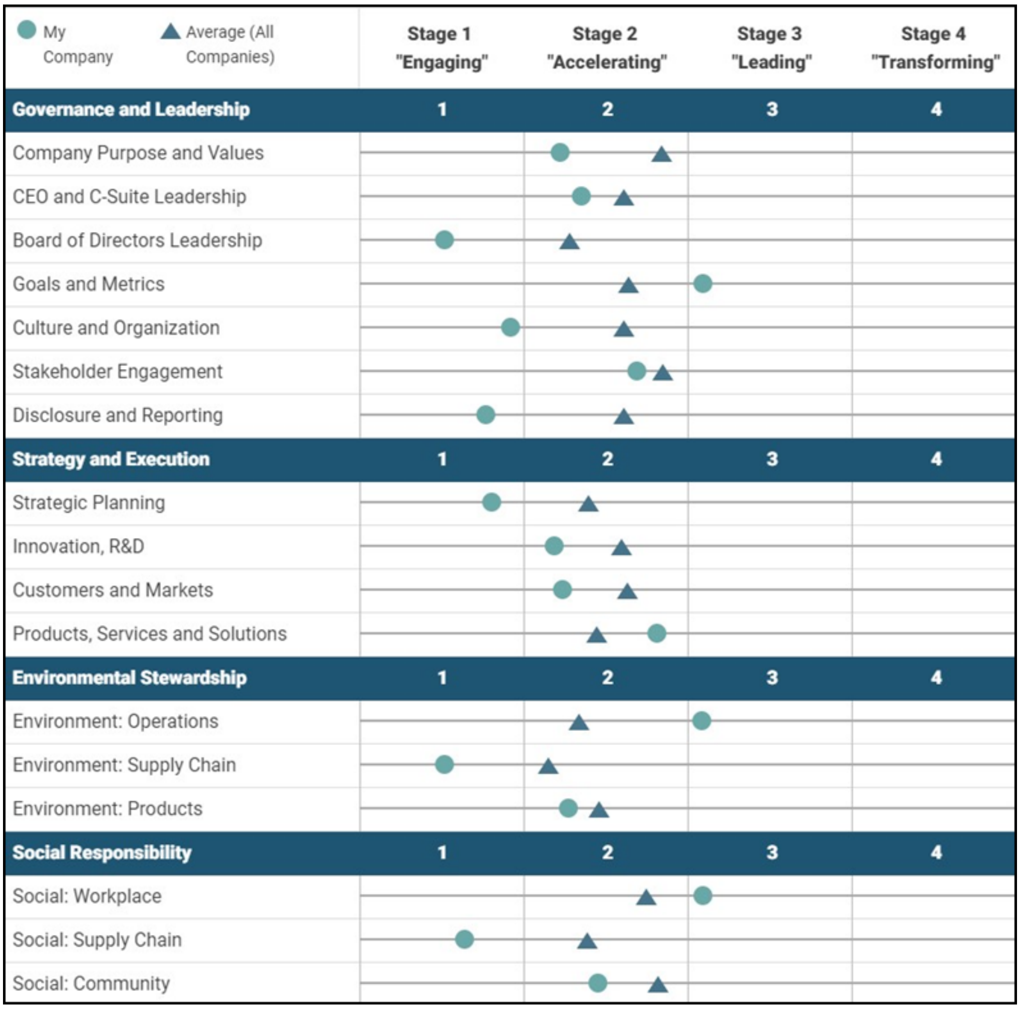
The material in the *ESG Navigator Maturity Model* reflects the best judgment of Hedstrom Associates in light of the information available to us at the time of preparation. Any use that a third party makes of this document, or any reliance on it, or decisions to be made based on it, are the responsibility of such third party. Hedstrom Associates accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or not made, or actions taken, or not taken, based on this report.

For questions or additional information, please contact Gib Hedstrom at gib@hedstromassociates.com.

November 27, 2021

Dear Corporate Leaders:

This document contains the latest scoring criteria on https://esgnavigator.com/. The ESG Navigator Scoring Criteria allow corporate users of the platform to create a summary company self-assessment, an example of which is depicted below. To access ESG Navigator, please request log-in access.



How is this document is organized?

The ESG Navigator Maturity Model is structured following the left column in the figure above. For each of the 17 ESG Navigator *elements*, a following page provides the (Stage 1 ➔ Stage 4) scoring criteria. Appendix A provides definitions of selected words and phrases (in **bold** font) used throughout.

How are the ESG Navigator Scoring Criteria established?

ESG Navigator is established *"by industry – for industry."* The structure and content of the ESG Navigator Maturity Model is designed to reflect leading practices globally on how companies currently create value from ESG – *and* how they plan to create value from ESG in the future.

- *Structure*: The same basic structure we designed in corporate boardrooms in 1997:
  - 4 sections (Governance; Strategy; Environment; Social)
  - 17 supporting elements
  - 114 Key Sustainability Indicators (KSIs) – *[down from 129 in 2020; 147 in 2019; and 157 in 2018]*
- *Content*: Each of the (currently 114) Key Sustainability Indicators (KSIs) describes current and planned corporate ESG actions and practices.

How often is the ESG Navigator Maturity Model updated?

We conduct a major review of the ESG Navigator Maturity Model – and specifically the content of the KSIs every 12-18 months. The goal is to:

- *Update*: Review external developments since the last update – and refine the KSIs and the Stage 1 ➔ Stage 4 descriptors to update as needed. The updates are based upon:
  - Research by our Hedstrom Associates team – ongoing during the year.
  - Input from ESG Navigator users – invited to comment.
  - Input from the ESG research team at The Conference Board (TCB). Note: TCB has licensed ESG Navigator and is making the platform available to TCB's corporate members globally.
- *Sharpen*: Ensure that the words used in the KSIs and especially in the Stage 1 ➔ Stage 4 descriptors provide a clear, widely-applicable, maturity path progression for corporate users.
- *Retain Integrity*: Ensure the integrity of year-over-year comparisons, such that (for example) what constituted a Stage 2 activity a year or two ago still applies after new updates.

The ESG Navigator Scoring Criteria were updated during January to March 2021.

How do companies use the Scoring Criteria to create a company self-assessment ("Scorecard")?

Upon requesting log-in access, companies that meet the minimum qualifications use the on-line ESG Navigator scoring system to create their company self-assessment. An Excel Toolkit is also available.

Completion of the company self-assessment involves two steps:

- *KSI Scores*: Score your company on each KSI from Stage 0.5 to Stage 4.0.
- *Highly Relevant KSIs*: Select roughly 10-15% of the KSIs that are especially critical to your company over the next 12-24 months.

How do we select our Top 12-15 Highly Relevant KSIs?

The purpose of tagging as "Highly Relevant" KSIs is to aid in selecting those activities most critical over the coming few years to: *reduce ESG risk*; *grow new revenue streams* from more sustainable offerings; and *enhance reputation* and brand. We suggest you use these definitions below.

- **Governance Section:** Which ~8-10 of the 42 Governance KSIs are *most critical to how we run the company - and to fully integrate ESG into our core business operations?*
- **Strategy Section:** Which ~4-6 of the 27 Strategy KSIs re *most important to driving tomorrow's revenue growth from more sustainable products, services and solutions?*
- **Environment Section:** What ~3-5 of the 23 Environment KSIs are *the most material environmental issues, representing greatest risk to your company and industry sector(s)?*
- **Social Section:** What ~3-5 of the 22 Social KSIs are *the most material social issues, representing greatest risk to your company and industry sector(s)?*

If you have any questions or suggestions, please let me know.

Regards,

Gib

gib@hedstromassociates.com

1. *Governance:* Company Purpose and Values

Key Question: How are ESG/S and the drive to deliver long-term value to society integrated into our company's core purpose – however a company expresses this (e.g., in statements of vision, mission and values)?

[NOTE: For each **Key Sustainability Indicator (KSI)** below, ***stages are additive***: e.g., to be Stage 3 requires meeting metrics in Stages 1, 2, and 3.]

KSI #	Key Sustainability Indicators (KSIs)	Stage 1 *"Engaging"*	Stage 2 *"Accelerating"*	Stage 3 *"Leading"*	Stage 4 *"Transforming"*
1.1	**Company Purpose**	ESG/Sustainability (ESG/S) is viewed as compliance, an extension of Environment, Health, and Safety (EHS), and/or corporate responsibility. The core purpose of the company is to create shareholder value.	ESG/Sustainability is *part of* how the company sees its role in society – with purpose deliberated in light of current news and developments (e.g., COVID 19, the rise in ESG investing, etc.).	ESG/S is *near the core of* how the company sees its role in society – alongside creating value for all stakeholders. The executive team drives integration of ESG/S into the business. Corporate strategy and capital allocation are guided by ESG/S.	Every strategic and key operational decision is guided by purpose, with ESG/S at the core of the company's distinctive role in society. C-Suite is driving deep integration of ESG/S into core business processes.
1.2	**Vision, Mission, Values, and Policies**	ESG/Sustainability is not explicitly called out; vision and mission can enable ESG/S. Business ethics policies and controls are broadly communicated.	ESG/S is explicitly called out. Employees, customers, and investors view company as committed to ESG/S. Company values transparency and builds robust anti-corruption business processes.	ESG/S is integral to vision and mission; robust ESG/S posture is fully woven into and enriches core values and policies. ESG/S statements stand out among peers.	ESG/S is central to transformation, driving goal of **net positive**[1] impact. There is a demonstrated commitment to creating both economic value and value for society.
1.3	**Commitments (by Board and/or C-Suite)**	Company conforms to common industry practices and standards (e.g., **Responsible Care** or **Global Reporting Initiative**).	Company CEO and/or **board** endorses leading ESG/S initiatives broadly (e.g., **UNGC**, **Davos Manifesto**, or 2019 Business Roundtable pledge) or within industry sectors (e.g., **green chemistry**). Address key **material** issue (e.g. climate change via RE100) and disclose a clear human rights policy.	Company CEO/**board** supports the objectives of leading industry commitments (e.g., **Science-Based Targets initiative - SBTi**) as signatory or equivalent.	Company's full board of directors publicly commit to ESG/S (the intent of the **SDGs**). Company supports and measures **total societal impact.**
1.4	**Long-Term Viability of Core Business(es)**	Core businesses may or may not align with **sustainability principles**.	Core businesses are aligned with selected **sustainability principles** (e.g., **circular economy**) – either as is or by actively reducing negative societal impacts.	Core businesses are fully aligned with **sustainability principles** - measuring **total societal impact**.	Core businesses engage with larger company to measure and drive toward **net positive total societal impact** - helping to drive the global sustainability agenda, defined by the **SDGs**.
1.5	**ESG/S in Key Business Decisions**	ESG/S elements are typically not factors in **key business decisions** made by C-Suite and **board**.	ESG/S elements are openly discussed and debated – and are major factors in **key business decisions**. ESG/S factors (e.g., product safety) are prioritized when in question or during crises.	Formal ESG/S criteria or "screens" (e.g., internal **carbon price**) are applied to all **key business decisions.** ESG/S purpose and goals are clear enough that mid-managers are confident making trade-offs in daily decisions.	**Material** ESG/S issues guide strategic planning and capital allocation. Company demonstrates a track record of factoring **material** ESG/S risks into **key business decisions**.

[1] **Bold words or phrases: this term is defined in Appendix A.**

2. *Governance:* CEO and C-Suite Leadership

Key Question: How deeply engaged is our CEO and C-suite in spreading the ESG/S message; stimulating robust board of directors' discussions; and building accountability and leadership for ESG/S?

[NOTE: For each **Key Sustainability Indicator (KSI)** below, ***stages are additive***: e.g., to be Stage 3 requires meeting metrics in Stages 1, 2, and 3.]

KSI #	Key Sustainability Indicators (KSIs)	Stage 1 *"Engaging"*	Stage 2 *"Accelerating"*	Stage 3 *"Leading"*	Stage 4 *"Transforming"*
2.1	**CEO/C-Suite Approach to ESG/S**	CEO/C-Suite rarely mentions issues relating to ESG/S, or the **material**[1] environmental or social impacts of the company practices or industry overall.	CEO/C-Suite mentions ESG/S when it pertains to reduction of ESG/S risks, but only where ESG/S is **material** to industry or sector.	CEO/C-Suite makes ESG/S goals and policy stance clear when it is **material** to company and its industry sector – and ensures ESG/S is integral to growth strategy.	CEO often communicates **material** ESG/S risks and opportunities and discusses role of company and industry in addressing global ESG/S challenges.
2.2	**CEO/C-Suite Messages to Investors/Owners**	CEO/C-Suite responds to ESG/S questions from investors (or owners if a private company) but shares relatively little insight regarding ESG/S risks or opportunities.	CEO/C-Suite mentions **material** ESG/S risks, but it is not core to key investor meetings. **CSO** is called on to answer questions as needed.	CEO/C-Suite voluntarily discloses **material** ESG/S risks and opportunities, communicates the company's position on addressing **climate risk**, and invites discussion of key ESG/S issues with investors.	CEO/C-Suite actively engages with key investors regarding societal impact topics. Leads on addressing **climate change** and reporting financial impacts (e.g., carbon-adjusted earnings per share).
2.3	**CEO/C- Suite Interaction with Customers**	CEO/C-Suite responds to customer requests regarding ESG/S.	CEO/C-Suite invites a dialogue with key customers and welcomes feedback regarding ESG/S issues and strategy.	CEO/C-Suite tracks customers' ESG/S goals and collaborates with customers to jointly invest in ESG/S innovation and growth.	CEO/C-Suite collaborates with key customers to create ESG/S offerings that are core to the company's growth strategy.
2.4	**CEO/C-Suite Messages to Employees**	CEO/C-Suite encourages compliance and efforts on selected ESG/S topics (e.g., recycling).	CEO/C-Suite endorses (or launches) ESG/S teams to drive initiatives on **material** ESG/S issues. CEO/C-Suite issues regular updates about ESG/S goals and progress.	CEO/C-Suite sponsors initiatives to address **material** ESG/S issues, and C-Suite member(s) personally lead key initiatives.	CEO/C-Suite actively ties ESG/S to internal strategy. Encourages teams to integrate ESG/S across operations and incentivizes achievements.
2.5	**CEO's and C-Suite's Sources of ESG/S Learning**	CEO/C-Suite discusses relevant global ESG/S issues within industry sector and among colleagues with similar worldview (e.g., other members of the same industry association).	CEO/C-Suite engages with a diverse range of ESG/S sources, including CEOs of advanced ESG/S companies within and beyond industry sector.	CEO/C-Suite actively seeks insight and education from diverse range of sources (left, right, center), including gathering input from an **External Sustainability Advisory Board** or equivalent.	CEO/C-Suite frequently engages with global ESG/S leaders, including those from more challenging **stakeholders**. Processes information with a well-informed knowledge and perspective in ESG/S.
2.6	**ESG/S Leadership (at the C-Suite)**	A C-Suite executive appoints a cross-functional ESG/S team. C-Suite member(s) may sponsor but do not lead or participate actively.	A C-Suite executive leads a formal ESG/S council that meets at least two times per year.	A C-Suite executive leads an ESG/S council (linked to the operations council) that meets quarterly.	C-Suite agendas routinely address **material** ESG/S issues. ESG/S Council has several C-Suite members and meets at least quarterly.

[1] **Bold words or phrases: this term is defined in Appendix A**.

3. *Governance:* Board of Directors Leadership

Key Question: What oversight structure, processes, and systems support our board of directors' commitment and engagement with ESG/S?

[NOTE: For each **Key Sustainability Indicator (KSI)** below, ***stages are additive***: e.g., to be Stage 3 requires meeting metrics in Stages 1, 2, and 3.]

KSI #	Key Sustainability Indicators (KSIs)	Stage 1 *"Engaging"*	Stage 2 *"Accelerating"*	Stage 3 *"Leading"*	Stage 4 *"Transforming"*
3.1	**Board Oversight of ESG/S**	**Board**[1] oversight of ESG/S is not explicit or extensive. Responsibility for ESG/S is folded under a standing **board** committee (e.g., audit, nominating and governance, etc.).	**Board** oversight of ESG/S is strong and growing each year, commensurate with business growth and trends. **Board** meeting attendance is 75%+.	**Board** oversight of ESG/S is significant in time spent and effectiveness, and fully aligned with **TCFD. Board** self-assessment includes relevant ESG/S metrics.	Full **board** is actively and frequently involved (during and between meetings) in discussing ESG/S issues, risks, and opportunities. Invest time in special (e.g., half-day) session(s) on ESG/S.
3.2	**Board Committees, Charters, and Roles**	**Board** charter focuses on conventional environment, health, and safety (EHS) and public policy issues.	**Board** member or board committee oversees ESG/S. **Board** charters explicitly discuss ESG/S oversight (especially where ESG issues are **material**).	**Board** roles, committees, and charters embrace ESG/S through a dedicated ESG/S committee or equivalent. Full **board** discusses risks and opportunities driven by ESG/S.	**Board** (perhaps via a single board member) strongly advocates the company's ESG/S goals & targets. Charters (full board and committees) are updated frequently.
3.3	**Board Independence and ESG/S Expertise**	Company discloses tenure of **board** members. **Board** relies mostly on internal ESG/S experts and industry associations. **Board** ESG/S expertise is little to moderate.	Company has a lead independent director (or separate CEO/Chairman roles). **Board** receives periodic presentations by external ESG/S experts.	Average tenure is 7-10 years (or less). **Board** receives input from **External Sustainability Advisory Board** or equivalent. **Board** ESG/S expertise is strong; explicitly growing.	Independent directors represent =/>90%. **Board** receives input directly from widely respected ESG/S leaders (including other CEOs and **board** members).
3.4	**Board Agendas Regarding ESG/S**	**Board** agendas typically cover: EHS, philanthropy, peer company ESG/S actions, ESG/S trends, and emerging issues. **CSO** reports goals and metrics (own operations).	**Board** discusses **material** ESG/S issues**,** benchmark data, trends, and performance vs. goals. **CSO** reports ESG/S risks in own operations and **value chain**.	**Board** actively engages in ESG/S dialog between meetings. **Board** discusses full **value chain** ESG/S risks.	**Board** meetings incorporate planned ESG/S learning (e.g., site visit). **Board** discusses implications of full **value chain** ESG/S risks and opportunities.
3.5	**Time Spent on ESG/S in Board Meetings**	Time spent on ESG/S is typically 4 hours a year or less (full board or board committee). ESG/S is a key agenda item in at least one meeting per year.	Time spent on ESG/S is typically about 4-8 hours per year (time in board meetings) and likely growing. Time spent is about average among sector peers.	Time spent on ESG/S is significant (typically about 8-12 hours per year – time in full board and/or board committee meetings) – and growing.	Time spent on ESG/S is very significant – and growing; (typically >12 hours per year – time in full board and/or board committee meetings).
3.6	**Board Sources of ESG/S Learning**	**Board** receives presentations on **ESG/S** at **board** meetings. **Board** pre-reading often limited to slides, with few ESG/S "thought leadership" articles.	**Board** members engage during meetings in discussion of current ESG/S articles and books, encouraging continuous learning.	**Board** receives a range of ESG/S pre-reads along with benchmark data. Board deliberates climate **scenarios** and engages deeply with **material** ESG/S issues.	**Board** members engage in systematic ongoing learning between board meetings. **Board** has special session on ESG/S (e.g., **scenario planning**) when **material**.
3.7	**Board Diversity, Equity and Inclusion**	**Board** diversity representation (gender, ethnicity; religion, etc.) is (cumulatively) less than 20%. No **board** diversity policy.	**Board** diversity is 20-30% (female and other underrepresented people). **Board** nomination and diversity policy is public.	**Board** diversity is at least 30% female plus very diverse life experiences (e.g., upbringing; places lived; key life events; etc.). Nomination policy aims for robust diversity.	**Board** reflects diversity of workforce and marketplace, with at least 40% female plus underrepresented people and diverse life experiences.

[1] **Bold words or phrases: this term is defined in Appendix A.**

4. *Governance:* Goals and Metrics

Key Question: How does our company set ESG/S goals for the most material issues across our value chain that drive **footprint** reduction and long-term value creation.

[NOTE: For each **Key Sustainability Indicator (KSI)** below, ***stages are additive***: e.g., to be Stage 3 requires meeting metrics in Stages 1, 2, and 3.]

KSI #	Key Sustainability Indicators (KSIs)	Stage 1 *"Engaging"*	Stage 2 *"Accelerating"*	Stage 3 *"Leading"*	Stage 4 *"Transforming"*
4.1	**Long-Term ESG/S Goals and Roadmap**	Long-term goals (typically 5-10 year) may be a stretch, but are achievable, mainly focusing on own operations and suppliers. Mindset is stay within comfort zone, with interim steps to achieve goals.	Goals are a challenge to achieve and aligned to most **material**[1] ESG/S impacts. The central focus is on own operations, suppliers, and products. Goals map to **SDGs** and are supported by general roadmap.	Goals address **material** ESG/S issues across full **value chain** using **science-based** targets where applicable. Goals pursue ESG/S innovation and growth, with key milestones, supported by a roadmap (aligned with **TCFD**).	Goals are highly rigorous (e.g., **net zero** or **net positive** impact where applicable), supported by a detailed roadmap (short-term; mid-term; longer-term) using science-based targets.
4.2	**2050 ESG/S Goals**	Company does not have 2050 (or similar range) ESG/S goals but might make a general reference to wanting the company to be around long-term.	Company states (mostly un-quantifiable) long-term ESG/S ambitions, perhaps included in the CEO's public speeches.	Company has a **net zero GHG** goal (aligned with Paris); **net neutral** or **net positive** impact goal aligned with most **material SDGs**.	Company has goals and metrics driving to **net positive total societal value** across its full **supply chain.** Addresses **circular economy** as appropriate.
4.3	**Materiality Assessment**	**Materiality assessment** mostly covers impacts from own operations.	**Materiality assessment** covers full **value chain** (often a long list of issues) and considers **NGO** input but lacks sharp focus on top few **material** issues.	**Materiality assessment** leads to sharp focus on reducing impact of most **material** ESG/S issues and directly guides strategic plans.	**Materiality assessment** drives large **footprint** reductions, with C-Suite executives personally owning the most **material** ESG/S issues.
4.4	**Tracking Reduction of ESG/S Footprint**	Informally assess full **value chain** ESG/S impacts. Demonstrated cuts in company operations footprint from baseline year (or when **footprint** reduction efforts began).	Formally estimate full **value chain** ESG/S impacts. Assess carbon reductions against 2°C global goal. Significant cuts in major ESG/S impacts from baseline year.	Formally measure full **value chain footprint**. Cuts in CO_2 align with 2°C, and cuts in other material ESG/S impacts are of a similar magnitude and use **science-based targets** where applicable.	Carbon reductions are on track to align with 1.5°C or well-below 2°C goals. Cuts in all footprint components align with **circular economy** principles.
4.5	**Tracking ESG/S Impact on Growth**	Establish criteria for measuring and tracking ESG/S attributes of **products, services, & solutions (PSS).**	Communicate defined ESG/S attributes of **PSS.** Track revenue from separate ESG/S portfolio or equivalent.	Pursue goals for a major portion of revenue (e.g., 50% or more) from ESG/S portfolio (or equivalent).	Derive most revenue from ESG/S **PSS**, or equivalent if no separate ESG/S portfolio.
4.6	**Accounting for Material ESG/S Risks, Externalities**	View accounting for **material** ESG/S risks and **externalities** as a compliance requirement. May assign **carbon price.**	Assess magnitude and scale of **material** ESG/S risks & liabilities across **value chain** and factor into **key business decisions**.	Account for **externalities.** Assign **carbon price** equal to or greater than industry average; fully aligned with **TCFD.**	Account for **externalities** across the **value chain** in a formal way, consistent with the company's financial controls.
4.7	**ESG/S Ratings and Rankings**	Engage with external **ESG raters** to gain recognition (if applicable) and enhance credibility of external reporting.	Engage with **ESG raters** to improve ESG/S practices and to build transparency. Work to fill gaps where **ESG ratings** are weak (e.g., governance).	Engage selectively with **ESG raters**. Focus on strong governance, integrate ESG/S into strategy, and drive footprint reduction and growth from ESG/S.	Earn recognition as a model ESG/S performer by peers and **NGOs**. Track record of investing in best-in-class ESG/S governance.

[1] **Bold words or phrases: this term is defined in Appendix A.**

5. *Governance:* Culture and Organization

Key Question: How does our company's culture and organization promote robust integration of ESG/S into executive compensation and job descriptions, resulting in actions and performance from the C-suite to the shop floor?

[NOTE: For each **Key Sustainability Indicator (KSI)** below, ***stages are additive***: e.g., to be Stage 3 requires meeting metrics in Stages 1, 2, and 3.]

KSI #	Key Sustainability Indicators (KSIs)	Stage 1 *"Engaging"*	Stage 2 *"Accelerating"*	Stage 3 *"Leading"*	Stage 4 *"Transforming"*
5.1	**Driving ESG/S Culture: Compensation and Goals**	CEO and C-Suite compensation and **KPIs**[1] may include a few "traditional" ESG/S topics (e.g., safety; diversity, compliance). Annual ESG/S goals for individual employees are largely limited to ESG/S staff and teams.	CEO and C-Suite compensation and **KPIs** include measuring performance against key, **material** ESG/S metrics (including **GHG** for almost all sectors). Several C-Suite members have ESG/S goals as part of their personal annual performance goals.	CEO and C-Suite compensation (about 15-20%) is based on performance on **material** ESG/S issues. CEO/S-Suite ESG/S **annual goals** cascade down the chain of command.	CEO and C-Suite compensation (about 20%+) is based on performance on **material** ESG/S issues. CEO/S-Suite annual goals track performance against **material** ESG/S metrics. **GHG** target cascades to all relevant company staff and contractors.
5.2	**CEO/C-Suite Roles Regarding ESG/S**	An existing C-Suite member assumes role of sustainability leader. CEO/C-Suite addresses sustainability risks during crises and as part of formal risk reviews.	A full-time experienced leader, responsible for corporate ESG/S, reports to a C-suite executive. C-Suite meetings are dedicated to ESG/S about quarterly.	C-suite executives are accountable for ESG/S programs, processes & performance – overall and on most **material** ESG/S issues. ESG/S is a core part of planning and operations meetings.	The CEO and C-Suite personally drive an ambitious sustainability agenda. ESG/S is a core part of strategic plans and CEO's C-Suite meetings.
5.3	**ESG/S Reward and Recognition**	Recognition of ESG/S excellence is limited to traditional sustainability topics only (e.g., EHS, compliance, etc.).	Recognition of ESG/S excellence (beyond traditional topics of EHS, etc.) is informal but executive sponsorship of ESG/S initiatives is growing.	Formal corporate ESG/S programs are recognized by business and functional leaders, with a visible reward system.	Recognition of ESG/S excellence is high profile and coveted, awarded annually by CEO and/or **board** member(s).
5.4	**Unwritten Rules of the Game Regarding ESG/S**	A candid survey of employees (across all operational levels) would likely convey a healthy skepticism about the value of ESG/S relative to the company vs. bottom-line financial metrics.	A candid survey of employees (across all operational levels) would likely convey that the CEO is serious about ESG/S, but the company lacks a system-driven approach with incentives.	Broad-based employee culture assessments have been conducted and convey that the CEO and business leaders are driving the ESG/S agenda with strong alignment throughout company.	Broad-based employee culture assessments convey that ESG/S is core to the business, supported by ambitions, goals, strategy, and roadmap.
5.5	**Leadership of ESG/S (below the C-Suite)**	The most senior, full-time corporate ESG/S leader reports several levels below the CEO and runs cross-functional ESG/S team.	The most senior, full-time corporate ESG/S leader(s) has occasional access to a C-Suite executive. May be invited to periodic reports to the board of directors (or equivalent if private).	The most senior, full-time corporate ESG/S leader(s) has frequent access to CEO/C-Suite, with periodic reporting to the board of directors.	A C-Suite member provides oversight while ESG/S is fully integrated into key C-Suite positions and roles of other senior leaders.

[1] **Bold words or phrases: this term is defined in Appendix A**.

6. *Governance:* Stakeholder Engagement

Key Question: How actively and deeply do we engage with key **stakeholders** to help our company reduce (full value chain) **footprint**, manage risks, and create opportunities – while providing value to society?

[NOTE: For each **Key Sustainability Indicator (KSI)** below, ***stages are additive***: e.g., to be Stage 3 requires meeting metrics in Stages 1, 2, and 3.]

KSI #	Key Sustainability Indicators (KSIs)	Stage 1 *"Engaging"*	Stage 2 *"Accelerating"*	Stage 3 *"Leading"*	Stage 4 *"Transforming"*
6.1	**Overall Approach to Stakeholder Engagement**	Engage in ongoing talks with investors, customers, and suppliers. Approach **NGOs**[1] and communities with the intent to win approval, often defending company positions.	Partner with customers regarding ESG/S solutions. Approach **NGOs** and communities to demonstrate corporate citizenship and enhance reputation.	Build action-oriented strategic partnerships that promote and accomplish ESG/S solutions. Approach **NGOs** and communities to listen, learn, and respond to their needs.	Engage and partner with **stakeholders** on very big initiatives. Approach **NGOs** and communities to engage deeply, listen, learn, and respond to their needs and to critical societal challenges.
6.2	**Reasons for Stakeholder Engagement**	To respond to concerns to protect brand and reputation. Solicit input regarding ESG/S goals from customers and/or few **NGOs.**	To anticipate future expectations of stakeholders and engage with "business-friendly" **NGOs.**	To directly address ESG/S goals and concerns of key **stakeholders**. Actively engage, listen, and learn from a range of **NGOs** and factor input into strategic planning.	To drive strategic partnerships (e.g., regarding the **circular economy**) using an institutionalized process to engage **stakeholders**.
6.3	**Stakeholder Partnerships**	Partner with **NGOs,** communities, suppliers (often locally) on specific projects.	Partner with industry peers, **value chain** partners, and **NGOs** to address key ESG/S issues in own industry sector(s), often with regional impact.	Partner with other ESG/S leaders beyond industry to lead efforts addressing the most **material** ESG/S issues in own industry sector(s).	Partner actively and deeply with **NGOs**, value chain partners, and a range of stakeholders on very large initiatives, often with global impact.
6.4	**Engaging on Material (Supply Chain) Issues**	Engage in ongoing dialog on an ESG/S issue in own operations to gain visible public relations.	Engage in ongoing dialog on most **material** ESG/S issue(s) in own operations.	Engage in ongoing dialog on most **material** ESG/S issue(s) across full **value chain.**	Engage in ongoing dialog on all **material** ESG/S issue(s) across full **value chain**, with a focus on growth and opportunity.
6.5	**Engaging on Strategy**	Company takes a cautious approach to discussing strategy with external stakeholders, focused on reducing risk and enhancing brand.	**CSO** and C-suite engage ESG/S advisors on strategic issues at a regional level.	**CSO** and C-suite engage key advisors (e.g., **External Sustainability Advisory Board**) in strategy discussions.	CEO leads strategic discussions with external stakeholders on most **material** issues among **SDGs**.
6.6	**Engagement by CEO/C-Suite**	CEO/C-Suite spends considerable time with employees, investors, customers and suppliers. CEO/C-Suite spends time with other ESG/S **stakeholders** (e.g., **NGOs**).	CEO/C-Suite spends time engaging with **NGOs**, community advocates, etc. (e.g., 5-10 hours/year), driven by **material** ESG/S issues.	CEO/C-Suite spends considerable time (e.g., 10-20 hours/year) engaging with **NGOs** on key ESG/S issues in sector.	CEO/C-Suite provides leadership across industry sector, and spends considerable time (e.g., >20 hours/year) engaging with **NGOs** and educating others.

[1] **Bold words or phrases: this term is defined in Appendix A**.

7. *Governance:* Disclosure and Reporting

Key Question: To what extent is our disclosure and reporting of ESG risks and opportunities transparent, robust, and aligned with financial/business reporting?

[NOTE: For each **Key Sustainability Indicator (KSI)** below, ***stages are additive***: e.g., to be Stage 3 requires meeting metrics in Stages 1, 2, and 3.]

KSI #	Key Sustainability Indicators (KSIs)	Stage 1 *"Engaging"*	Stage 2 *"Accelerating"*	Stage 3 *"Leading"*	Stage 4 *"Transforming"*
7.1	**Disclosure of Material ESG/S Impacts**	Publicly disclose required information, with a focus on compliance plus a few other key issues.	Follow ESG/S disclosure and reporting tools and frameworks that are generally accepted among industry peers. Provide annual progress review.	Disclose **material**[1] ESG/S impacts across full **value chain** - fully aligned with **TCFD.**	Provide robust, balanced disclosure targeted at **total societal value.** Quantify and explain full **life-cycle** impacts. Earn recognition as a leader in **TCFD** risk reporting.
7.2	**Annual Reporting and Financial Disclosures**	Mention **material** ESG/S issues briefly (if at all) in CEO letter. Financial disclosures are mostly conventional. Update website periodically with ESG/S data. May or may not have sustainability report. Discuss ESG/S in ways similar to EHS and corporate responsibility.	Mention **material** ESG/S issues in CEO letter. Provide information on **material** ESG/S risks in financial disclosures. Update website in a timely way. Discuss ESG/S as a set of issues mostly "separate" from core business activities (with separate sustainability report).	Include top **material** ESG/S KPIs along with key business metrics and financial disclosures. Provide clear and transparent reporting. Conform to a common framework (e.g., **TCFD**). **Board** reviews drafts. Publicly report code of conduct breaches.	Issue and integrate ESG/S information with annual report, which **Board** reviews and approves. ESG/S issues should be indistinguishable from core business issues (100% core business language). Strategic messaging is aligned with transition to a low-carbon economy.
7.3	**Assurance and Verification of ESG/S**	Company does not solicit formal verification of ESG/S business processes or data.	Company's internal audit staff (or third party) reviews process and verifies selected data.	Company retains a credible, independent third party to review ESG/S processes and data. Fully aligned with **TCFD.**	Company's third party review is conducted in a manner consistent with the company's review of its financial controls.
7.4	**Transparency**	Adopt a cautious approach (*"stay in comfort zone")* remaining consistent with industry sector peers. Communicate ESG/S impacts when necessary.	Implement candid, balanced reporting of own ESG/S impacts using multiple outreach channels, including social media. Earn respect from **NGOs**, perhaps via lack of negative attention.	Fully transparent communication, with a balanced reporting of ESG/S impacts across full **value chain.** Earn strong respect from key **NGOs** – including positive commentary.	Convey powerful ESG/S messages from CEO. Reinforce messaging across multiple channels of communication and drive increased transparency among industry peers.
7.5	**Public Policy (e.g., Lobbying) Alignment**	Company's public policy positions on ESG/S issues and risks (e.g., lobbying, political contributions, etc.) are aligned with industry association positions.	Company public policy positions and actions are aligned with candid disclosure of its **material** ESG/S impacts.	Company either ends membership in industry groups whose ESG/S positions are not aligned, or actively recruits other CEOs to get industry group to change posture.	Company lobbying, public policy positions and actions are completely aligned, transparent, and consistent with publicly stated ESG/S goals.
7.6	**Corporate Marketing and Advertising**	Walk a tight line: approach with honesty – but may be viewed by **NGOs** as *"green marketing"* (perhaps not fully addressing **material** ESG/S risks.	Adopt a balanced, truthful, humble approach to corporate marketing and advertising and solicit feedback from a range of **stakeholders**.	Earn the respect of **NGOs**; emulated by others that aim to be leaders.	Earn ethical marketing credentials and reputation from external stakeholders that critically analyze industry sector peer companies.

[1] **Bold words or phrases: this term is defined in Appendix A**.

8. *Strategy:* Strategic Planning

Key Question: To what extent are ESG considerations fully embedded in our company's strategic and operational planning processes?

[NOTE: For each **Key Sustainability Indicator (KSI)** below, ***stages are additive***: e.g., to be Stage 3 requires meeting metrics in Stages 1, 2, and 3.]

KSI #	Key Sustainability Indicators (KSIs)	Stage 1 *"Engaging"*	Stage 2 *"Accelerating"*	Stage 3 *"Leading"*	Stage 4 *"Transforming"*
8.1	**ESG/S Positioning and Strategy**	Pursue a very basic ESG/S strategy; aim to *"stay in the pack."* ESG/S is not a key driver of business strategy.	Pursue a comprehensive ESG/S strategy tied to **material**[1] ESG/S issues. ESG/S goals and roadmap are tied to annual business plans.	Actively pursue road to **net zero** - with the outlook that reducing **footprint** is integral to business strategy.	Corporate strategy is indistinguishable from ESG/S (no separate sustainability strategy). Aim to *"transform company and industry."*
8.2	**ESG/S Cost Reduction**	Employ traditional costing. Focus on reducing **footprint** (emissions, packaging, waste, etc.) and on reducing waste.	Pursue relentless waste reduction (all forms of "excess inputs") perhaps linked to **Six-Sigma**. Early stages of **impact valuation** regarding ESG/S.	Cut waste relentlessly, viewing waste and impacts as cost. Use tools (e.g., **impact-weighted accounting** or **full-cost accounting**) across full **value chain**.	Achieve full **value chain** reduction of key **material externalities**, resulting in full life-cycle cost savings. Dedicate significant **CapEx** for ESG/S projects.
8.3	**Enterprise Risk Management**	Identify major ESG/S risks impacting the company**.** ESG/S issues are not fully integrated into strategic planning. Define critical suppliers.	Key ESG/S risks integral to strategic and business planning. ESG/S issues are fully integrated with **enterprise risk management** and fully aligned with **TCFD.**	**Material** ESG/S issues largely drive strategic planning process with C-suite member(s) personally addressing them. Process supports ESG/S risk reporting aligned with **TCFD**.	**Material** ESG/S issues drive changes to business portfolio. C-Suite partners with customers and suppliers to cut **material** ESG/S impacts.
8.4	**Revenue from ESG/S Products, Services and Solutions (PSS)**	Sustainability attributes of **products, services, and solutions (PSS)** are not widely viewed as a revenue driver (unless in response to customer inquiries). Pilot ESG/S investments.	Sustainability advantaged **PSS** sales are tallied and reported. Work with customers to shape ESG/S investments.	Sustainable **PSS** portfolio (or equivalent) is growing (approaching +/-50% of revenue) with formal, robust criteria. Make significant investments in sustainable **PSS**.	Sustainability drivers dominate growth options. Company is on track to generate most sales from sustainability-advantaged **PSS**.
8.5	**ESG/S Impacts on Brand**	ESG/S is not a major factor in efforts to enhance brand and reputation. Company may publicize current activities in favorable ESG/S light.	ESG/S is important to company's efforts to enhance brand. Seek brand recognition via **ESG ratings** (e.g., *MSCI*, *Sustainalytics*, *CDP*, *DJSI*, *Global 100, etc.*).	Company invests considerable resources to enhance brand through demonstrated ESG/S excellence.	Company brand is tied directly to driving **total societal value** – and often to one or more of the **SDGs.**
8.6	**Use of Scenario Planning**	Use informal processes to identify potential future ESG/S impacts on the business.	Use a formal **scenario** process, systematically identifying and assessing major ESG/S drivers in terms of impact and uncertainty.	Use best-in-class ESG/S **scenario** process, including a 1.5 °C **scenario** (perhaps also 2 °C **scenario**), to be reviewed with C-Suite (but not **board**).	Review robust **scenarios** with C-Suite and **board** to consistently shape business strategy and portfolio changes.
8.7	**ESG/S Impact of Capital Expenditures**	Use traditional metrics. A modest portion of **CapEx** (e.g., about 25% for many sectors) is driven by **material** ESG/S risks.	A growing portion of **CapEx** about 25-50% for certain sectors) is driven by **material** ESG/S risks and opportunities.	A major portion of **CapEx** (>50% for certain sectors) is driven by **material** ESG/S risks and opportunities.	A very major portion of **CapEx** (often >75% for certain sectors) is allocated to address **material** ESG/S risks and opportunities.

[1] **Bold words or phrases: this term is defined in Appendix A**.

9. *Strategy:* Innovation, Research & Development

Key Question: How are sustainability and ESG issues integrated into innovation research, processes, and investments – ultimately aimed at helping our customers and delivering value to society?

[NOTE: each **Key Sustainability Indicator (KSI)** below, ***stages are additive***: e.g., to be Stage 3 requires meeting metrics in Stages 1, 2, and 3.]

KSI #	Key Sustainability Indicators (KSIs)	Stage 1 *"Engaging"*	Stage 2 *"Accelerating"*	Stage 3 *"Leading"*	Stage 4 *"Transforming"*
9.1	**Linkage Between ESG/S and Innovation**	No formal linkage between ESG/S and the company's innovation processes.	ESG/S issues are formally embedded in innovation processes.	ESG/S is fully integrated with innovation as a vital part of culture. Goal is to decouple sales growth from full **value chain footprint**.[1]	ESG/S is driver of long-term growth. The **precautionary principle** (or equivalent) is central to research and development (R&D).
9.2	**ESG/S in Materials and Labor Inputs**	Regulations are the main ESG/S driver in evaluating materials and labor inputs into new **products, services and solutions (PSS)**.	Processes are in place to systematically reduce higher-hazard materials and labor inputs into new **PSS**. May use some **Life Cycle Assessment (LCA)** tools.	Processes are in place to eliminate all higher-hazard materials and labor inputs into existing and new **PSS**, with a growing use of **LCA**.	Processes are in place to eliminate high-hazard materials and labor inputs and to maximize use of natural and highly recycled or recyclable materials (as appropriate).
9.3	**ESG/S Benefits from Technology**	Use of technologies to reduce **PSS** footprint is largely limited to compliance with existing and new requirements.	Use technologies such as advanced analytics, digitization, electrification, and process efficiencies to significantly reduce **PSS footprint**.	Use these advanced technologies to also help suppliers and customers reduce their **footprint**. Achieve success in reducing carbon-intensive operations.	Make major investments in disruptive technologies to drive to reduce full value chain footprint and to achieve **net zero** GHG emissions.
9.4	**ESG/S in Product Design and Development**	Use basic "stage gate" process with ESG/S issues considered, if indirectly. Limited or no use of eco-design tools.	Formally consider life cycle ESG/S risks and impacts, essentially "bolted-on" to the product development process. Create **PSS** offerings that help customers cut their **footprint**/impacts.	Assess ESG/S issues, risks, and opportunities formally and at an early stage, "woven-in" at each key step. Use eco-design tools in a formal, fully integrated process. Tie ESG/S waste to **Lean Six Sigma** (zero defects).	Determine "go/no-go" decision early in the process – based on product ESG/S risk assessment and related metrics. Use innovative eco-design tools, aimed at **closed-loop** processes.
9.5	**R&D Partnerships - Driving ESG/S Benefits**	Engage rarely in ESG/S-related R&D partnerships (e.g., with universities, incubator start-ups, etc.) to collaborate on ESG/S challenges.	Engage occasionally in ESG/S-related R&D partnerships to collaborate on ESG/S issues, challenges, and opportunities.	Engage frequently with current and potential R&D partners to collaborate on ESG/S issues, challenges, and opportunities.	Proactively seek ESG/S-related R&D partnerships that could have a significant business and societal impact. Work with ESG/S "thought-leaders."
9.6	**R&D Investment in ESG/S Products (PSS)**	Respond to immediate customer demands. Likely do not invest in R&D specifically targeted at sustainable **products, services, and solutions (PSS)**.	Pilot new ESG/S **PSS**, tied to ESG/S trends and typically less than 25% of total R&D investment.	Invest early to create demand from ESG/S **PSS.** With a growing focus on disruptive technologies, this is often about 50% of total R&D investment.	Alter business portfolio to be driven by ESG/S trends and the **SDGs.** Virtually all R&D investment is aligned with **sustainability principles** - meaningfully advancing progress on the **SDGs**.

[1] **Bold words or phrases: this term is defined in Appendix A**.

10. *Strategy:* Customers and Markets

Key Question: How are we working with key customers to reduce their full life-cycle impacts and create sustainable solutions?

[NOTE: For each **Key Sustainability Indicator (KSI)** below, ***stages are additive***: e.g., to be Stage 3 requires meeting metrics in Stages 1, 2, and 3.]

KSI #	Key Sustainability Indicators (KSIs)	Stage 1 *"Engaging"*	Stage 2 *"Accelerating"*	Stage 3 *"Leading"*	Stage 4 *"Transforming"*
10.1	**Company's ESG/S Approach to Customers**	Respond to customer ESG/S requests. Focus is: *"Do our customers like our products?"*	Understand ESG/S goals of key customers. Educate customers about ESG/S attributes. Focus is: *"Can we help our customers achieve their ESG/S goals?"*	Work with customers to meet their ESG/S goals. Promote responsible ESG/S consumption. Focus is: *"Do our products benefit our customers and society?"*	Work with customers to jointly create demand for ESG/S solutions while greatly reducing existing ESG/S impacts. Focus is: *"Do our products, services, and solutions address the world's toughest challenges?"*
10.2	**Customer ESG/S Partnerships**	Partner with customers to instruct on safe product use and cut negative ESG/S impacts of **products, services, and solutions (PSS)**.[1]	Partner with customers to reduce collective **footprint**. Actively solicit input regarding more sustainable **PSS**.	Partner with customers by investing significantly to cut collective **footprint** and to develop more sustainable **PSS**.	Partner with customers to pioneer innovative **closed-loop** business models.
10.3	**Nature of Customer ESG/S Communications**	Solicit feedback on existing products and services.	Share ESG/S attributes of existing and new **products, services, and solutions (PSS)**.	Invest jointly to drive down **footprint** across full **value chain**.	Partner to jointly create or expand market for sustainable **products, services, and solutions (PSS)** that meet rigorous criteria for ESG/S attributes.
10.4	**Selling ESG/S Features into Existing Markets**	Focus on selling **PSS** into traditional markets and market segments (based on geography, demographics, etc.).	Develop or expand **PSS** offerings with enhanced ESG/S features in existing markets.	Systematically grow sales of ESG/S attributes and products. Stop selling **PSS** with negative ESG/S impacts.	Transform company's PSS portfolio to fully embrace ESG/S attributes and differentiate from competitors based (in part) on ESG/S features.
10.5	**Selling ESG/S Features into Developing Markets**	Enter new markets motivated by traditional business factors (e.g., regulations, economics, etc.).	Reposition existing **PSS** to take advantage of ESG/S market opportunities. Launch pilots in underserved markets.	Invest in adjacent ESG/S markets. Rapidly grow ESG/S portfolio in developing markets (e.g., developing economies).	Map ESG/S investments to most **material** issues among the **SDGs.** Provide track record and innovation platform.
10.6	**ESG/S Attributes in Product Line Extension**	Consider sustainable attributes only occasionally when extending existing product lines.	Make pilot investments in ESG/S features to extend lines of **PSS**.	Incorporate ESG/S in all business decisions as company invests in and rolls out new **PSS** lines.	Launch industry **PSS** breakthroughs with new ESG/S features. Lead as the market grows.
10.7	**New ESG/S Product (PSS) Families**	Invest rarely (if ever) in new family of ESG/S **products, services and solutions (PSS)**.	Launch investments in sustainable **PSS** families (e.g., a new line of low-carbon widgets).	Make multi-year investments in sustainable **PSS** families.	Ensure new **PSS** families align with **SDGs** and preserve or restore **ecosystem services**.

[1] **Bold words or phrases: this term is defined in Appendix A**.

11. *Strategy:* Products, Services, and Solutions

Key Question: How deeply are ESG risks and opportunities embedded in our evolving portfolio of product, service, and solution (PSS) offerings?

[NOTE: For each **Key Sustainability Indicator (KSI)** below, ***stages are additive***: e.g., to be Stage 3 requires meeting metrics in Stages 1, 2, and 3.]

KSI #	Key Sustainability Indicators (KSIs)	Stage 1 *"Engaging"*	Stage 2 *"Accelerating"*	Stage 3 *"Leading"*	Stage 4 *"Transforming"*
11.1	**Product, Service, Solution (PSS) Value Proposition**	Focus is selling products (e.g., price and quality) and providing value to customers and to shareholders – while ensuring that **products, services and solutions (PSS)**[1] do not harm health or the environment.	Focus is shifting; the value of **PSS** is both to customers/shareholders and also to society at large. Company begins to map **PSS** to the **SDGs** (or equivalent).	Focus is growing ESG/S services and solutions, while shifting away from products that do not align with ESG/S. Societal value of offerings is visible (e.g., disclose percentage of **PSS** that can be reused or recycled).	Focus is moving increasingly to services and solutions, and to **closed-loop supply chain**. Societal value of offerings is core.
11.2	**Product (PSS) Stewardship**	Reduce or phase out hazardous substances from **products, services, and solutions (PSS)** with a risk and compliance focus.	Implement basic **design for environment (DfE)** criteria. Pilot ESG/S **PSS**.	Publicly accept full life cycle responsibility and accountability. C-suite-led greening of product portfolio.	Purposefully grow green and/or healthy **PSS.** Demonstrate track record of performance.
11.3	**Product (PSS) ESG/S Risk Assessment**	Selectively use product ESG/S risk assessment for products that are high-risk and/or high business impact. Most likely do no use formal **life cycle assessment (LCA)**.	Use product ESG/S risk assessment (e.g., **LCA** software, "streamlined **LCA**") for key product lines/families to identify major ESG/S risks.	Use formal ESG/S risk mapping to drive portfolio changes within and across product lines. Product ESG/S risk assessment is core to new **PSS** growth.	Use **cradle-to-cradle** metrics (or equivalent) for most/all existing and new **PSS**.
11.4	**Product (PSS) ESG/S Labeling and Rating**	Label and rate products (**PSS**) in compliance with industry codes, standards, certifications, and ecolabels. Disclose hazardous substances.	Use simple labeling methods for rating product ESG/S impacts. Promote (eco, health, etc.) labeling.	Use sector-leading product labeling and rating to convey ESG/S impacts and drive transparency.	Use formal risk mapping to not only label and rate products (**PSS**) but also drive portfolio changes across businesses.
11.5	**Product (PSS) Quality and Safety**	Manage product quality and safety, driven predominantly by laws and regulations.	Expand internal definition of product quality and safety to incorporate ESG/S impacts.	Define and manage product quality and safety to include full range of ESG/S impacts (e.g., durability vs. disposable products).	Define and manage **PSS** quality and safety across portfolio to be fully aligned with **circular economy**.
11.6	**Product (PSS) ESG/S Audits**	Do not conduct formal product audits.	Implement product stewardship review program. Review and address negative ESG/S aspects systematically.	Audit vs. robust ESG/S criteria. Review product portfolio vs. societal needs and benefits.	Audits include quantification of ESG/S and financial benefits for existing and new **PSS.**
11.7	**Product (PSS) Marketing and Advertising**	Encourage safe and responsible use. Company is "selectively quiet" about potential product ESG/S risks.	Communicate honestly in advertising, sharing critical information on full supply-chain ESG/S impacts.	Communicate honestly in advertising, labelling and public messaging. Convey full **life-cycle** impacts, being transparent about ESG/S impacts.	Communicate (often **LCA**-based) **cradle-to-cradle** impacts; fully transparent.

[1] **Bold words or phrases: this term is defined in Appendix A**.

12. Environmental Footprint: Operations

Key Question: How deeply and robustly are we managing and reducing the environmental risks associated with our wholly owned (and >50% owned joint venture) operations globally?

[NOTE: For each **Key Sustainability Indicator (KSI)** below, ***stages are additive***: e.g., to be Stage 3 requires meeting metrics in Stages 1, 2, and 3.]

KSI #	Key Sustainability Indicators (KSIs)	Stage 1 *"Engaging"*	Stage 2 *"Accelerating"*	Stage 3 *"Leading"*	Stage 4 *"Transforming"*
12.1	**Energy Purchased**	Source most energy (e.g., fuel, electricity, transport, etc.) from conventional sources (oil, gas, coal) with <10% renewables.	Source about 10-30% of energy from renewables - a growing portion of total energy used. Very strong energy efficiency programs.	Source about 30-60% of total energy used from renewables. Goal is to source 100% renewables.	Company is on target for being **carbon neutral**[1] and is driving aggressively toward sourcing 100% renewable energy.
12.2	**Carbon Emissions: Owned/Controlled Sources**	Company is on target for about 10-20% reduction in emissions from owned or controlled sources (**Scope 1 GHG emissions**) from baseline year.	Company is on target for about 20-50% reduction in **Scope 1 GHG emissions** from baseline year.	Company is on target for about 50-80% reduction in **Scope 1 GHG emissions** from baseline year.	Company is on target for being **carbon neutral** - or better *(use of unbundled RECs or low-quality offsets is not permitted).*
12.3	**Non-Carbon Emissions**	Manage non-carbon emissions *(e.g., SOx, NOx, particulates, etc.)* for compliance.	Manage to the toughest regulatory standards globally.	Manage for zero discharge of hazardous substances.	Achieve zero discharge of hazardous substances and fully benign emissions.
12.4	**Materials Sourced**	Source in conventional ways, with a compliance focus and aligned with industry codes. Seek to understand source of all major materials. Adopt some resource efficiency efforts. Source about 10-20% recycled content.	Eliminate prioritized list of toxics and "de-select" hazardous materials. Source about 50% + from responsible and/or certified ESG/S sources. Grow bio-based inputs, and source recycled content (20-50%).	Aggressively apply **green chemistry** principles, eliminating toxics and high ESG/S risk product inputs. Source about 50% bio-based materials if demonstrated (e.g., through **LCA**) to be preferred. Source 50-75% recycled content.	Source 100% from responsible or certified ESG/S sources. Approach **closed-loop** with 75-100% recycled content or bio-based materials if proven (e.g., through **LCA**) to be preferred. Align with **green chemistry** principles.
12.5	**Water Management**	Achieve incremental reduction of water sourced with focus on compliance in own operations and >50% joint ventures.	Achieve significant reduction of water use, with focus on high-risk sources. Manage to toughest standards globally.	Achieve **water-neutrality** in selected operations. Manage to achieve discharges cleaner than water sourced.	Achieve **water-neutrality** in all operations. Manage for **water positive** impact on stressed aquifer supply.
12.6	**Buildings and Equipment**	Launch targeted efforts to reduce energy, waste, water use, etc. in owned buildings and equipment.	Launch major initiative (e.g., **carbon neutral** on-site goal), and achieve **LEED** standards on selected new buildings.	Achieve LEED standards on all new buildings; ensure they are not sited in sensitive habitats. Undergo aggressive retrofits.	Systematically drive all owned or leased buildings to **net zero** energy within five years.
12.7	**Land Management**	Remediate (clean up) or restore land as required. Adhere to biodiversity policy, with a focus on compliance and protection.	Promote and invest in cleaning up owned land (e.g., **brownfield redevelopment**).	Restore habitats of strategic importance: land owned and other land of importance to company. Actively protect biodiversity.	Restore and protect habitat aggressively. A leader in promoting the importance of **valuing natural capital.**
12.8	**Waste Generation**	Implement goals to reduce waste and report steady progress on waste reduction (e.g., per unit of production).	Drive very significant focus on waste reduction (reduce and recycle) with demonstrated success.	Achieve pockets of **zero waste to landfill** and 100% recycling. Reduce and/or recycle about 25-75% of materials used.	Achieve **zero waste to landfill**, 100% recycling, & zero hazardous waste (within geographical constraints).

[1] **Bold words or phrases: this term is defined in Appendix A.**

13. Environmental Footprint: Supply Chain

Key Question: How deeply and robustly are we managing and reducing the environmental risks associated with the company's full supply chain impacts?

[NOTE: For each **Key Sustainability Indicator (KSI)** below, ***stages are additive***: e.g., to be Stage 3 requires meeting metrics in Stages 1, 2, and 3.]

KSI #	Key Sustainability Indicators (KSIs)	Stage 1 *"Engaging"*	Stage 2 *"Accelerating"*	Stage 3 *"Leading"*	Stage 4 *"Transforming"*
13.1	**Approach to Supply Chain Environmental Impacts**	Comply with industry standards regarding environmental **footprint**.[1] Focus on quality, cost, and dependability (over environmental impacts).	Engage with key suppliers to assess and actively reduce environmental impacts. Provide ESG/S training and incentives to suppliers.	Engage upstream supply tiers to aggressively cut **material** environmental impacts. Set joint impact reduction goals. Incorporate ESG/S in buyer performance.	Partner with most suppliers to drive down full **supply chain** environmental **footprint** toward zero. Monitor performance against joint customer-supplier goals. Collaborate around growth opportunities.
13.2	**Standards for Supply Chain Environmental Impacts**	Impose conventional contract requirements, focusing on compliance.	Impose basic environmental contract requirements and include ESG/S questions in formal supplier assessments. Adopt formal environmental procurement policy.	Demonstrate that supplier selection (or dismissal) is based on environmental performance. Suppliers have robust controls on environmental actions across full **supply chain**.	Impose non-negotiable environmental requirements. Apply root cause analysis to actively reduce footprint in the entire **supply chain**.
13.3	**Measuring Supply Chain Environmental Impacts**	Measure supply chain environmental impacts by relying primarily on supplier reports.	Measure environmental impacts across **supply chain** by requiring environmental **KPIs** of major suppliers.	Measure results from engagement with suppliers to aggressively drive ESG/S improvements. Report results publicly.	Measure, track and report **material** ESG/S impacts throughout **supply chain**, with a goal of **net positive** environmental impacts. Report results publicly.
13.4	**Verifying Supply Chain Environmental Impacts**	Conduct basic due diligence and require compliance assurance (self-audits).	Conduct supplier risk analysis regarding environmental impacts.	Conduct third-party audits of **material** ESG/S issues at tier 1+ suppliers.	Go beyond third-party audits; use root-cause analysis and supplier collaboration to strengthen full **supply chain** ESG/S performance. Publish results.
13.5	**Supply Chain Impact: Biodiversity**	No significant consideration of **supply chain biodiversity** impacts.	Assess and systematically reduce negative **biodiversity** impacts of **supply chain** operations but don't invest in biodiversity.	Achieve a high level of restoration and invest in enhanced **biodiversity** across the **supply chain**.	Source 100% sustainably to restore, preserve, and enhance **biodiversity**, independently verified.
13.6	**Supply Chain GHG Emissions**	Limited or no focus on **supply chain GHG** emissions.	Engage key direct and indirect suppliers. Start to quantify and reduce **Scope 3 GHG** emissions (across **supply chain**).	Engage actively with key direct and indirect suppliers. Strong goals in place to cut **Scope 3 GHG** emissions (across **supply chain**).	Engage actively with suppliers, customers, and others, successfully meeting a **science-based target** to cut **Scope 3 GHG** emissions.
13.7	**Supply Chain Impact: Water**	Focus with **tier 1 suppliers** on compliance with water impact requirements.	Work with suppliers to better understand systems and slash water use (e.g., by 10-25%).	Lead industry efforts. Replenish water with strong focus on water quality preservation.	Achieve **water-neutral** status across **supply chain** with leading position on water quality preservation.

[1] **Bold words or phrases: this term is defined in Appendix A.**

14. Environmental Footprint: Products, Services, and Solutions (PSS)

Key Question: How deeply and robustly are we managing and reducing the environmental risks associated with our products, services and other offerings?

[NOTE: For each **Key Sustainability Indicator (KSI)** below, ***stages are additive***: e.g., to be Stage 3 requires meeting metrics in Stages 1, 2, and 3.]

KSI #	Key Sustainability Indicators (KSIs)	Stage 1 *"Engaging"*	Stage 2 *"Accelerating"*	Stage 3 *"Leading"*	Stage 4 *"Transforming"*
14.1	**Responsibility for ESG/S: Product (PSS) Use and End-of-life**	Focus on compliance, with typically informal systems for product take-back, recycling or reuse of **products, services and solutions (PSS)**[1] sold.	Take responsibility for the company's **PSS** following useful life (e.g., via take-back, etc.). Follow industry code of conduct (e.g. **WEEE**).	Measure and report growing portion of **PSS** portfolio that achieves **closed-loop**. Ensure responsibility for the company's **PSS** following useful life.	Implement robust systems ensuring end-of-life responsibility that approach 100% **closed-loop**.
14.2	**Traceability Related to Products (PSS)**	Little or no focus on traceability of source materials. Focus on compliance when monitoring inputs through life-cycle stages.	Implement processes to ensure that some key source materials (e.g., ones that **NGO**s focus on or ones that are key to sales) come from **traceable** sources.	Establish and implement processes to ensure that many source materials come from **traceable** sources.	Establish and implement processes to ensure that all higher ESG/S risk source materials inputs are **traceable** (e.g., from raw material extraction to product end-of-life).
14.3	**Energy Efficiency of Products (PSS)**	Energy efficiency associated with customer and consumer use of **PSS** is not a major priority. Focus on low cost.	Increase energy efficiency associated with customer and consumer use of **PSS** by about 10-25% from baseline year.	Increase energy efficiency associated with customer and consumer use of **PSS** by about 25-50% from baseline year.	Design all **PSS** for maximum energy efficiency.
14.4	**Durability of Products (PSS)**	Focus **PSS** portfolio on traditional elements (low cost and quality), with most products being single-use and disposable.	Address the conflict of low-cost, single-use (often disposable) products vs. higher initial cost, more durable, longer-lasting products in a public, transparent way.	Change the revenue model (as appropriate) by building products to last. Systematically increase the lifecycle of the company's **PSS**.	Build a robust business around product life-extension: sell highly durable products; shift from selling products to selling products as a service.
14.5	**Biodegradability of Products (PSS)**	Pursue **biodegradability** associated with **PSS** as beneficial; however, this is not a major consideration.	Emphasize (and market) product **biodegradability** for a small percentage of applicable **PSS** offerings. Internal calculations of biodegradability may not be subject to external validation.	Emphasize (and market) product **biodegradability** for most applicable **PSS** offerings. Internal calculations of biodegradability are externally validated.	Make product **biodegradability** explicit for all applicable **PSS** offerings (as applicable). Internal calculations of biodegradability are externally validated by highest quality sources.
14.6	**Recyclability and Reusability of Products (PSS)**	Achieve product or **PSS** recyclability and reusability as beneficial to traditional business metrics.	Achieve **PSS** recyclability and reusability for some **PSS** portfolio offerings, often driven by customer pressure or inquires.	Achieve **PSS** recyclability and reusability for most **PSS** portfolio offerings as a key strategic priority.	Achieve **PSS** recyclability and reusability for entire **PSS** portfolio (as applicable).
14.7	**Water-Use Efficiency of Products (PSS)**	Increase water use efficiency when driven by customer requests and goals.	Increase water use efficiency (e.g., about 10-20%) during customer use of **PSS** across major water-consuming **PSS**.	Increase water use efficiency (e.g., >25%) during customer **PSS** use across water-consuming **PSS**. Design new **PSS** for minimum water use.	Increase water use efficiency (e.g., >50%) during customer use of **PSS** (for water consuming **PSS**). Design **PSS** for minimum water use.
14.8	**Packaging**	Reduce packaging where driven by economics. Provide some packaging that is renewable, recyclable or reusable.	Reduce packaging or provide renewable, recyclable, and/or reusable options (e.g., about 25-50%).	Reduce packaging or provide renewable, recyclable, and/or reusable options (e.g., about 50-75%).	Reduce packaging or provide renewable, recyclable, and/or reusable options (approach 100%).

[1] **Bold words or phrases: this term is defined in Appendix A**.

15. Social Performance: Workplace

Key Question: How does our workplace environment and supporting programs, incentives, and initiatives engage our employees and others in sustainability issues?

[NOTE: For each **Key Sustainability Indicator (KSI)** below, ***stages are additive***: e.g., to be Stage 3 requires meeting metrics in Stages 1, 2, and 3.]

KSI #	Key Sustainability Indicators (KSIs)	Stage 1 *"Engaging"*	Stage 2 *"Accelerating"*	Stage 3 *"Leading"*	Stage 4 *"Transforming"*
15.1	**Workplace Environment**	Earn recognition by employees that company meets basic needs, honors individual privacy, and pays a **living wage.**[1] Focus is mostly "inside the fence line" (company operations).	Earn recognition by employees that company provides a supportive work environment and a transparent workplace. Focus is work, home and family, supported by pay equity analysis and **living wage** audit.	Earn recognition by employees that company stands for something meaningful and is among best to work for in sector. Focus is work, home, family and community. Employees value the high transparency culture.	Earn recognition by employees that they are truly living the company purpose – and actively driving achievement of robust goals.
15.2	**Diversity, Equity, and Inclusion (DEI)**	Provide a diverse and inclusive workplace with equal opportunity and pay without discrimination. Make public commitments (e.g., equal opportunity). Outline programs and training.	Commit to strong DEI programs that are equivalent or better than industry peers. Company strategy and processes for recruiting, hiring, retaining and promoting employees explicitly consider diverse candidates.	Actively create inclusive environment (fully aligned with **SDG** 5 – Gender Equality) through cultural programming and education. Incorporate diversity goals and metrics (e.g. 20% growth of minority employees in next 2 years).	Push the boundaries of industry sector with a highly diverse C-Suite, executive and staff. DEI policies extend to business partners, vendors, and suppliers (e.g. 30% more spending with minority-owned businesses).
15.3	**ESG/S Benefits in Recruitment and Retention**	Emphasize traditional ESG/S benefits in hiring and managing workforce (e.g., childcare, telecommuting, etc.).	Appeal to worker ESG/S expertise and passion. Provide considerable opportunities for ESG/S learning. Solicit basic employee feedback.	Invest in, and reward, ESG/S initiatives. Constantly assess if benefits are meeting employee needs.	Reward ESG/S success and expertise with high profile (e.g., C-Suite/board) recognition. ESG/S benefits are among the best in industry.
15.4	**Safety Programs and Performance**	CEO/C-Suite promotes safety performance generally consistent with peers (e.g., conform to ISO 45001 standard).	CEO/C-Suite provides very strong leadership, driving safety performance.	CEO/C-Suite invests heavily in building a robust safety culture – with proven results. Top quartile across all industry.	CEO drives safety culture that is pervasive across the company, constantly reinforced. A leader across all industry.
15.5	**Health, Wellness, and Sustainable Lifestyles**	Provide a comfortable work environment with insurance coverage, exercise rooms, voluntary programs, healthy food offerings, etc.	Provide formal health and wellness programs, encouraging broad employee participation. Offer health risk appraisals, healthy food offerings, etc.	Provide formal health and wellness programs to employees and beyond – fully aligned with **SDG** 3 (Good Health & Well-Being). Stress physical and mental health.	Provide wellness programs to 100% of employees and business partners. Provide locally sourced and healthy food, as well as robust mental health programs.
15.6	**ESG/S Training and Staff Development**	Provide basic safety, ethics, diversity etc. training for all employees. Hire ESG/S interns. Provide ESG/S skills training and career development.	Provide, measure, and report formal ESG/S skills development. Offer ESG/S short course for all staff. Promote career mobility (e.g., rotating jobs) and lifelong ESG/S learning.	Provide innovative employee training to help reduce **footprint**. C-Suite engages in sustained ESG/S learning. Include in 360 degree reviews and leadership development.	Invest in robust ESG/S tools and infrastructure so that all staff are aligned with company ambitions. Provide high profile ESG/S learning for high potential employees.
15.7	**Employee Engagement with ESG/S**	Provide opportunities for employee ESG/S engagement - largely based on individual initiative.	Encourage a core set of ESG/S teams and networks, endorsed by the C-Suite and supported by awards & recognition.	Sponsor a broad ESG/S network and teams with C-Suite oversight. Encourage volunteering on ESG/S initiatives.	Monitor and track an extensive network of employees actively working on high-impact projects with major ESG/S value contribution.

[1] Bold words or phrases: this term is defined in Appendix A.

16. Social Performance: Supply Chain

Key Question: How deeply and robustly are we managing and reducing the social risks associated with the full supply chain impacts?

[NOTE: For each **Key Sustainability Indicator (KSI)** below, ***stages are additive***: e.g., to be Stage 3 requires meeting metrics in Stages 1, 2, and 3.]

KSI #	Key Sustainability Indicators (KSIs)	Stage 1 *"Engaging"*	Stage 2 *"Accelerating"*	Stage 3 *"Leading"*	Stage 4 *"Transforming"*
16.1	**Approach to Supply Chain Social Impacts**	Comply with social responsibility standards and requirements. Focus on quality, cost, and dependability (over social impacts).	Implement formal responsible sourcing program and criteria to actively reduce negative social impacts. Provide ESG/S training and incentives to suppliers.	Engage upstream supply tiers to aggressively cut **material**[1] social impacts. Set joint impact reduction goals.	Partner with most suppliers to drive down negative social impacts across **supply chain**. Actively monitor performance vs. joint customer-supplier goals.
16.2	**Standards for Supply Chain Social Impacts**	Impose conventional contract requirements, focusing on compliance.	Adopt formal ESG/S procurement policy. Impose basic ESG/S contract requirements; include ESG/S questions in formal supplier quality assessments.	Select suppliers based on social vs. cost metrics. Establish robust ESG/S controls and systems across full **supply chain**.	Impose non-negotiable ESG/S requirements. Apply root cause analysis to actively reduce social footprint in **supply chain**.
16.3	**Measuring Supply Chain Social Impacts**	Measure purchase of local **PSS**. Protect customer privacy through secure information storage and privacy policies.	Measure success in treating **supply chain** partners in a fair and inclusive way – without bias or discrimination.	Measure results from engagement with suppliers to aggressively drive ESG/S performance improvement. Report results publicly.	Measure, track, and report ESG/S sourcing, aiming for **net positive** social impacts.
16.4	**Verifying Supply Chain Social Impacts**	Conduct basic due diligence and require compliance assurance (self-audits), with no significant social focus.	Conduct supplier risk analysis regarding social impacts of business operations.	Conduct third-party audits of **material** ESG/S issues at tier 1+ suppliers. Incorporate ESG/S in buyer performance.	Use root cause analysis and supplier collaboration to strengthen full **supply chain** social performance. Publish results.
16.5	**Human Rights**	Comply with laws, regulations and global conventions. No formal human rights policy (other than perhaps protecting human rights of direct employees).	Require suppliers to follow accepted workplace standards of basic human rights. Endorse relevant global charters, including UN Conventions regarding child/forced labor. Publish human rights policy.	Endorse UN Conventions (human rights, child and forced labor, etc.). Implement due diligence processes to ensure policies are carried out throughout the **supply chain**. Publish strong human rights policy.	Conduct human rights impact assessments across **supply chain**. Address issues surrounding selling (directly or indirectly) to countries that exploit their people, with a strong drive to eradicate child/forced labor.
16.6	**Labor Relations**	Support basic, structured relations with trade unions by key suppliers.	Actively encourage suppliers to have structured relations with employee representatives.	Require public commitment and strong labor relations by all suppliers.	Demonstrate leadership as a very strong promoter of labor relations throughout **supply chain**.
16.7	**Animal Welfare**	Comply with laws, regulations and global conventions regarding animal rights/welfare within industry sector.	Encourage supply chain partners to align with company practices and actively reduce animal harm and suffering.	Advocate powerfully for relevant animal welfare issues (across full **supply chain**) within industry sector.	Advocate, utilize, and demonstrate the most humane alternatives (e.g., cruelty free) across **supply chain**.
16.8	**Supply Chain Capacity Building**	Ensure quality, dependability and compliance of key suppliers.	Partner with industry groups and peer companies to address major industry wide ESG/S issues.	Partner with **NGOs** and others, aiming to eliminate negative ESG/S impacts across the **supply chain**.	Collaborate with suppliers and others to eliminate negative impacts and become leading solution providers, globally.

[1] **Bold words or phrases: this term is defined in Appendix A**.

17. Social Performance: Community

Key Question: What types of policies, programs, partnerships and investments are we making to benefit the communities in which we operate and society at large?

[NOTE: For each **Key Sustainability Indicator (KSI)** below, ***stages are additive***: e.g., to be Stage 3 requires meeting metrics in Stages 1, 2, and 3.]

KSI #	Key Sustainability Indicators (KSIs)	Stage 1 *"Engaging"*	Stage 2 *"Accelerating"*	Stage 3 *"Leading"*	Stage 4 *"Transforming"*
17.1	**Philosophy Regarding "Community"**	Focus community initiatives (often locally or regionally) where it fits business goals.	Align community initiatives with full **supply chain**[1] impacts ("*think globally, act locally*").	Engage with communities wherever company has full **supply chain** impacts. Inspire employees to drive positive **total societal impact** aligned with company strategy.	Embed ourselves in communities, driven by shared value (value to shareholders and to society). Actively measure and track the company's **total societal impact.**
17.2	**Social Investment**	Invest resources (often money and time) devoted to social action (typically as philanthropy in USA) in a way generally consistent with industry sector peer companies in the same country/market.	Invest resources to enhance societal value, growing transparency about the company's impacts and investments (e.g., financial contributions, pro-bono service, etc.).	Demonstrate significant positive impact of social investment, aligned with top few **material** ESG/S issues and **SDGs.** Demonstrate C-Suite leadership that is highly visible and consistent.	Earn high recognition and trust from communities globally that are impacted by the company's (full **value chain**) activities. A leader in helping to solve the world's toughest challenges.
17.3	**Community Partnerships**	Partner with local industry groups and selected local **NGOs** to address community priorities.	Identify key value to society, considering new sources of value (e.g., health; bio-based; locally produced; recyclability; etc.). Partner with a broad range of **NGOs**.	Launch high-impact partnerships that address community needs. Communicate broadly and with full transparency.	CEO joins other leaders in driving global ESG/S agenda. Lead efforts to tackle a major societal challenge.
17.4	**Employee Volunteering**	Provide limited company sponsored volunteering time.	Provide formal corporate ESG/S (skilled and unskilled) volunteer programs - typically short-term projects (days).	Provide skills-based ESG/S volunteering to create social impact and engage employees. Build strong communities where company operates or has key **supply chain** impacts.	Provide long-term ESG/S volunteer projects (years), especially in under-served communities. Embed skills in communities and form lasting relationships with local organizations.
17.5	**Infrastructure Development**	Invest in physical structures or systems that enhance societal value at a local level near company operations or offices (e.g., parks; schools).	Use local products and resources. Invest in needed infrastructure, mostly at a local or regional level.	Invest in leading a major ESG/S infrastructure initiative. Partner to achieve scale impacts (e.g., at a national level), with a focus on underserved communities.	Tackle community needs first. Invest at scale globally. Partner with others to drive the **circular economy** and enhance societal value (e.g., eco-parks, smart cities, etc.).
17.6	**Community Education**	ESG/S is not a major component of company's community outreach and education.	Company executives support ESG/S education locally – and become more knowledgeable about broader ESG/S issues in the process.	Company executives actively engage in community education and set an example for understanding and articulating ESG/S issues.	Company executives are leading voice(s) on global ESG/S issues. Company is a leader in ESG/S solutions and in tackling environmental justice.
17.7	**Community Job Creation**	Company emphasizes local talent in purchasing and hiring decisions.	Company builds a local employment pipeline as well as learning and job opportunities in communities where it operates.	Company invests in small and start-up companies through innovation and incubation resources.	Company drives business development programs to enhance job-creation in underprivileged communities.

[1] **Bold words or phrases: this term is defined in Appendix A.**

Appendix A: Definitions

Definitions
• **Biodegradability:** the capacity for biological degradation of organic materials by living organisms down to the base substances such as water, carbon dioxide, basic elements and biomass.
• **Biodiversity:** A term used to describe the enormous variety of life on Earth. It can be used more specifically to refer to all of the species in one region or ecosystem. Biodiversity refers to every living thing, including plants, bacteria, animals, and humans.
• **Board:** Refers to the external Board of Directors (as with all U.S.-based public corporations); the governing body with oversight fiduciary responsibility for the corporation *[Note: the 'Supervisory Board' referred to often in Europe, consisting of the CEO and his/her direct reports, is not part of this section. That is covered under CEO Leadership and Culture and Organization.]*
• **Brownfield Redevelopment:** the expansion, redevelopment or reuse of land and property which may be complicated by the presence or potential presence of hazardous substances or contaminants.
• **Capital Expenditure (CapEx):** Funds used by a company to acquire, upgrade, and maintain physical assets such as property, plants, buildings, technology, or equipment. CapEx is often used to undertake new projects or investments by a company.
• **Carbon-neutral:** Having a **net zero** carbon **footprint**; achieving **net zero** carbon emissions by balancing a measured amount of carbon released (by a company, product, or activity) with an equivalent amount sequestered or offset, or buying enough carbon credits to make up the difference. **Carbon neutral** is not about achieving zero emissions.
• **Carbon Price:** an instrument that captures the external costs of greenhouse gas (**GHG**) emissions and ties them to their sources through a price, usually in the form of a price on carbon dioxide (CO2) emitted; pricing can be set internally or through regulations.
• **CSO (Chief Sustainability Officer):** The most senior person in the company with responsibility for overseeing sustainability policy, positioning and activities. *Note*: the person may or may not be officially designated as the CSO by the company; ESG Navigator does not presume an official CSO is necessary.
• **Circular Economy:** An alternative to the traditional linear economy (make, use, dispose) in which resources remain in use for as long as possible, extracting the maximum value from them while in use, then recover and regenerate products and materials at the end of each product or service life.
• **Climate Change:** Significant changes in global temperature, precipitation, wind patterns and other measures of climate that occur over several decades or longer.
• **Climate Risk:** Includes both physical risks and transition risks: ▪ **Physical Risk:** Risk to assets due to variables in the climate/weather system that reach values that affect human life adversely. Risks typically include fire, drought, flooding, water scarcity, etc. ▪ **Transition Risk:** Risks from the transition of the economy/society to a clean, low-carbon economy. Risks typically include legislative, reputation and market risks.
• **Closed-Loop:** Also referred to as the **circular economy**, where materials, at the end of their useful life, are consistently repurposed, recycled, reused, reclaimed, restored, or otherwise converted to some use rather than discharged as waste.
• **Cradle-to-Cradle:** A holistic framework for design of industry, products, buildings, or urban environments that seeks to create systems that are efficient and essentially waste free (The term Cradle to Cradle is a registered trademark of McDonough Braungart Design Chemistry / MBDC.)
• **Davos Manifesto:** A set of ethical principles to guide companies in the age of the Fourth Industrial Revolution launched by the World Economic Forum.
• **Design for Environment (DfE):** A design approach to reduce the overall human health and environmental impact of a product, process or service, where impacts are considered across its life cycle.
• **Ecosystem Services:** Humankind benefits in a multitude of ways from ecosystems (e.g., cleaning drinking water, decomposing wastes, etc.). Collectively, these benefits are known as **ecosystem services**.
• **Enterprise Risk Management:** Often a company's formal risk management process, identifying events or circumstances relevant to the organization's objectives (risks and opportunities), assessing them in terms of likelihood and magnitude of impact, determining a response strategy, and monitoring process.
• **ESG (Environment, Social, Governance):** The term often used by the investment community to refer to the three central factors in measuring the sustainability of an investment in a company or business. In ESG Navigator, the term ESG is used interchangeably with sustainability: **ESG/Sustainability (ESG/S)**.

Definitions
• **ESG Ratings and Rankings (**also **ESG Raters):** Independent sustainability frameworks, ratings and rankings that major companies globally view as particularly influential or worthy. Common frameworks are CDP, *GRI, SASB, and TCFD.* ESG ratings targeted at investors include (for example): *Bloomberg; CDP; Dow Jones Sustainability Index (DJSI); FTSE4Good; MSCI; Morningstar/Sustainalytics.* Other highly regarded ratings include *EcoVadis* and *Global 100 Most Sustainable Companies.*
• **External Sustainability Advisory Board:** A group of sustainability experts or thought leaders from various external **stakeholder** groups, assembled to periodically advise the CEO and CSO.
• **Externalities:** The cost or benefit that affects a party who did not choose to incur that cost or benefit. For example, manufacturing activities that cause air pollution or carbon emissions may impose health, cleanup, or other costs on society.
• **Footprint:** A measure of an organization's (or human's) demand on the Earth's ecosystems. Unless otherwise, in this context is used as a measure of the full impact across the **supply chain** of an organization's operations, including, for example, consumption, use and emissions of energy, materials, resources, water, etc.
• **Full-Cost Accounting:** A method of cost accounting that traces direct costs and allocates indirect costs by collecting and presenting information about the possible environmental, social and economic costs and benefits for each proposed alternative. For example, full cost would assign a "cost of carbon" to address carbon risk associated with use of hydrocarbons.
• **Global Risks:** refers to the major risks facing society globally. See annual summary by the World Economic Forum Global Risk Report (https://www.weforum.org/reports/the-global-risks-report-2021.)
• **Green Chemistry:** The design of chemical products and processes that reduce or eliminate the use or generation of hazardous substances across the full life cycle of chemical production, from design and manufacture to product use and disposal.
• **Greenhouse Gas (GHG):** The main greenhouse gases are water vapor (H2O), carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6).
• **Impact Valuation:** A tool to systematically collect and evaluate data to help identify, measure and value the impact of companies (including **externalities**) beyond products and profits.
• **Impact-Weighted Accounting:** Analogous to full cost accounting, adjusting traditional accounting measures to consider the various types of impacts ESG might have – including product impacts, environmental impacts and employment impacts.
• **Integrated Report to Society:** An integrated report is a concise communication about how an organization's strategy, governance, performance and prospects lead to the creation of value over the short, medium and long term. Typically, this means a combination of a company's (financial) annual report with its sustainability report – in a single document.
• **Key Business Decisions:** Hedstrom Associates defines key business decisions as the handful of major decisions the CEO and Board make each year – typically involving merger, acquisition or divestiture; large capital expenditure; new product launch; major research and development expenditure, etc.
• **Key Performance Indicator (KPI):** A performance indicator or KPI is a type of performance measurement. KPIs evaluate the success of an organization or of a particular activity in which it engages.
• **Key Sustainability Indicators (KSIs):** Hedstrom Associates uses the term "key sustainability indicators" to characterize the specific items in the ESG Navigator rating system. ESG Navigator allows a user to rate a company on about 120 KSIs.
• **Lean Six Sigma: Lean** focuses on analysing workflow to reduce cycle time and eliminate waste. **Six Sigma** focuses on achieving consistent results. The Lean Six Sigma certification validates professionals skilled in identifying risks, errors or defects in a business process and removing them.
• **LEED:** Leadership in Energy and Environmental Design (LEED) is one of the most popular green building certification programs worldwide. It was developed by the non-profit U.S. Green Building Council.
• **Life-Cycle Assessment (LCA):** A technique to assess environmental impacts associated with all stages of a product's life (i.e., from raw material extraction through materials processing, manufacture, distribution, use, repair and maintenance, and disposal or recycling). Also known as life-cycle analysis.
• **Living Wage Audit:** An independent review to assess what percentage of a company's workforce (full time employees, contractors, etc.) is earning a living wage or better (Living Wage Calculator is available, e.g., from MIT).
• **Material:** Information is material if its omission or misstatement could influence the economic decision of users taken on the basis of the financial statements. (See Materiality.)

Definitions
• **Materiality (**also **Materiality Assessment):** A concept or convention within the financial community relating to the importance/significance of something relevant to the corporation. Information is material if its omission or misstatement could influence the economic decision of users taken on the basis of the financial statements. Materiality in relation to the inclusion of information in an integrated (financial and sustainability) report refers to matters that "could substantively affect the organization's ability to create value over the short, medium and long term."
• **Materiality Assessment:** A process to identify, refine and assess potential ESG issues which are sufficiently important that they should inform corporate sustainability strategy and reporting. Unfortunately, GRI uses the term "materiality" in this context in a very broad way – any ESG issue that is <u>*important*</u> to stakeholders – whether or not it might have a <u>*(financially) material*</u> impact.
• **Natural Capital:** The world's stock of natural assets, providing critical services and resilience (e.g., supporting water cycles and soil formation; protecting communities from major storms, floods, fires, and desertification; absorbing carbon dioxide (CO2) to limit the pace of climate change).
• **Net Neutral** (Environmental Impact): Refers to a situation where the sum of the full environmental impacts of an organization – across the full **supply chain** – is offset by the net reduction in environmental impact caused by use of the company's products, services or solutions.
• **Net Positive** (Environmental Impact): A situation where the sum of the full environmental impacts of an organization – across the full **supply chain** – is less than the net reduction in environmental impact caused by use of the company's products, services or solutions. [Note: MIT has a "net positive" initiative as part of SHINE (Sustainability and Health Initiative for Net Positive Enterprise), - which aims to improve the scientific basis by which **Net Positive** is assessed (products, activities, companies, economic sectors, individuals, and groups).
• **Net Zero:** Can be set as a target for all greenhouse gases or for CO2 only. Defined by the Paris Agreement as a balance between anthropogenic emissions by sources and removals by sinks of GHG. Note that Carbon Neutral means having a **net zero** carbon **footprint**; achieving **net zero** carbon emissions by balancing a measured amount of carbon released (by a company, product, or activity) with an equivalent amount sequestered or offset, or buying enough carbon credits to make up the difference.
• **NGO (Non-Governmental Organization):** An organization that is neither a part of a government nor a conventional for-profit business; seen to represent "civil society."
• **Precautionary Principle:** If an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is not harmful, the burden of proof that it is *not* harmful falls on those taking an action.
• **Products, Services, and Solutions (PSS):** Items or services sold by companies to satisfy a market need. From a sustainability context, shifting from selling products to leasing products or selling services is consistent with moving from a linear ("take – make – waste") system to a closed-loop one whereby products, after their useful life, are recycled, reused, refurbished, or returned to some productive use.
• **RE100:** A corporate leadership initiative led by The Climate Group and CDP, launched in 2014 – refers to targets for companies to move towards 100% renewable power.
• **REACH:** A European regulation promulgated in 2006 that addresses the production and use of chemical substances, and their potential impacts on both human health and the environment.
• **Responsible Care®** is a global, voluntary initiative developed autonomously by the chemical industry to demonstrate chemical industry's desire to improve health, safety, and environmental performance. The vast majority of the largest chemical producers in the world have adopted Responsible Care.
• **Scenario Planning:** is a structured way for organizations to think about the future and make flexible long-term plans. A group of executives sets out to develop a small number of **scenarios**—stories about how the future might unfold and how this might affect an issue that confronts them.
• **Scenario (climate-related):** a future anticipated mean temperature rise based on an assumption of action or inaction by society on limiting carbon emissions.
• **Science-Based Targets:** Refers to science-based emission reduction targets that are independently verified against a set of criteria developed by the Science Based Targets initiative (SBTi). These typically refer to energy and greenhouse gas reduction goals aligned with the 1.5°C or well-below 2°C criteria.
• **Scope 1 GHG Emissions:** Direct emissions from owned or controlled sources.
• **Scope 2 GHG Emissions:** Indirect emissions from the generation of purchased energy.
• **Scope 3 GHG Emissions:** All indirect emissions (not included in Scope 2) that occur in the **value chain** of the reporting company, including both upstream and downstream emissions.

Definitions
• **Six Sigma:** A set of techniques and tools for process improvement. Six Sigma strategies seek to improve the quality of the output of a process by identifying and removing the causes of defects and minimizing impact variability in manufacturing and business processes.
• **Stakeholder:** Individuals or groups of people who can reasonably be expected to be significantly affected by an organization's business activities, outputs or outcomes, or whose actions can reasonably be expected to significantly affect the ability of the organization to create value over time. o "Internal stakeholders" = the board (or equivalent), management, employees and owners. o "External stakeholders" = communities, government, NGOs, suppliers, customers and consumers.
• **Supply Chain:** The system of organizations, people, activities, information and resources involved in moving a product or service from point of origin to point of consumption. Supply chains underlie **value chain**s because, without them, no producer can provide customers what they want, when they want it, and at a price they will pay.
• **SDGs (Sustainable Development Goals):** A set of 17 "Global Goals" with 169 targets between them, adopted by 193 member countries of the United Nations, intended to galvanize and guide the world's efforts to eradicate poverty, end hunger and address climate change by 2030.
• **Sustainability (**see also **ESG/Sustainability):** The pursuit of a business growth strategy that creates long-term shareholder value by seizing opportunities and managing risks related to the company's environmental and social impacts. Sustainability includes conventional environment, health and safety (EHS) management; community involvement and philanthropy; labor and workplace conditions as well as elements of corporate citizenship, corporate governance, **supply chain** and procurement.
• **Sustainability Principles:** Various ways of characterizing the concept of sustainability, the most common of which is to meaningfully advance progress on the Sustainable Development Goals (**SDGs**). Another example would be the four system conditions of The Natural Step.
• **TCFD (Task Force on Climate-related Financial Disclosures):** This industry-led task force, established by the Financial Stability Board issued its final report in June 2017. The report includes recommendations to industry for disclosure to investors, following a simple structure (that is almost identical to ESG Navigator): Governance; Strategy; Risk (ESG Navigator has separate sections for Environmental and Social); Metrics (ESG Navigator folds this under Governance).
• **Tier 1 Supplier:** a manufacturer who provides products (or services) directly to a company without dealing with a middleman or other manufacturers.
• **Total Societal Impact:** The full economic, social, and environmental impact (both positive and negative) of a company's products, services and solutions (PSS); operations; core capabilities; and activities.
• **Total Societal Value:** The value to society, measured by an analysis of the full economic, social, and environmental cost, impacts, and benefits – across the full **value chain**. (Connected to **Total Societal Impact**)
• **Traceability (also Traceable):** The ability to identify and trace (e.g., from raw material extraction to product end-of-life) the history, distribution, location and use of products, parts and materials, to ensure the reliability of sustainability claims, in the areas of environment, human rights, anti-corruption, etc.
• **UNGC:** The **United Nations Global Compact** is a non-binding United Nations pact to encourage businesses worldwide to adopt sustainable and socially responsible policies, and to report on their implementation.
• **Unwritten Rules of the Game:** how employees generally describe "the way things work around here."
• **Value Chain:** The process by which a company adds value to an article, including during production, transportation, marketing and the provision of after-sales service.
• **Waste Electrical & Electrical Equipment (WEEE):** The waste generated from electrical devices and household appliances like refrigerators, televisions, and mobile phones, etc. To address the issues, the WEEE Directive and the Directive on the Restriction of the use of certain Hazardous Substances in electrical and electronic equipment (RoHS Directive) were established.
• **Water Positive:** the term typically refers to the quantity (vs. quality) of water; water positive refers to replenishing more water than we use – and especially to putting back more water in stressed water basins.
• **Water-neutral:** Refers to a situation where an organization is returning to surface water or ground water the volume of water it uses – across the full **supply chain** – at a level of purity that is of the same or higher quality of the receiving body or aquifer.
• **Zero Waste to Landfill:** is a set of principles focused on waste prevention that encourages the redesign of resource life cycles so that all products are reused. The goal is for no trash to be sent to landfills, incinerators, or the ocean.