‘The Next Big Leap’
Towards ESG Maturity in Tech Sector

November 2021
By Sreyssha George, Vikash Jain, Rohan Jain, Ayon Banerjee, and David Young
Boston Consulting Group partners with leaders in business and society to tackle their most important challenges and capture their greatest opportunities. BCG was the pioneer in business strategy when it was founded in 1963. Today, we work closely with clients to embrace a transformational approach aimed at benefiting all stakeholders—empowering organizations to grow, build sustainable competitive advantage, and drive positive societal impact.

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The National Association of Software and Services Companies (NASSCOM®) is the premier trade body and chamber of commerce of the Tech industry in India and comprises over 2800-member companies including both Indian and multinational organizations that have a presence in India. Our membership spans across the entire spectrum of the industry from start-ups to multinationals and from products to services, Global Service Centers to Engineering firms.

Guided by India’s vision to become a leading digital economy globally, NASSCOM focuses on accelerating the pace of transformation of the industry to emerge as the preferred enablers for global digital transformation. Our strategic imperatives are to reskill and upskill India’s IT workforce to ensure that talent is future-ready in terms of new-age skills, strengthen the innovation quotient across industry verticals, create new market opportunities - both international and domestic, drive policy advocacy to advance innovation and ease of doing business, and build the Industry narrative with focus on Talent, Trust and Innovation. And, in everything we do, we will continue to champion the need for diversity and equal opportunity. NASSCOM has played a key role in not just the growth of the Industry to become a $180+ Billion industry today, but we have helped establish the Tech industry in India as one of the most trusted partners, globally. NASSCOM continues to make significant efforts in contributing towards India’s GDP, exports, employment, infrastructure development and global visibility. Our membership base constitutes over 95% of the industry revenues in India and employs over 4 M professionals, and as technology blends into every aspect of the economy, we expect the industry to become key driver of growth, development and inclusion for the country. Our mission is to make India a global hub for Innovation and Talent so when the world thinks Digital, the world will think India.
Foreword

The last few years have brought Climate change, sustainable business models, and ESG reporting norms to the limelight. Over 3000 firms across the globe signed up for the United Nations ‘Race to Zero’ campaign in 2019, with a promise to achieve net-zero emissions. With the ongoing, COP26, many more governments and private organizations are expected to further commit to ambitious sustainability targets.

ESG has become a top priority today with scrutiny by clients, investors, and employees. This is particularly evident for the Tech industry with ESG related articles doubling over the last four years. Clients of technology companies are becoming alert to the ESG performance of their partners and vendors. Investors are using ESG as a key metric to drive their investments. In India alone, Assets Under Management (AUM) for ESG-themed funds rose to USD 650 Million in FY21 from USD 275 Million in FY20, a 2.5X increase. ESG principles have also become a huge competitive advantage in retaining and attracting talent.

While the signs are positive, a lot of ground remains to be covered before we get close to the global sustainability ambitions. Within the technology sector, the significance of ESG is being discussed extensively, though a clear roadmap is yet to emerge. ESG is also a broad topic and not every ESG factor will be material to all businesses and sectors. Hence it is essential for both companies and investors to be able to identify and manage factors that are significant for their industry.

The focus for the NASSCOM and BCG’s report, ‘The Next Big Leap’, sensitizes the technology sector on the material ESG topics for the industry. We layout the nine material ESG topics for technology companies to use to formulate their respective ESG strategies. Our five-point maturity framework enables CXOs to analyze their current position and provides actionable steps to dynamically evolve in this fast-evolving topic.

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Over the past decade, ESG—Environmental, Social and Governance—factors have become an increasingly important paradigm across the corporate world. In January 2021, at the World Economic Forum in Davos, more than 60 corporations together accounting for a market capitalization of over USD 4 Trillion, pledged to adhere to a new set of ESG reporting norms. This was following a Business Roundtable (BRT) resolution in the fall of 2019, where 181 CEOs representing the largest U.S. companies released their new “Statement on the Purpose of a Corporation” with a high focus on sustainable business models. Also in 2019, 86% of S&P500 companies published ESG metrics in their sustainability reports; a four-fold increase from the 20% adherence just eight years ago. With the ongoing COP26, the United Nations Climate Change Conference of the Parties, discussions on achieving net-zero global emissions by 2050 are expected to fructify, with commitments expected not only from governments but from the private sector as well. Over 3000 firms across the globe have signed up to the ‘Race to Zero’ campaign with a promise of net zero emissions across their operations by 2050 at the latest. The number of companies committing to science-based climate targets is doubling each year and that includes more than 20% Fortune 500 companies.

There is no doubt that the COVID-19 pandemic and recent climate reports have accelerated the focus on ESG issues and this is particularly evident for the Tech industry. BCG’s Media Study of 4,000+ media articles on ESG from this sector over the last four years shows that the volume of ESG-related articles has nearly doubled. Climate change continues to dominate the published word with firms announcing ambitious commitments. Social topics have also gained attention as firms put greater focus on employee well-being, mental health and digital skilling. (See Exhibit 1).

In step with the world, India too is witnessing an increasing focus on ESG. Assets under management (AUM) for ESG-themed funds rose to USD 650 Million in FY21 from USD 275 Million in FY20, a 2.5X increase. Issuance of sustainability-linked bonds in the first four months of 2021 are already more than double of issuances in all of 2020.

The Tech industry—A frontrunner on ESG—has led most ratings and is well-positioned to play a significant role in shaping the path forward; not only for itself but also for its clients by actively supporting their journey towards ESG goals.

Influencers of Priorities

Before going any further, it is important to cast an eye over several key stakeholder groups that directly impact strategic decisions on ESG topics.

The first of these are, of course, customers. Large clients for Tech, such as FedEx, Microsoft and Unilever, now require explicit commitments from their partners on ESG disclosures while ESG commitments have become a key differentiator in large deal bids in many Tech RFPs in the last year. While this is being discussed in many other industries, this is becoming a reality in Tech Sector buying as well. Investors, similarly, are a big driver of ESG discussions and actions. There is increasing questioning of the role of corporation in society and the total societal impact that goes beyond shareholder value. Investors are integrating ESG as an important consideration in investment decisions across investments and asset classes. Investment companies pledging to incorporate ESG considerations have grown 48x over the past 14 years, with a 14x growth in AUM pledged to USD 103 Trillion in 2020 (“The Investor Revolution: Shareholders Are Getting Serious About Sustainability”, Harvard Business Review). Employees as a stakeholder group have always been important influencers of strategy, and ESG principles have become a huge competitive advantage in retaining and attracting talent. According to BCG analysis (“Organizing for the Future with Tech, Talent,
67% of millennials expect employers across industries to have purpose and their jobs to have societal impact. Last, but not the least, regulators, ESG rating agencies and the media are other inter-related key stakeholders that must inform ESG priorities for organizations. ESG rating agencies form a complex eco-system of over 600 agencies and varying rating methodologies; media opinion directly impacts investor opinion and ESG ratings, and also impacts the attractiveness of the company to jobseekers; and while no single regulatory body governs ESG adoption and compliance currently, there are several government mandates (e.g. CSR regulations in India) and global alliances (e.g. the Paris Agreement on Climate Change) that propagate sustainability and can guide the path ahead.

Materiality Assessment of ESG Priorities

As with other value-building approaches, it is imperative to identify priorities for an enterprise looking to establish ESG credentials, The Sustainability Accounting Standards Board (SASB) Materiality Map defines more than 25 materiality issues across industries. Our synthesis of the SASB material issues, the Global Reporting Initiative (GRI) framework and methodologies followed by ESG rating agencies such as the Dow Jones Sustainability Index (DJSI) and Morgan Stanley Capital International (MSCI) reveals nine salient ESG topics for the Tech industry. (See Exhibit 2).

Nine Near-Term Priorities for Tech Sector

A synthesis of relevant ESG topics and stakeholder priorities suggests that the Tech industry will need to prioritize the following nine topics in the near term. The relative importance of the topics may vary for each firm based on the business context, capabilities, and strengths. (See Exhibit 3).

Environment

1. Climate change and carbon footprint: Over the years, regulations and alliances have exhorted firms to
commit to emission reduction, while investment decisions and supplier selection are now being weighed on ESG concerns. A Bank of America institutional investor survey confirms that climate change is a top concern of 72% of institutional investors. Tech companies are not among top polluters, but the climate impact is driven by travel, facilities, data centers, as well as the consumption footprint across a large employee base. They have clearly realized the importance of climate change and are setting bold ambitions of carbon neutrality and even balancing of historical emissions. Typical technology services customers such as Microsoft and Unilever have also started demanding emission disclosures and CDP target commitments from suppliers.

2. Green technology and innovation for clients: Green technology innovation is a relatively nascent topic but is gaining importance. ESG rating agencies such as MSCI and Refinitiv give a weightage of 5–19% to this topic. Tech firms are uniquely placed to not just reduce their own climate emissions, but also to develop technology solutions to help their customers meet climate targets.

Green technology has the potential to convert into a direct revenue line for Tech while offering impactful solutions to clients; for example, the market for IoT sensor deployment (including 5G network enablement) for smart cities is estimated to be a USD 400 Billion market. This fast-growing agenda also provides an opportunity for sectoral players to differentiate through bold ambitions. Atos is capitalizing on the emerging ESG themed market, estimating USD 550 Million of revenue to be generated via their decarbonization offering over the next few years. Overall, the company expects cutting-edge technologies, including ESG material topics such as Cloud, Security and Decarbonization, to represent 65% of their revenue in the mid-term. They are also investing in various initiatives including Atos One Cloud initiative (committing Euro 2 Billion over five years) and the Global Decarbonization Excellence Centre.

3. Water and waste management: Water management emerges as another priority topic for technology services, with leading rating agencies giving this a score of 5%. 7% of the articles in the BCG Media Study revolved around...
### Exhibit 3 - ESG Topics Prioritized Based on Importance Across Stakeholders

<table>
<thead>
<tr>
<th>ESG Indices</th>
<th>Investors</th>
<th>Customers</th>
<th>Media</th>
<th>Regulators</th>
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<tbody>
<tr>
<td><img src="image1" alt="Moderate" /></td>
<td><img src="image2" alt="Moderate" /></td>
<td><img src="image3" alt="Moderate" /></td>
<td><img src="image4" alt="Moderate" /></td>
<td><img src="image5" alt="Moderate" /></td>
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#### Environment

1. **Climate Change & Carbon Footprint**
2. **Green Technology & Innovation for Clients**
3. **Water & Waste Management**

#### Social

4. **Human Capital Development**
5. **Skilling & Development**
6. **Diversity & Inclusion**

#### Governance

7. **Corporate Governance**
8. **Business Ethics & Compliance**
9. **Risk & Crisis Management**

Source: ESG agency websites (MSCI, DJSI), investor survey, supplier code of conducts for key tech sector customers, Quid-BCG’s Center for Growth & Innovation Analytics.
water management as well as the e-waste produced by the Tech sector.

**SOCIAL**

4. **Human capital development:** Human capital development includes sub-themes of employee engagement, wellbeing, attraction and retention. Given the direct impact of employee talent on performance and growth of a company, investors place high importance on human capital development. The Edelman Trust Barometer, a survey of 600+ investors, found 52% of investors consider human capital development as a highly important ESG topic across industries. The pandemic has also increased focus on employee wellbeing and mental wellness.

Leading Tech players have not only established and communicated employee values, but have gone beyond by actively measuring employee engagement. SAP measures and publishes its Employee Engagement Index (EEI), with a target to achieve 84–86% engagement by 2023.

5. **Skilling and development:** Due to their core digital capabilities, Tech companies play an important role in digitally skilling their employees and the community at large. BCG’s Media Study revealed that over 20% articles highlighted digital skilling.

Microsoft set a target in 2020 to impact more than 25 million lives globally in a year, by enabling them to acquire digital skills needed for the COVID-19 economy.

6. **Diversity and inclusion (D&I):** D&I for employees is not limited to gender equality, but spans across ethnicity, disability and LGBTQIA+ frameworks. Nearly 10% of the articles in our Media Study revolve around the D&I measures undertaken by Tech firms.

Leading Tech firms are setting bold targets for a diverse and inclusive workplace. Accenture aims to include 50% women in its workforce and 30% in management by 2025.

**GOVERNANCE**

7. **Corporate governance:** This industry has upheld high standards for corporate governance in general with their disclosures and have set the benchmark for good corporate governance and reporting. Corporate governance includes board composition (in terms of diversity, independence and experience), board effectiveness and transparency. ESG rating agencies accord strong weightage to corporate governance, with scores varying between 20–30%. In India, corporate governance is shaped by the Companies Act of 2013 (amended in 2020) and SEBI regulations.

Voluntary non-financial disclosures to enhance trust beyond requirement of standards such as Supplier GHG emissions, Task Force on Climate-related Financial Disclosures (TCFD). Microsoft has ESG-linked incentives for executives to improve board effectiveness.

**8. Business ethics and compliance:** Business ethics and compliance includes adherence to core values, such as honesty and integrity, and compliance with instituted policies, such as anti-corruption, anti-bribery and prohibition of insider trading. This is a priority topic across most stakeholders, especially since non-compliance can cause severe impact on business reputation.

The United Nations Global Compact has laid down ethical guidelines for businesses to work against corruption, extortion and bribery. India, China and other countries are working with the Organization for Economic Co-operation and Development (OECD) to further strengthen national compliance frameworks.

**9. Risk and crisis management:** Risk and crisis management includes subthemes such as data privacy and security, and risk governance. 16% of the articles in our Media Study highlighted risk and crisis management as a key topic. Strong regulations such as the EU General Data Protection Regulation (GDPR) have evolved in the recent past to strengthen risk and crisis management frameworks among businesses.

**Path to Performance**

The past few months have witnessed an accelerated mainstreaming of ESG issues. Companies are regularly announcing new climate commitments, while new ESG disclosure norms and standards are being set alongside increased social activism. ESG has found a rightful place in boardroom conversations, amplified by concerns about climate change, natural resource scarcity and a growing demand for social equality and inclusiveness.

Despite heightened awareness and appreciation of issues, ESG performance across the Tech industry is marked by significant inconsistency. At one end of the spectrum, sectoral leaders are raising the bar with ambitious commitments that drive positive impact; while at the other, concrete action is still awaited across many companies.

A comprehensive and mature ESG strategy can guide companies’ non-financial vision and ambitions to unlock future value. However, embedding ESG across the organization to achieve the desired results may not be very simple. To navigate this complex ESG transformation journey, we have distilled the learnings into a comprehensive ESG strategy. (See exhibit 4).
Exhibit 4 - Pillars of the ESG Strategy

**ESG driven corporate purpose & strategy**
ESG embedded in vision & long-term plans

- **ESG governance model**
  Integrated into Board & Executive agenda with organization wide focus

- **Target oriented ESG Roadmap**
  With material focus areas & measurable time-bound commitments

- **Engagement of stakeholders across ecosystem**
  Transparent disclosures, owning narrative with rating agencies etc.

**Leveraging ESG as an impact lever**
Prevent business risk, source of positive impact, lever to innovate products/services, ESG Stewardship etc.

Source: BCG Analysis.

- **ESG-driven corporate purpose and vision**: Aligning an organization’s vision with ESG goals ensures incorporation of sustainability in its DNA and hence in short-term and long-term planning, key decisions, products and services. ESG-driven organizations place emphasis on total stakeholder value creation, supported by a robust process to determine issues and concerns which are material to all stakeholders—internal and external.

  *Infosys* has developed a clear ESG vision tied to their business strategy: ‘Shape and share solutions that serve the development of businesses and communities’. This is supported by ‘Vision 2030’ which has clearly articulated measurable and time-bound ambitions across all material topics.

- **A robust ESG governance model**: ESG leaders have integrated ESG in their board and executive agendas, and embedded ESG-related KRAs across the organization. This is further activated through performance management and collaboration between different business units and functions. Linking of executive KPIs and incentives to ESG and embedding them as a criteria in performance evaluations, product development checklists and revenue targets further reinforces ownership of the ESG agenda.

  *Accenture* has an explicit board oversight, executive accountability, and group-wide responsibility to drive ESG transformation. The executive-level Global Management Committee (GMC) is focused on ESG progress; its agenda is managed by a dedicated ‘Chief Responsibility Officer and Global Sustainability Services Lead’, who is part of the GMC. A cross-functional group of senior executives is responsible for driving action across the market units and ensuring that ESG is a core strategic priority.

- **A target-oriented ESG roadmap**: An ESG roadmap with clearly defined ambitions, measurable and time-bound commitments, and ambitious targets is required to bring the corporate vision to life. Furthermore, the strategy and execution should lend itself to balanced and transparent reporting, clearly highlighting the areas of improvement and underperformance.

- **Stakeholder engagement across the ecosystem**: ESG leaders proactively plan for ongoing engagement
ESG commitments starting to become a key differentiator in large Tech deals
across all stakeholder groups. ESG communication should be responsive to external and internal stakeholder needs—with a timely grievance redressal mechanism and an ongoing revision of material topics, initiatives and strategy—based on the feedback.

- **Leveraging ESG as an impact lever:** ESG leaders go beyond addressing ESG concerns to mitigate business risks. They incorporate ESG into the core business strategy. Innovative and sustainable products, services and solutions, and co-creation of solutions with value-chain partners and customers can help achieve 360° impact. The impact generated via business and community development initiatives should be quantified and reported for tracking.

**Move to Action: A Five-Point Maturity Framework**

ESG is a top priority in the boardroom today; it is critical for CXOs to evaluate and understand their organization’s maturity level to evolve as a competitive and sustainable business. Today, business strategy and sustainability can no longer be distinct. A discernible shift is in progress, from executing a sustainability strategy, to making the business strategy sustainable. A maturity framework for ESG is critical as it helps identify points of differentiation for the organization. Given the pace of ESG evolution, the baseline is shifting rapidly; what is a differentiator today could become base-level compliance in a few months.

Our five-point framework based on the ESG maturity structure enables CXOs to analyze the maturity level of their organizations and provides actionable steps to dynamically evolve in this fast-paced environment. *(See Exhibit 5).*

No matter the size or complexity of a Tech company, ESG should be at the forefront of leadership thinking and corporate strategy, and viewed as a source of both risk and opportunity. A comprehensive and sustainable approach to ESG issues means looking beyond window-dressing initiatives or quick fixes. It is necessary that ESG be embedded into broader organization practices in order to create greater transparency, accountability and impact across business, economy and society.

Achieving proficiency or maturity in any field is an evolutionary process and ESG is no exception. Today’s front runners will be joined by many others as stakeholders continue to pursue sustainability agendas. Many firms are finding innovative ways to establish sustainability as a part of their core business model—making progress towards solving persistent societal and environmental problems, while expanding business and operations at the same time.

In the current scenario, with business norms being challenged daily, companies are focusing on resilience, moving to a low carbon economy, and engaging a remote and diverse workforce. The Tech sector can play a significant role in not only setting its own ambitious ESG agenda but elevating their clients’ agendas. Clearly, companies that focus on a sustainable ESG approach are set to emerge stronger.
### Exhibit 5 - Five Point Framework to Self-Assess ESG Maturity

<table>
<thead>
<tr>
<th>ESG maturity</th>
<th>Comply</th>
<th>Compete</th>
<th>Shape</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> ESG driven corporate purpose &amp; strategy</td>
<td>Limited integration of ESG with business strategy&lt;br&gt;Peripheral priority, Board focus on profit/expansion</td>
<td>ESG is a leadership priority with moderate strategy integration&lt;br&gt;Leadership focus on balancing profit &amp; purpose for material issues</td>
<td>Sustainability vision &amp; goals embedded in business strategy&lt;br&gt;Focus on sustainable business model, central to business strategy</td>
</tr>
<tr>
<td><strong>2</strong> ESG Governance model</td>
<td>Limited Board &amp; senior leadership oversight&lt;br&gt;Driven primarily by CSR foundation/department</td>
<td>Senior leadership driven ESG alongside “core operations”&lt;br&gt;Flagship initiatives lead by business; but no/limited ESG KPIs</td>
<td>Eco-system wide ESG agenda extending into value chain&lt;br&gt;ESG fully incorporated in KPIs &amp; performance management</td>
</tr>
<tr>
<td><strong>3</strong> Target oriented ESG roadmap</td>
<td>Opportunistic portfolio of sustainability initiatives&lt;br&gt;Ad-hoc selection of ESG initiatives; Qualitative reporting of achievements</td>
<td>Sustainability roadmap linked to leadership priorities&lt;br&gt;Leadership focus on balancing profit &amp; purpose for material issues</td>
<td>Business reimagined with sustainability at the core&lt;br&gt;Business use-case assessment; disclosure of all material topics incl. areas of underperformance</td>
</tr>
<tr>
<td><strong>4</strong> Stakeholder engagement</td>
<td>Limited engagement by leadership on ESG performance&lt;br&gt;Leadership engages on positive impact of ESG/CSR initiatives</td>
<td>Proactive engagement by C-Suite on ESG performance&lt;br&gt;Public commitments on material topics, regular updates to stakeholders</td>
<td>Holistic ESG narrative across stakeholder ecosystem&lt;br&gt;All stakeholders (internal &amp; external) mapped; Well defined process to incorporate stakeholder feedback</td>
</tr>
<tr>
<td><strong>5</strong> ESG as an impact lever</td>
<td>Avoids harmful impact of own operations on stakeholders&lt;br&gt;No impact disclosure</td>
<td>Creates positive value for stakeholders by pursuing ESG opportunities&lt;br&gt;Limited impact disclosure</td>
<td>Leverages sustainability as advantage in business model.&lt;br&gt;Contributes via solutions &amp; ESG Stewardship&lt;br&gt;Impact on society and the environment is quantified &amp; disclosed in monetary terms</td>
</tr>
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Source: BCG Analysis.
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Acknowledgments

The authors are grateful to the following colleagues for their assistance with the development of this report: Adrien Portafaix, Ankit Singhal, Aishwarya Jain, Siddhant Jain and Saumya Sen. The author would like to also thank Jamshed Daruwalla, Saroj Singh, Pradeep Hire and Ratna Soni for their contribution towards design and production of the report.

Special Acknowledgment

We would also like to thank Sangeeta Gupta, Senior Vice President at NASSCOM, for her continued support for the report. You may contact her by email at sangeeta@nasscom.in
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