SUSTAINABILITY SUPER TRENDS 2018

IMPLICATIONS FOR INDIAN COMPANIES



MESSAGE FROM THE DESK OF TERI CBS CO-CHAIR

There is growing appreciation that Sustainability is now central to core business objectives of any Enterprise. This calls for moving 'sustainability' from the generic 'check-the-box' approach to a strategic seat in the boardroom. Progressive businesses are increasingly becoming aware of the interconnections of environmental, social and economic issues. As more corporates understand the dynamics of this interdependence, sustainability considerations will become an integral part of commercial normality.

A sustainable business strategy can help companies to grow profitably while managing risks in a robust manner. The key is to better understand what sustainability means for companies and how it can add value and resilience to their operations.

TERI CBS engages with the core issue of what businesses must do to shape and lead in sustainability. The TERI CBS report thoughtfully captures the emerging trends that will drive corporate actions on sustainability in the days to come. I urge leaders and colleagues in the Indian industry, managing corporate sustainability programs, to reflect on the report findings while charting out their annual sustainability goals and plans.



R Mukundan Managing Director, Tata Chemicals Ltd



PREFACE

Sustainability is now critical for the survival of human civilization. For India, the challenge of sustainability is acute. Fortunately, Indian businesses are increasingly recognizing the importance of sustainability.

A medium term risk assessment for any business requires the factoring in off sustainability scenarios and implications for that business. The market is becoming more and more sensitive to sustainability concerns. Firms, which are seen as being environmentally responsible, see their brand value increase.

The frontiers of regulation are being pushed by civil society for the achievement of full sustainability. Businesses which anticipate the future and stay ahead of the curve in terms of compliance with higher standards of sustainability would prosper and grow. Businesses which fail to see the imperatives of sustainability will end up as losers.

Businesses need to internalize the new paradigm of sustainability for success in the market. This is also the key to ensuring a sustainable future for India.



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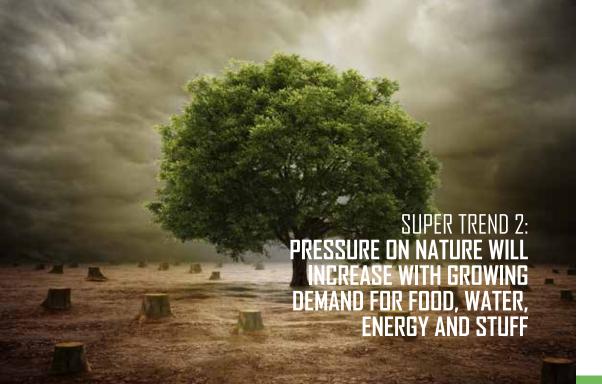


Without the potential for equal access to resources, opportunities, and good environments, envy can generate conflict between those who have and those who have not. Social equality demand companies going beyond providing goods and services and solving societal problems. From the distribution of profits to the prevalence of corporate tax abuse and unfair labour and wage practices, business behavior can affect inequality trends in both direct and indirect ways.

Addressing inequality requires businesses to reform business models (including corporate strategy, governance and ownership) towards more equitable profit distribution, pay proper taxes, disclose payments and advocate publicly for tax regimes that reduce inequality and assess inequality impacts across business functions, including remuneration, product impact, and supply chains.

Less than 1% population has 45% of worlds global wealth and 70% of the population has 3% of world's global wealth.





Water is a critical input for various industrial processes such as cooling and transportation, producing steam or electricity, sanitation and as a critical component of a firm's output.

The water scarcity in several states adversely impacted another large cap company, Grasim Industries, which announced shutdown of its pulp and fiber plant at Nagda in Madhya Pradesh. Reliance Industries had to shut down its Dahej plant in Gujarat due to non-availability of industrial water. Tata Coffee had to shut down their plant because of shortage of water. So, processed water to run plants will be difficult to source in the future.

Humankind's
ecological footprint
is one and a
half times the
earth's capacity to
sustainably provide
the resources to
meet that demand





Extreme events will be a new normal. Climate change is likely to increase the frequency and intensity of floods and droughts. Businesses need to worry about climate change. In the coming years, the amount of rainfall will increase but the number of rainy days will fall by half and so the more rainfall in a shorter time span will lead to floods and most of the plants are not designed for this kind of flooding. More water shortage-induced power shutdowns are expected in the coming decades unless steps are taken to reduce these risks.

Investment in low carbon growth models is required. Businesses that do not invest in low carbon growth models mat face forcible closure.



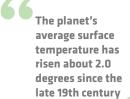
The planet's average surface temperature has risen about 2.0 degrees since the late 19th century



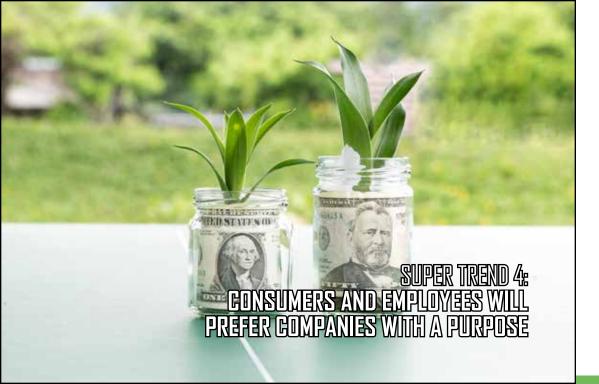


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A new international study by Unilever reveals that a third of consumers (33%) are now choosing to buy from brands they believe are doing social or environmental good. The study also suggests that the trend for purpose-led purchasing is greater among consumers in emerging economies than in developed markets (88% in India).

The experience with employees has shown that the younger generations are more inclined to be driven by a sense of purpose rather than pure monetary rewards. They demonstrate huge enthusiasm in areas like volunteering with non-profits. Participation in charitable activities increases employee morale and make employees more satisfied and productive. A study showed that if employees felt they are working towards a good cause, it increased their productivity by up to 30%.



Consumers today are not only paying more to companies that contribute to the common good but are also invariably encouraging others to embrace their purchasing preferences.





Several factors are driving the way investors view an investment portfolio. These include raising concerns about the effects of climate change that are leading citizens and governments to demand tougher environmental regulations for businesses, human right abuses and poor governance. Investors ensure full disclosures and reporting by companies failing which investors might turndown deals with companies that don't disclose enough data or don't disclose at all.

Increasingly investors are preferring investments in companies with sustainable and environmentally friendly practices and products/services. Companies are raising money through green bonds - debt instruments that raise money to fund projects on renewable energy, waste management, clean transport or sustainable land use. Indian firms like Indian Renewable Energy Development Agency Ltd and Greenko have in the past issued bonds that have been used for financing renewable energy.



processes.







































The Sustainable Development Goals (SDGs) are a universal framework aiming to tackle our most pressing social, economic and environmental challenges on the road to 2030. These ambitious goals were agreed upon by the world leaders in 2015 and included new areas such as climate change, economic inequality, innovation, sustainable consumption, peace and justice etc. Businesses can play a major role in achieving sustainability in several ways:

· Focus on areas where their business has the greatest negative or positive impact and ensure that their current activities do not have an undesirable impact on sustainable development outcomes

- Integrate SD concerns into their core operations and not just cherry pick SDGs based on a win-win opportunities.
- Address barriers that prevent sustainable businesses from flourishing and challenge the economic theories that have ruled their behavior till now.
- Improve the quality of reporting aligned with the SDGs in annual reports to strengthen transparency and accountability.

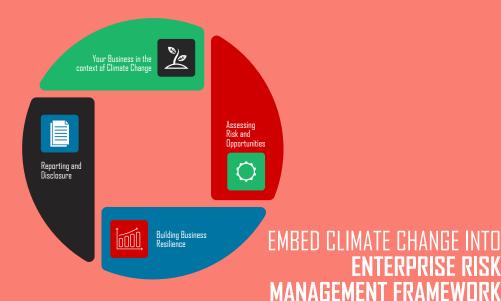




In the past, sustainability was something only company CSOs and CEOs were concerned about, but achieving sustainability should become everybody's business in the company. Instead of taking a top-down approach, a company should involve all employees in creating and customizing sustainability initiatives. This can be done by adding sustainability to departmental meeting agendas and by inviting employees to share ideas.

- Creating employee committees focused on sustainability. Sustainability-minded individuals should have a leading role in spearheading activities, planning ideas or even communicating sustainability efforts through blogs or newsletters.
- Creating a carpool incentive program that rewards ridesharing employees with prizes or preferred parking. Carpooling saves money and reduces carbon footprint, while also building company and reducing employee stress.
- Making achievement of sustainability targets a game.
 Companies can set targets for different departments and have them compete against each other.





Usually reports of companies provide adequate information on their sustainability efforts but often lack to report the impact of climate threats on financial performance. This is because slow-moving climate-related risks and their potential effects are often difficult to identify and quantify, and in many cases they do not align easily with corporate planning timelines.

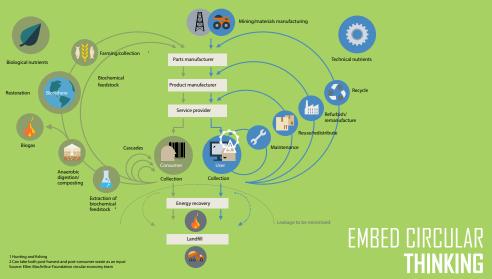
The recommendations report by the Task Force on Climate-related Financial Disclosures (TCFD) will help companies provide relevant, forward-looking information to investors, lenders, and insurance underwriters on the potential financial

impact of climate-related risks and opportunities, and what is being done to manage them.

Organizations should identify these climate risks and opportunities in the short, medium, and long term. Given their potential impact on the organization, climate-related risks must be integrated into the company's ongoing risk assessment and quantification processes and the board's oversight of risk management.



FIGURE 6 The circular economy—an industrial system that is restorative by design



The Circular economy represents an alternative to the linear take-make-consume-dispose economic model. Circular economy should become a widely studied discipline by corporates. The argument for a circular economy can move beyond environmental concerns or good corporate citizenship and be seen as an emerging opportunity and a profitable way of doing business. Implementation of circular economy would require the combination of a legislative approach with the establishment of the necessary infrastructure and restructuring of waste services.

According to TERI'S recent publication, by adopting circular economy, companies would help in keeping global warming less than two degree Celsius above pre-industrial levels, taking a step closer to meeting the NDC targets. It also has important implications on job creation and this livelihood development potential of circular economy needs to be explored more.



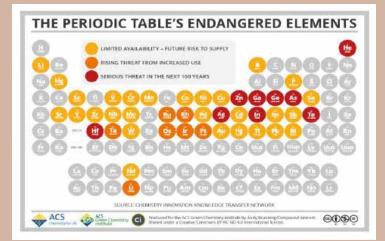


MAINSTREAM SUSTAINABILITY
IN SUPPLY CHAINS

The objective of supply chain sustainability is to create, protect and grow long-term environmental, social and economic value for all stakeholders involved in bringing products and services to market. The primary reason a company should start supply chain sustainability is to ensure compliance with laws and regulations & to support international principles for sustainable business conduct. Companies should also take such actions because society expects this and because there are business benefits of doing so.

A company can mainstream sustainability in supply chains by:

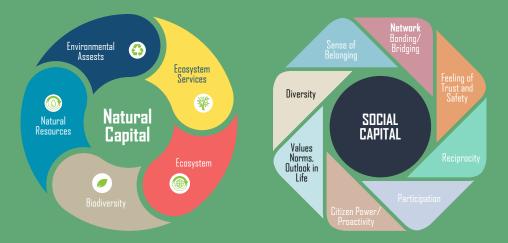
- · Establishing Vision and Objectives.
- Indulging in Planning and Team building.
- Creating a Roadmap with Goals.
- · Implementing the Programme.



SEARCH FOR ALTERNATIVE MATERIAL

The chemical elements which compose the Earth are finite. These elements are also essential to fuel all human needs. But presently, we are mining and redistributing these fundamental elements at such a rapid rate that many are already in short supply and will be completely exhausted within next few decades. To maintain a steady supply of these essential elements, there is an urgent need to reframe our present understanding of mining and consumption, along with environment and waste management.

A new period table was devised in 2011 to indicate which elements are at risk and may become scarce. Their analysis revealed that 44 out of 118 elements are facing limited supply, or are under the threat of becoming scarce or inaccessible. The list includes all of the rare earth elements, as well as zinc, gallium, germanium, helium, silver, and even phosphorus. At such a juncture, the companies will have to seek alternatives.



START VALUING AND INTERNALIZING YOUR SOCIAL AND ENVIRONMENTAL IMPACTS

Historically, externalities have had little or no impact on the cash flows or risk profiles of most companies. Companies have both created benefits for society for which they have not been fully compensated and have imposed costs on society for which they have not fully paid. Hence, externalities have been largely excluded from the measurement of corporate value. But the disconnect between corporate and societal value is rapidly disappearing.

Globalization, digital connectivity, the financial crisis, population growth, the explosion of the global middle class, climate change and other factors are

transforming the operating landscape for business. As a result, externalities should increasingly be internalized, bringing new opportunities and new risks with significant implications for corporate value creation. Internalization is the process through which a company's externalities become internalized i.e. through which a company is more fully rewarded for the societal benefits it creates and/or pays for more of the costs it inflicts on society.

Indian Business leading on Carbon Pricing			
Mahindra	\$ 10 per tonne of ${\rm CO_2}$		
Infosys	\$ 10.5 per tonne of ${ m CO_2}$		
Arvind Ltd	25% of electricity bill		
Dalmia Bharat	\$11 per tonne of CO,		













CONSIDER SETTING AN INTERNAL CARBON PRICE

An internal carbon price is a value that companies voluntarily ascribes in order to internalize the economic cost of greenhouse gas emissions. Companies can use it both as a risk management tool and as part of a decarbonisation strategy. Setting a price on carbon enables companies to test and assess the profitability of projects in different scenarios to make better decisions to future-proof their business. It can help companies enhance their global strategies to become more buoyant to regulatory climate policies and more favorable to emission reductions.

Internal carbon pricing will offer companies an incentive to shift investments to low-carbon alternatives. Some of the global companies that have announced carbon pricing are Unilever, Microsoft, Google and Novartis. Mahindra and Mahindra Ltd was the first Indian company to announce its internal carbon price of \$10 per ton of carbon emissions.



EXPLORE PERFORMANCE IMPROVEMENT OPPORTUNITIES

WATER USE EFFICIENCY:

Companies need to manage water resources for which it requires to look beyond the paradigm of in-situ water management. There is a need for formulation of an integrated water management framework with responsive corporate water policies and programs in order to respond to the potential challenges related to water within and outside the plant boundaries.

CARBON NEUTRALITY:

Companies should achieve carbon neutrality. This can be achieved by either balancing carbon dioxide released from burning fossil fuels with renewable energy or planting trees or by funding 'carbon projects.

ENERGY EFFICIENCY:

One of the most essential drivers for reducing the energy footprint is incorporating energy efficiency measures. Companies should create and implement energy efficiency policies.

LIFE CYCLE ASSESSMENT:

LCA enables the estimation of the cumulative environmental impacts resulting from all stages in the product life cycle. An LCA can help decision-makers select the product or process that result in the least impact to the environment.















BECOME MORE PRECISE AND TARGETED IN YOUR NON-FINANCIAL DISCLOSURES

Nonfinancial disclosures help in the measuring, monitoring and managing business performance.

- GRI (2018) reveals that about 63 Indian companies publish sustainability reports.
- SEBI prescribes the top 500 companies to have "Business Responsibility Report" as part of their Annual Report.
- Over 100 Indian companies have expressed their support for the TCFD recommendations
- As many as 31 Indian companies have made it to a global list for disclosing climate change related information to their investors



MAKE CSR **More Strategic** Businesses that want to stay relevant to new generations while increasing their own revenue and efficiency will benefit from embracing CSR. There is a need to make CSR more strategic. CSR determines the way forward as well as defines how the corporate should align its resources, skills and competencies to meet the goals and create value for the business and its stakeholders.

A sound CSR strategy should:

- Lay down work load, description and role of working team.
- Consult specialist for environmental and social risk assessment.
- Determine priorities before developing strategy.
- Align to overall mission and vision of business.



Collaborations are considered an effective and innovative instrument for realizing sustainable development. Businesses need to develop partnerships to mobilize and pool the various resources across different stakeholders.

The Plant Bottle project Ford worked on with Coca-Cola is an example of marshaling the power of two global brands for good. By working together, researchers at Ford and Coca-Cola were able to produce a fabric made using Coca-Cola's Plant Bottle packaging technology, which was derived partially from plants. The result was a car that has seat cushions, backs, headrests, door panel inserts and headliners made from 30 percent plant-based material. If Ford would've installed the same fabric in all of its vehicles, it would have displaced nearly four million pounds of petroleum-derived materials, as well as saved the equivalent of 295,000 gallons of gasoline and 6,000 barrels of oil.



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