SUSTAINABILITY: RACE TO SURVIVAL AND RACE TO EXISTENCE

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Introduction to Weather, Climate and Global warming

➢ What is Weather?

Weather describes the condition of the atmosphere over a short period of time e.g. from day to day or week to week, while climate describes average conditions over a longer period of time.

As an air mass warms, it becomes lighter and rises higher into the atmosphere. As an air mass cools, it becomes heavier and sinks. Pressure differences between masses of air generate winds, which tend to blow from high-pressure areas to areas of low pressure. Fast-moving, upper atmosphere winds known as jet streams help move weather systems around the world.

➢ What is Climate?

Weather describes the condition of the atmosphere over a short period of time e.g. from day to day or week to week, while climate describes average conditions over a longer period of time.

The climate of an area or country is known through the average weather over a long period of time. If an area has more dry days throughout the year than wet days, it would be described as a dry climate; a place which has more cold days than hot days would make it known to have a cold climate. (Ref. https://www.climateandweather.net/)

➢ Climate Change

"Any change in climate over time, whether due to natural variability or as a result of human activity" - IPCC

"A change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods" – UNFCCC

A change in the state of the climate that can be identified (e.g. using statistical tests)

➢ What is this global warming

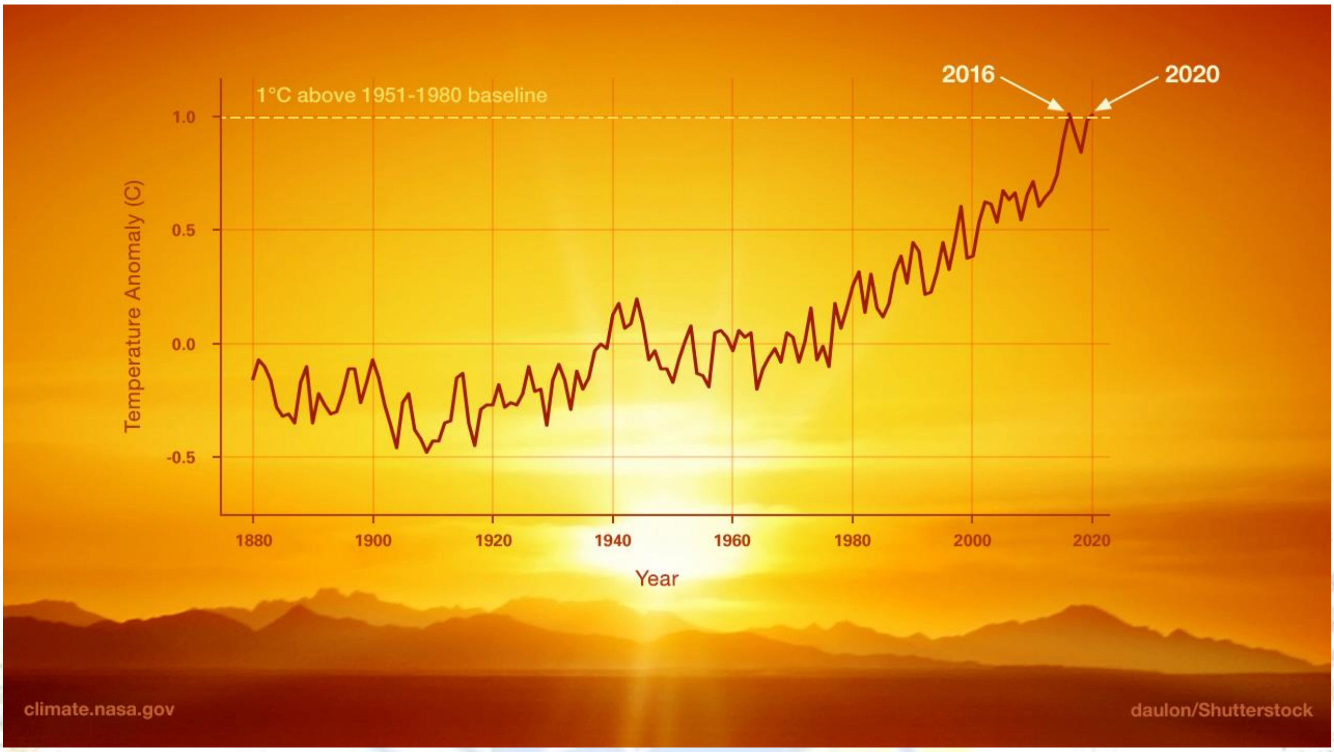
Global warming is the long-term heating of Earth's surface observed since the pre-industrial period (between 1850 and 1900) due to human activities, primarily fossil fuel burning, which increases heat-trapping greenhouse gas levels in Earth's atmosphere. This term is not interchangeable with the term "climate change."

Since the pre-industrial period, human activities are estimated to have increased Earth's global average temperature by about 1 degree Celsius (1.8 degrees Fahrenheit), a number that is currently increasing by more than 0.2 degrees Celsius (0.36 degrees Fahrenheit) per decade. The current warming trend is unequivocally the result of human activity since the 1950s and is proceeding at an unprecedented rate over millennia.

- It is the global temperature rise w.r.t to pre-industrial times

- Pre-industrial level: period before the start of the industrial revolution IPCC Special Report uses the reference period 1850–1900

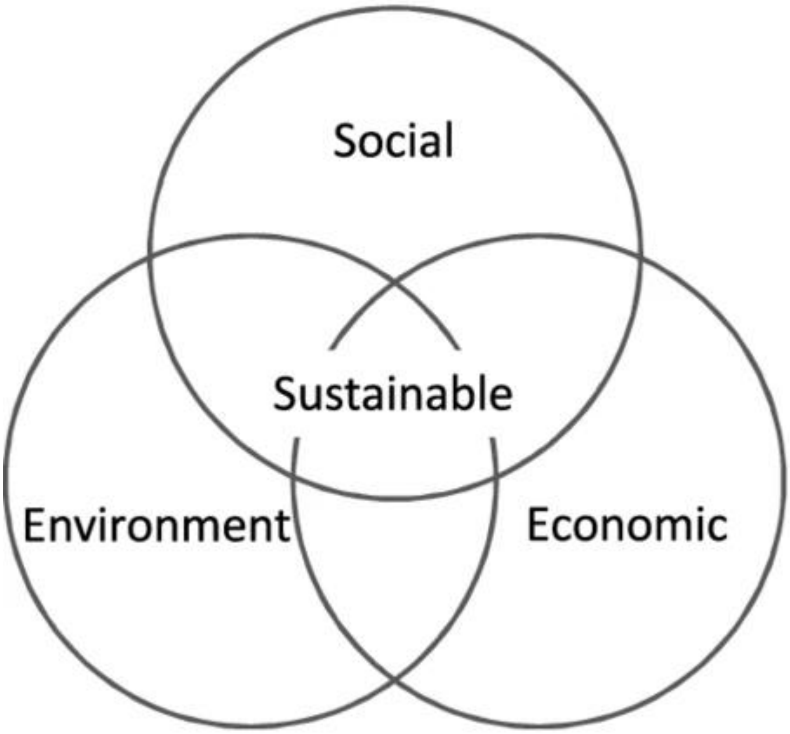
- Warming is defined as the increase in the 30-year global average of combined air temperature over land and water temperature at the ocean surface

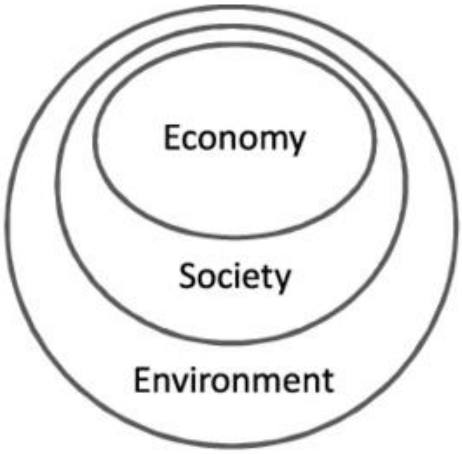


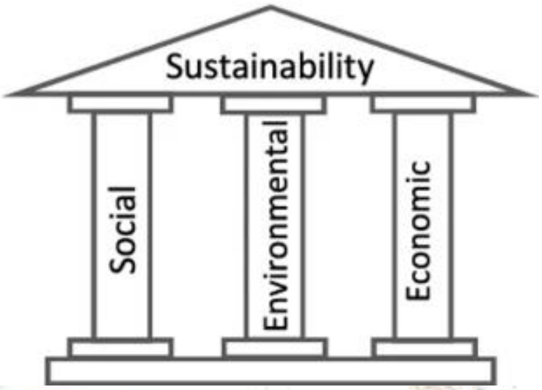
This graph illustrates the change in global surface temperature relative to 1951-1980 average temperatures, with the year 2020 tying with 2016 for hottest on record (Source: NASA's Goddard Institute for Space Studies). Learn more about global surface temperature here. Credit: NASA/JPL-Caltech

Sustainability:- In 1987, the United Nations Brundtland Commission defined sustainability as "meeting the needs of the present without compromising the ability of future generations to meet their own needs."

Sustainability is commonly described as having three dimensions (also called pillars): environmental, economic, and social.







UN Sustainable Development Goals (UNSDG)

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.

The 17 sustainable development goals (SDGs) to transform our world:

GOAL 1: No Poverty
GOAL 2: Zero Hunger
GOAL 3: Good Health and Well-being
GOAL 4: Quality Education
GOAL 5: Gender Equality
GOAL 6: Clean Water and Sanitation
GOAL 7: Affordable and Clean Energy
GOAL 8: Decent Work and Economic Growth
GOAL 9: Industry, Innovation and Infrastructure
GOAL 10: Reduced Inequality
GOAL 11: Sustainable Cities and Communities
GOAL 12: Responsible Consumption and Production
GOAL 13: Climate Action
GOAL 14: Life Below Water
GOAL 15: Life on Land
GOAL 16: Peace and Justice Strong Institutions
GOAL 17: Partnerships to achieve the Goal

RACE TO SURVIVAL AND RACE TO EXISTENCE

My own Perspective of sustainability and its implementation requires change of thoughts and need to stop being not so bothered and waiting for others to take actions, It is the responsibility of every single individual to act for making and maintaining our planet, better place to live now and in future too.

In a general, everyone is familiar with Sustainability is war against climate change and global warming to save mother Earth, which can have disastrous consequences, like the melting of glaciers, the disappearance of animal and plant species, forest fires and droughts, among others. And to utilising the resources in a way that our future generation can also meet their requirements and it's a war against climate change and global warming for survival of Humans and our existence on planet Earth, because if this continues then the consequences of climate change & global warming will make the planet Earth inhabitable, and our survival & existence will be questioned.
Every country, businesses, and individuals have to come together to fight against it by adaptation & mitigation keeping in view that we do not have any other Planet alike the Earth and we need to consider our existence and survival rather to save Earth as the planet Earth was there before humans and is with humans and will be without humans, as it is one of the planet of milky way galaxy but we humans have no any substitute alike mother Earth. So, for development rather Sustainable development change of prospect is needed and now we must think like it's a race to survival and race to existence.
(Dr Abhineet Kumar Jha)

ESG due diligence?

Generally, ESG due diligences analyse the compliance of the targets with national and international regulations as binding frameworks as well as non-codified stakeholder ESG-related norms and expectations. Further, it highlights the environmental, social, and governance status-quo of a company.

In short, ESG due diligence should provide data and insights into the success and value of a company's ESG performance and policies. Many investors are beginning to require ESG due diligence reports, which include differentiation between each of the ESG criteria.

For example,

Environmental

- **Pollution of air, buildings, land and water**
- **Impacts on ecosystems and biodiversity (e.g. deforestation and the use of pesticides)**
- **Exposure to extreme weather**
- **Energy efficiency strategy and carbon management**
- **Use of scarce resources**
- **Sourcing practices such as the use of responsibly sourced materials**
- **Management of waste and recycling**
- **Use of water, especially in water scarce regions**
- **Readiness to respond to changing regulations on environmental performance**

Social

- **Level of customer satisfaction**
- **Protection of customers' data and compliance with privacy laws**
- **Approach to human rights risks such as labor standards, child labor and modern slavery**
- **Strength of relationships with workers and communities**
- **Worker safety**
- **Supply chain risks, such as standards of working conditions in the supply chain**
- **Approach to diversity and equal opportunities**
- **Employee attraction and retention record**
- **Appropriate and lawful use of marketing communications**
- **Product safety**

Governance

- **Compliance with accounting standards**
- **Examples of anti-competitive behavior**
- **Audit Committee and Board structure**
- **Bribery, corruption and responsible tax record**
- **Executive remuneration**
- **Succession planning**

- **Lobbying record and political contributions**
- **Robustness of ESG risk management processes**
- **Presence of appropriate whistle-blower and grievance mechanisms**

How does the ESG due diligence process work?

The ESG due diligence process should start early, ideally at the same time as other due diligence processes. Since ESG due diligence can uncover deal breaker issues, such as child labour, it's best to uncover those issues as soon as possible. Delaying the process means considerable risks and opportunities for improvement might be missed or discovered too late.

To begin, create a checklist and template that guides decision making and identifies KPIs (Key Performance Indicators). This framework helps steer implementation and will shed light on all the ESG issues to consider. All parties involved should agree on a common ESG strategy, policy, and execution.

When establishing consensus on ESG principles, here are some steps to follow:

1. Begin with a desk review by collecting, organizing and merging all key documentation
2. Interview company stakeholders such as employees, board members, and C-suite executives
3. Run background checks on key personnel to uncover current or previous corruption
4. Consider conducting an accounting analysis or transaction testing
5. Perform on-site visits of existing facilities or new project sites if relevant
6. Conduct an ESG risk assessment

After this is completed, firms can generate an analysis and make recommendations. At the end of the ESG due diligence process everyone should have a clear understanding of the company's operations, business plan, along with ESG impacts and risks and how management plans to address or capitalize on those issues.

ESG (**Environmental, Social, and corporate Governance)** reporting

ESG reporting is the disclosure of environmental, social and corporate governance data. As with all disclosures, its purpose is to shed light on a company's ESG activities while improving investor transparency and inspiring other organizations to do the same. Reporting is also an effective way to demonstrate that you're meeting goals and that your ESG projects are genuine Since ESG reports summarize the qualitative and quantitative benefits of a company's ESG activities, investors can screen investments, align investments to their values, and avoid companies with the risk of environmental damage, social missteps, or corruption.

Investors are increasingly applying these non-financial factors as part of their analysis process to identify material risks and growth opportunities.

The current state of ESG reporting

On June 7th, 2021, G7 finance ministers announced a commitment to mandate climate reporting in line with the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD). While a universal standard does not yet exist, ESG reporting does exist in the form of regional reporting frameworks, voluntary standards, and national legislation that vary significantly. Oftentimes, organizations will include ESG reporting into their annual reports to demonstrate how sustainable the business is.

What do ESG reports include?

ESG reports include qualitative and quantitative information pertaining to its three key topics.

Environmental: What is an organization doing to be a steward of the environment?

The environmental umbrella covers:

- How a company is combatting climate change
- What a company is doing to reduce carbon emissions
- How the company is preserving biodiversity, improving air and water quality, combatting deforestation, or responsibly managing its waste
- How the company is responsibly using resources and its supply chain

- What the company is doing to reduce its emissions?

Social: What is an organization doing to improve lives? The social umbrella covers:

- How a company nurtures its people and workplace
- Gender, BIPOC, and LGBTQ+ inclusivity initiatives
- The company's employee engagement
- Data protection and privacy
- Community involvement
- Human rights and labour standards

Governance: What is an organization doing to stay ahead of corruption and ensure its investments remain sustainable in the future? The governance umbrella covers:

- A company's internal controls

Policies, principles and procedures governing leadership, board composition, executive compensation, audit committee structure, shareholder rights, bribery, lobbying, political contributions, and whistle-blower programs

ESG Industry Materiality Map:

ESG materiality assessment is a tool used to identify and prioritize ESG issues that are the most critical to your organization. You can think of this as an exercise in stakeholder engagement, as well. A materiality assessment is designed to help you identify and understand the relative importance of specific ESG and sustainability topics to your organization. This involves looking at a variety of factors through two particular lenses: potential impact on your organization and importance to stakeholders.

Materiality matrix:

The materiality matrix showcases these sustainability issues by contrasting two dimensions. One is the importance of the issue to the organization regarding the expected influence, this issue will have on the organization's success. The second is the importance or attractiveness of the issue to stakeholders and the likely influence they might have, as a result of the working efforts (or lack of them) on this issue, on business success.

Notable ESG frameworks

Currently, companies have a long leash when it comes to ESG disclosure. In many cases they are free to present ESG information in a way they consider to be most useful. That said, the use of recognized frameworks is recommended. Here are just a few:

Global Reporting Initiative (GRI) :

Global Reporting Initiative (GRI) is a framework that helps companies disclose both the positive and negative impact their business has on the environment, the economy, and society. GRI's focus is on helping companies communicate their ESG impacts and how they manage these impacts. GRI is the most referenced ESG framework among all industries, receiving 83% of total references to ESG frameworks.

European Sustainability Reporting Standards (ESRS)

The CSRD, which mandates the use of the ESRS for some 50,000 companies, was adopted on 10 November 2022 by the European Parliament. According to the European Parliament's communication, the Council of the European Union is expected to adopt the proposal on 28 November and it is expected that the directive will enter into force at the beginning of next year at the latest.

The Corporate Sustainability Reporting Directive is introducing legislation to significantly expand mandatory sustainability disclosure requirements for companies operating in the EU, which will replace the current Non-Financial Reporting Directive.

The disclosure requirements under the CSRD will apply to an estimated 50,000 companies, from January 2024. All large companies governed by the law of or established in an EU member state, and all European stock exchange-listed companies (except micro-companies), as well as SMEs, are within the scope. Companies not in the EU but have securities on EU-regulated markets are also in scope. A large company is defined as meeting two of the following criteria:

- €40 million in net turnover
- €20 million on the balance sheet
- 250 or more employees

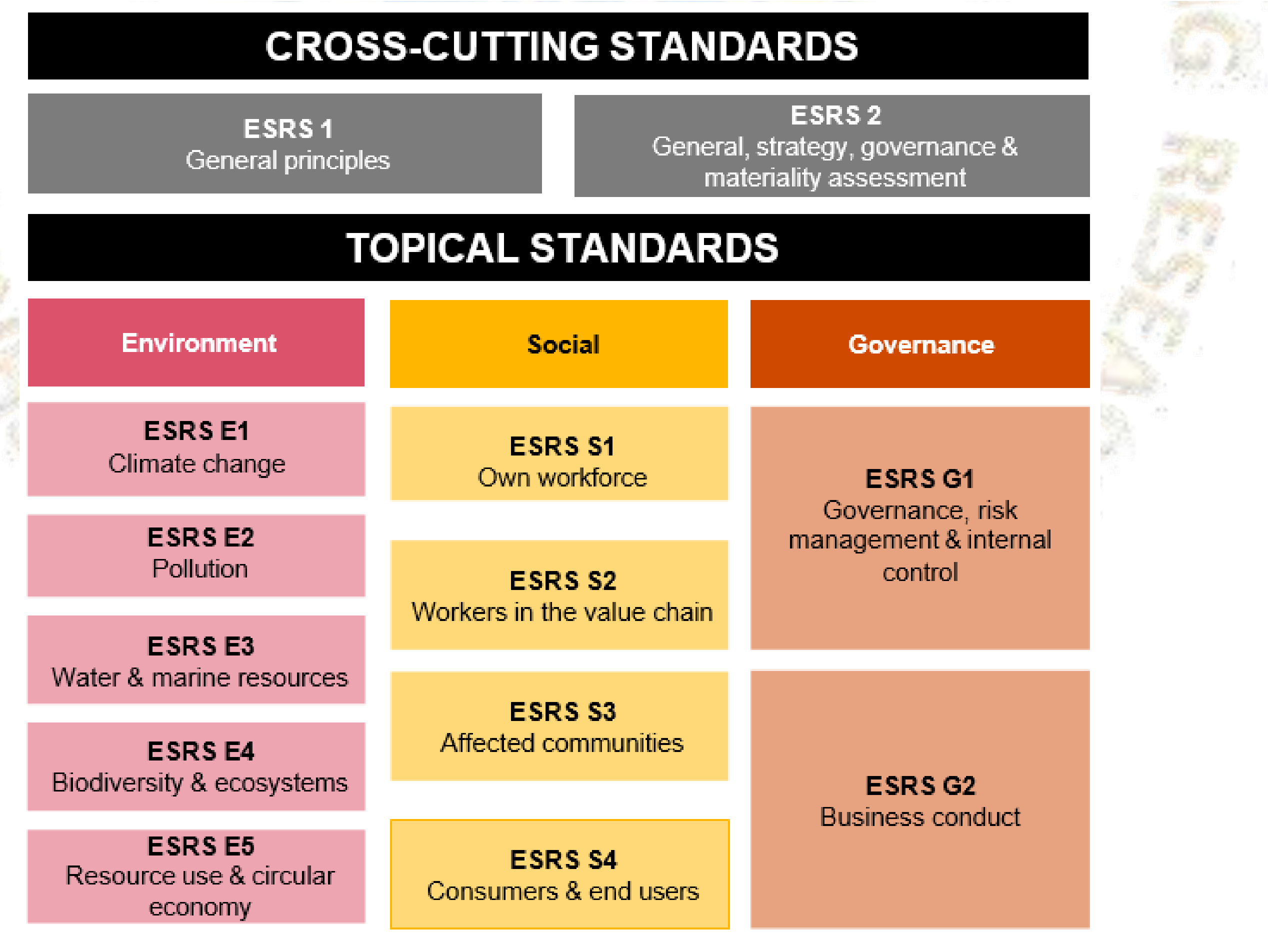
From January 2028, the CSRD will also apply to non-EU undertakings that generate a net turnover of over €150,000,000 in the EU and have an EU branch office with a net turnover of at least €40 million in the EU, or a large or listed EU subsidiary. However, these companies will only have to supply impact-related information, for which a special standard will be developed. GRI is advocating for the acceptance of GRI as equivalent to the use of these new standards.

The EU Taxonomy regulation is a classification system for economic activities to determine which are sustainable and prevent greenwashing. It provides clarification on the assessment process and disclosure of sustainable economic activities.
The system includes social considerations through the minimum social safeguards requirements. To be classified as sustainable, economic activities must substantially contribute to one of the following environmental objectives, and DISH to the other five:
1. Climate change mitigation
2. Climate change adaptation
3. Water protection
4. Circular economy
5. Pollution prevention
6. Biodiversity and ecosystems

Who will report on the EU Taxonomy?
- Investors who want to align with Sustainable
- Finance Disclosure Regulation ("SFDR") Article 9 are required to report on the EU Taxonomy.

Reporting is voluntary for all other financial market participants
- Companies in scope of the EU Non-Financial

Reporting Directive ("NFRD")



Examples of information to be reported per the European Commission's CSRD proposal.

Sustainability Accounting Standards Board (SASB) :The Sustainability Accounting Standards Board (SASB) are a set of standards that help companies collect and share ESG data that affect the firm's business decisions and explain the financial impact of sustainability. It's worth noting that the GRI and SASB joined forces in 2020 and have since published a guide to how organizations can use the two standards together. GRI is known for its high-level scope, while SASB gives companies industry-specific guidelines using a financial lens.

The Task Force on Climate-related Financial Disclosures (TCFD): The Task Force on Climate-related Financial Disclosures (TCFD) is a framework that provides principles-based recommendations for managing and reporting focused primarily on climate risks. It focuses most on financial risk disclosures associated with climate to aid banks, shareholders and investors scrutinize an organization's ESG efforts.

Carbon Disclosure Project (CDP): Carbon Disclosure Project (CDP) is an international non-profit focused on creating standards that companies can use to disclosure information pertaining to GHG emissions, water use, and forestry. This set of standards has helped companies as well as city, state and regional government organizations disclose decarbonisation and environmental protection efforts.

Streamlined Energy and Carbon Reporting (SECR): Streamlined Energy and Carbon Reporting (SECR) is a framework created by the UK Government that guides organizations on how to report on their carbon emissions and energy usage on an annual basis. The goal of the framework is to streamline existing carbon reporting frameworks for greater transparency and comparability, while making it easier for companies to monitor and reduce their carbon emissions.

The Workforce Disclosure Initiative (WDI): The Workforce Disclosure Initiative (WDI) is an investor collective that formed to help companies communicate labour practices to stakeholders. It aims to improve transparency and accountability on workforce issues by providing companies with a framework for disclosing comprehensive and comparable workforce data.

Business responsibility and sustainability reporting (BRSR):

SEBI, on 15th May, 2021 introduced new reporting requirements for sustainability by listed entities. This new Business Responsibility and Sustainability Report (BRSR) will replace the existing Business Responsibility Report (BRR). It will be applicable to the top 1,000 listed entities (by market cap), with voluntary implementation for FY22 (year ending March 2022) and mandatory implementation FY23 onwards. The BRSR seeks disclosures from listed entities on their performance against the nine principles of the 'National Guidelines on Responsible Business Conduct' (NGBRCs) and reporting under each principle is divided into essential and leadership indicators. The essential indicators are required to be reported on a mandatory basis while the reporting of leadership indicators is on a voluntary basis. Listed entities should endeavor to report the leadership indictors also.

The listed entities already preparing and disclosing sustainability reports based on internationally accepted reporting frameworks (such as GRI, SASB, TCFD or Integrated Reporting) may cross-reference the disclosures made under such framework to the disclosures sought under the BRSR.

Elements of BRSR:

The BRSR is intended towards having quantitative and standardized disclosures on ESG parameters to enable comparability across companies, sectors and time. Such disclosures will be helpful for investors to make better investment decisions. The BRSR shall also enable companies to engage more meaningfully with their stakeholders, by encouraging them to look beyond financials and towards social and environmental impacts.

In terms of the aforesaid amendment, with effect from the financial year 2022-2023, filing of BRSR shall be mandatory for the top 1000 listed companies (by market capitalization) and shall replace the existing BRR. Filing of BRSR is voluntary for the financial year 2021-22.

The Principle further emphasizes that the governance structure of the business should ensure this, in line with SDG 16.

Core Elements

1. The governance structure should develop and put in place structures, policies and procedures that promote this Principle, prevent its contravention and effect prompt and fair action against any transgressions.
2. The Governance Structure should ensure that the Principles of these Guidelines are understood, adopted and implemented throughout the operations of their business.
3. The Governance Structure should also promote the adoption of this Principle across the value chain of their business.
4. The Governance Structure should disclose and communicate transparently and enable access to information about the policies, procedures, performance (financial and non-financial), and decisions of their enterprise, that impact their stakeholders, especially those that are most at risk to business impacts and communities that are vulnerable and marginalized.
5. The Governance Structure should take responsibility for meeting all its statutory obligations in line with the spirit of the law, enabling fair competition and ensuring it treats all its stakeholders in an equitable manner.
6. The Governance Structure should ensure that the business avoids complicity with the actions of any third party that violates any of the principles contained in these Guidelines.
7. The Governance Structure should put in place appropriate structures, policies and procedures to address conflicts of interest involving its members, employees and business partners.
8. The Governance Structure should put in place appropriate structures, codes, policies, and procedures to ensure that the business does not engage in illegal and abusive practices, bribery and corruption, and ensure timely and fair action in case such transgressions are detected.
9. The Governance Structure should ensure that the business contributes to public finances by timely and complete payment of all applicable taxes in the letter and spirit of the laws and regulations governing such payments.

SDGs Mapped Against NGRBC (national guidelines on responsible business conduct)

SDG	NGRBC Principles
1 No Poverty	P3, P4, P8
2 Zero Hunger	P2, P6, P7 P8, P9
3 Good Health and Well-Being	P3, P6, P8
4 Quality Education	P3, P8, P9
5 Gender Equality	P3, P4, P5, P8
6 Clean Water and Sanitation	P2, P6, P8
7 Affordable and Clean Energy	P2, P6, P7
8 Decent Work and Economic Growth	P2, P3, P5, P8
9 Industry, Innovation and Infrastructure	P3, P4, P8
10 Reduced Inequalities	P2, P6, P7
11 Sustainable Cities and Communities	P3, P4, P7, P8
12 Responsible Consumption and Production	P2, P6, P9
13 Climate Action	P2, P6, P7, P8
14 Life Below Water	P2, P6, P7 P8. P9
15 Life on Land	P2, P6, P7, P8, P9
16 Peace, Justice and Strong Institutions	P1, P3, P4, P5, P8
17 Partnerships for the Goals	P1, P7, P8

The chart demonstrates the alignment between the SDGs and relevant Principles of the NGRBC. It may be noted that this is indicative.

Relation between GRI Disclosure and SDG

GRI disclosure		Related SDG
GRI 102: General Disclosures		
Organizational profile		
102-1	Name of the organization	
102-2	Activities, brands, products, and services	
102-3	Location of the headquarters	
102-4	Location of operations	
102-5	Report the nature of ownership and legal form	
102-6	Markets served	
102-7	Scale of the organization	
102-8	Information on employees and workers	8, 10

102-9	Supply chain	
102-10	Significant changes to the organization and its supply chain	
102-11	Precautionary Principle of approach	
102-12	External initiatives	
GRI disclosure		Related SDGs
102-13	Membership of associations	
Strategy		
102-14	Statement from senior decision-maker	
102-15	Key impacts, risks and opportunities	
Ethics and integrity		
102-16	Values, principles, standards and norms of behaviour	16
102-17	Mechanisms for advice and concerns about ethics	16
Governance		
102-18	Governance structure	
102-19	Delegating authority	
102-20	Executive-level responsibility for economic, environmental and social topics	
GRI disclosure		Related SDGs
102-21	Consulting stakeholders on economic, environmental and social topics	16
102-22	Composition of the highest governance body and its committees	
102-23	Chair of the highest governance body	16
102-24	Nominating and selecting the highest governance body	
102-26	Role of highest governance body in setting purpose, values, and strategy	
102-27	Collective knowledge of highest governance body	4
102-28	Evaluating the highest governance body's performance	

102-29	Identifying and managing economic, environmental, and social impacts	
102-30	Effectiveness of risk management processes	
102-31	Review of economic, environmental, and social topics	
102-32	Highest governance body's role in sustainability reporting	
102-33	Communicating critical concerns	
102-34	Nature and total number of critical concerns	
102-35	Remuneration policies	
102-36	Process for determining remuneration	
Stakeholder engagement		
GRI disclosure		Related SDGs
102-40	List of stakeholder groups	
102-41	Collective bargaining agreements	8
102-42	Identifying and selecting stakeholders	
102-43	Approach to stakeholder engagement	
102-44	Key topics and concerns raised	
GRI disclosure		Related SDGs
102-45	Entities included in the consolidated financial statements	
102-46	Defining the report content and the topic boundaries	
102-47	List of material topics	
102-48	Restatements of information	
102-49	Changes in reporting	
102-50	Reporting period	
102-51	Date of most recent report	
102-52	Reporting cycle	
102-53	Contact point for questions regarding the report	

102-54	Claims of reporting in accordance with the GRI Standards	
GRI disclosure		Related SDGs
GRI 102: General Disclosures		
Organizational profile		
102-55	The GRI content index	
102-56	External assurance	
GRI 103: Management Approach		
GRI disclosure		Related SDGs
103-1	Explanation of the material topic and its boundary	
103-2	The management approach and its components	
103-3	Evaluation of the management approach	
GRI standard and disclosure		
GRI 201: Economic performance		
GRI disclosure		Related SDGs
201-1	Direct economic value generated and distributed	2, 5, 7, 8, 9
201-2	Financial implications and other risks and opportunities for the organization's activities due to climate change	
GRI 203: Indirect economic impacts		
GRI disclosure		Related SDGs
203-1	Infrastructure investments and services supported	2, 5, 7, 9
203-2	Significant indirect economic impacts	1, 2, 3, 8, 9, 10, 17
Own metric	Helping our customers to connect the next billion measured by number of subscriptions in Nokia radio customers' networks	1–17
Procurement practices		

Own metric	Procurement practices	1, 8
GRI 205: Anti-corruption 2016		
205-3	Confirmed incidents of corruption and actions taken	16
GRI standard and disclosure		
GRI disclosure		Related SDGs
GRI 206: Anti-competitive behavior		
206-1	Total number of legal actions for anti-competitive behavior, anti- trust, and monopoly practices and their outcomes	16
GRI 301: Materials		
301-1	Materials used by weight or volume	8, 12
301-3	Reclaimed products and their packaging materials	8, 12
GRI 302: Energy		
302-1	Energy consumption within the organization	7, 8, 12, 13
302-2	Energy consumption outside of the organization	7, 8, 12, 13
302-3	Energy intensity	7, 8, 12, 13
GRI standard and disclosure		
GRI disclosure		Related SDGs
302-4	Reduction of energy consumption	7, 8, 12, 13
302-5	Reduction of energy requirements of products and services	7, 8, 12, 13
GRI 305: Emissions		
305-1	Direct (Scope 1) greenhouse gas emissions	3, 12, 13, 14, 15
305-2	Energy indirect (Scope 2) greenhouse gas emissions	3, 12, 13, 14, 15
305-3	Other indirect (Scope 3) greenhouse gas emissions	3, 12, 13, 14, 15
305-4	Greenhouse gas emissions intensity	13, 14, 15
305-5	Reduction of greenhouse gas emissions	13, 14, 15

305-7	Nitrogen oxides (NOX), sulphur oxides (SOX), and other significant air emissions	3, 12, 15
GRI 306: Effluents and waste		
306-2	Waste by type and disposal method	3, 12
GRI 307: Environmental compliance		
307-1	Non-compliance with environmental laws and regulations	16
GRI 308: Supplier environmental assessment		
GRI standard and disclosure		
308-1	New suppliers that were screened using environmental criteria	
308-2	Negative environmental impacts in the supply chain and actions taken	
GRI 401: Employment		
GRI disclosure		Related SDGs
401-1	New employee hires and employee turnover	5, 8, 10
GRI 402: Labor/management relations		
402-1	Minimum notice periods regarding operational changes	8
GRI 403: Occupational health & safety		
GRI disclosure		Related SDGs
403-1	Occupational health and safety management system	
403-2	Hazard identification, risk assessment, and incident investigation	
403-3	Occupational health services	
403-4	Worker participation, consultation, and communication on occupational health and safety	

403-5	Worker training on occupational health and safety	
403-6	Promotion of worker health	
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	
403-8	Workers covered by an occupational health and safety management system	
403-9	Work-related injuries	3, 8
GRI 404: Training and education		
404-1	Average hours of training per year per employee	4, 5, 8, 10
404-2	Programs for upgrading employee skills and transition assistance programs	8
404-3	Percentage of employees receiving regular performance and career development reviews	8, 10
GRI 405: Diversity and equal opportunity		
405-1	Diversity of governance bodies and employees	5, 8
GRI standard and disclosure		
GRI disclosure		Related SDGs
405-2	Ratio of basic salary and remuneration of men to women	5, 8, 10
GRI 406: Non-discrimination 2016		
406-1	Incidents of discrimination and corrective actions taken	5, 8, 16
GRI 407: Freedom of association and collective bargaining		
Own metric	Management of Freedom of association and collective bargaining in our supply chain	8
GRI 408: Child labor		
408-1	Operations and suppliers at significant risk for incidents of child labour	8, 16

GRI 409: Forced or compulsory labor		
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	8
GRI standard and disclosure		
GRI 412: Human rights assessment		
GRI disclosure		Related SDGs
412-2	Employee training on human rights policies or procedures	
GRI 414: Supplier social assessment		
414-1	New suppliers that were screened using social criteria	5, 8, 16
414-2	Negative social impacts in the supply chain and actions taken	5, 8, 16
GRI 416: Customer health and safety		
416-1	Assessment of the health and safety impacts of product and service categories	
GRI 418: Customer privacy		
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	16
GRI 419: Socioeconomic compliance		
419-1	Non-compliance with laws and regulations in the social and economic area	16

SASB Index: SASB SUSTAINABILITY DISCLOSURE TOPICS AND ACCOUNTING METRICS

Topic	Accounting Metric	Category	Unit of Measure	Code	Disclosure location
Energy Management inn Manufacturing	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage	TC-SC-130a.1	Environment/Energy Management
Water Management	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m^3), Percentage (%)	TC-SC-140a.1	Environment/Water Management
Waste Management	Amount of hazardous waste from manufacturing, percentage recycled	Quantitative	Metric tons (t), Percentage	TC-SC-150a.1	Environment/Waste Management
Employee Health & Safety	Description of efforts to assess, monitor, and reduce exposure of employees to human health hazards.	Discussion and Analysis	n/a	TC-SC-320a.1	People/Employee Health, Safety & Wellness
	Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations	Quantitative	Reporting currency	TC-SC-320a.2	People/Employee Health, Safety & Wellness

Material Sourcing	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	n/a	TC-SC-440a.1	Supply Chain/ Responsible Use of Materials and Chemicals in our Products
Intellectual Property Protection & Competitive Behaviour	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behaviour regulations	Quantitative	Reporting currency	TC-SC-520a.1	Supply Chain/ Intellectual Property and Competitive Behaviour

TCFD recommendations

The TCFD has developed a framework to help public companies and other organizations more effectively disclose climate-related risks and opportunities through their existing reporting processes.

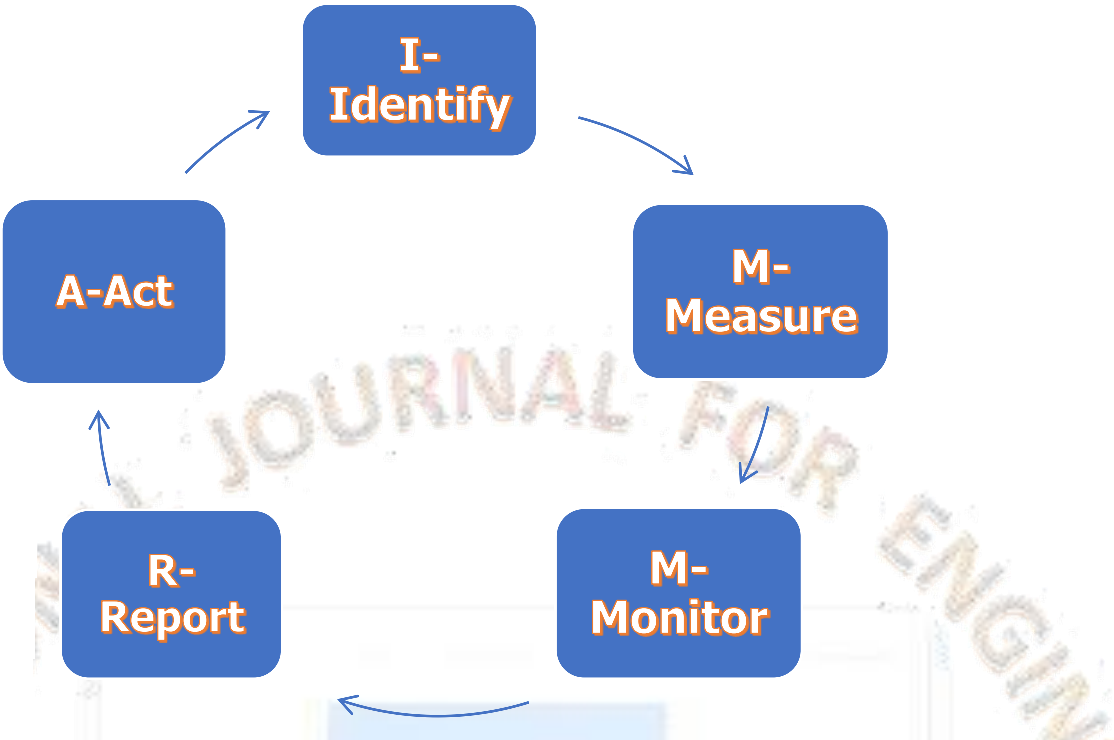
Recommendations and Supporting Recommended Disclosures

Governance	Strategy	Risk Management	Metrics and Targets
Disclose the organization's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	Disclose how the organization identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
Recommended Disclosures	**Recommended Disclosures**	**Recommended Disclosures**	**Recommended Disclosures**
a) Describe the board's oversight of climate-related risks and opportunities.	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	a) Describe the organization's processes for identifying and assessing climate-related risks.	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
b) Describe management's role in assessing and managing climate-related risks and opportunities.	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	b) Describe the organization's processes for managing climate-related risks.	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

Climate-Related Scenarios

One of the Task Force's key recommended disclosures focuses on the resilience of an organization's strategy, taking into consideration different climate-related scenarios, including a 2° Celsius or lower scenario. An organization's disclosure of how its strategies might change to address potential climate-related risks and opportunities is a key step to better understanding the potential implications of climate change on the organization. The Task Force recognizes the use of scenarios in assessing climate-related issues and their potential financial implications is relatively recent and practices will evolve over time, but believes such analysis is important for improving the disclosure of decision-useful, climate-related financial information.

IMMRA (Identify-Measure-Monitor-Report-Act) for sustainability:



Sustainability seems to be on every executive's lips today. Decision-making without data is like going on a hike up a mountain without a map to show you where you are going or how far you have gone. This leaves companies vulnerable.

To overcome these challenges, it's important for companies to focus on measuring their Environmental, Social and Governance (ESG) performance. Effective ESG measurement is not easy – it concerns data, tools and methodologies necessary to track, manage and disclose company performance.

Alike other international standards (ISOs) is using an iterative design and management method in business for the control and continual improvement of processes and products.

Similarly, **Dr Abhineet Kumar Jha emphasize IMMRA Cycle** which can be considered for Sustainability/ESG/GHG reporting, an interactive and cyclic process known as **IMMRA** (**Identify-Measure-Monitor-Report-Act)** for effective reporting and continual improvement**.**

Organisations who are committed or want to participate and show their commitment toward triple bottom line and Sustainable development can implement the cycle or can use this cycle as a tool.

Identify: - The first step in any reporting or communication is to identify what is to be reported which are relevant to the organisation. Identify and prioritize ESG issues that are the most critical to organization. Identify and understand the relative importance of specific ESG and sustainability topics to the organization looking at a variety of factors through two particular prospective: potential impact on your organization and importance to stakeholders. Also identify the suitable reporting framework for the organisation.

Measure: Investors, customers, employees, and others are demanding transparency and accountability around ESG metrics, goals, and progress. But for many reasons, the results are somewhat disappointing. This is largely because Businesses have difficulty in operationalising and measuring what sustainability means in practice.

The metrics organisation choose to disclose should clearly align with the values and purpose of organization and measuring relevant and key KPIs of businesses for communicating their Environmental Social and governance performance and commitments to stakeholders.

Monitor: Monitoring the ESG criteria most relevant to the organisation and reporting findings is the best way to show the progress made toward ESG goals. Measuring all KPIs and reporting will set companies as stewards for responsible ESG. ESG reporting shows investors the company's environmental, social, and corporate governance goals, and how it's handling potential issues in these areas.

Monitoring all the parameters is very important in providing more transparency & accuracy toward disclosure and measurements to the stakeholders and it ensure the quality of disclosure.

Regularly revisit the process of examining or monitoring is key to continuous improvement is a key part of ESG disclosures. Once the reporting program is in place, include updates in subsequent reports to demonstrate the commitment to continuous improvement and to share progress on the identified material topics.

Report: Reporting on ESG with respect to different scopes and in different categories provides transparency on where the impacts have occurred within a business's operations and make or plan a strategy to mitigate it to meet the management commitments and goal as well as to meet the requirement of the stakeholders. ESG reporting shows investors the company's environmental, social, and corporate governance goals, and how it's handling potential issues in these areas. with the help of transparent ESG reporting, organizations can track progress, set benchmarks, and communicate to the stakeholders, when their ESG goals have been met.

For example:

considering diversity and inclusion in hiring process and reporting it, sets the organisation to showcase its commitment against fair & equitable workplace, which in turns improve the brand loyalty and image in the market and diverse workforce can drive better outcomes and improve business growth, reporting on it gives investors a chance to make an informed decision on whether they want to invest in your company.

A recent study by Shopify revealed that consumers are 4x more likely to purchase from a company with strong brand values. And 77% are concerned about the environmental impact of the products they buy.

Act to Improve: Act on all relevant factors affecting ESG to reduce factor affecting ESG as much as possible and implementation of best practices for improvement. Action is the need of time to mitigate environmental impact and to improve environmental performance of the businesses. Act today to secure liveable future. Mitigation in industry can improve Environmental, Social and Governance impacts and increase employment and business opportunities.

Conclusion

Transparency encourages accountability, and both are essential for collaboration and developing solutions. ESG and GHG reporting is a voluntary in many countries, helping businesses to communicate their commitment towards Environment, people, and the community. However, the ESG reporting is quickly evolving, and rapidly increasing with increasing demands for global regulations and becoming mandatory reporting in many countries.

Measuring the GHG emission or carbon footprint is a major and a key KPI for businesses for communicating their Environmental impact and commitments towards sustainable development to stakeholders and help in improving ESG ratings. To meet the requirement of the stakeholders, transparent reporting is very critical which helps in tracking progress, set benchmarks, and communicate to the stakeholders, when their ESG goals have been met.

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