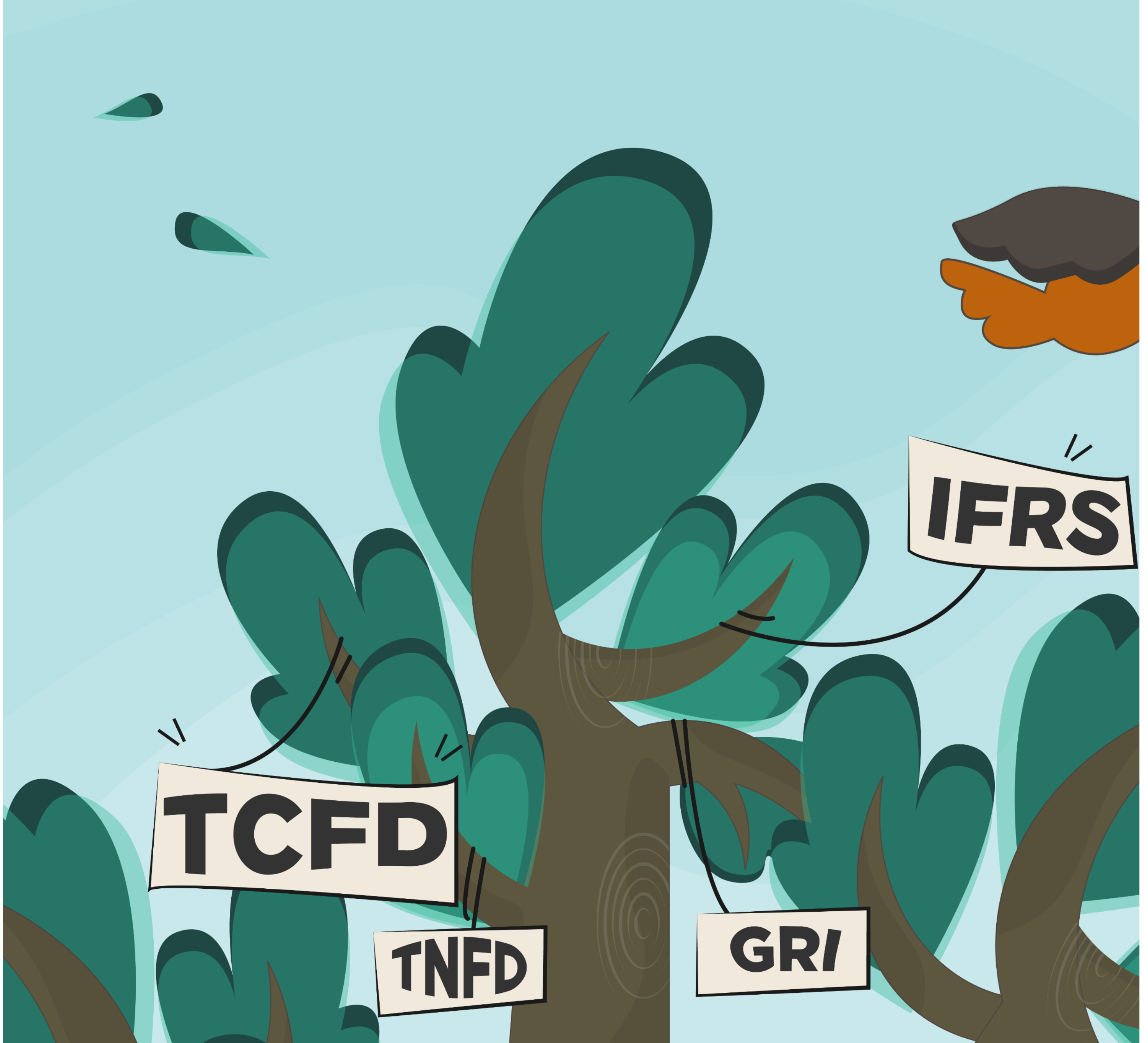
CENTRE FOR A SMART FUTURE

| DECEMBER 2024 |

Acronyms and Accountability: Navigating Corporate Environmental Disclosures

A KNOWLEDGE PRIMER



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Abbreviations and Acronyms

CA Sri Lanka	Chartered Accountants of Sri Lanka
CBSL	Central Bank of Sri Lanka
CDP	Carbon Disclosure Project[1]
CDSB	Climate Disclosure Standards Board
CSE	Colombo Stock Exchange
CSR	Corporate Social Responsibility
CSRD	Corporate Sustainability Reporting Directive
ESG	Environmental, Social and Governance
ESRS	European Sustainability Reporting Standards
GRI	Global Reporting Initiative
IASB	International Accounting Standards Board
IASC	International Accounting Standards Committee
IFRS	International Financial Reporting Standards
IIRC	International Integrated Reporting Council
IR	Integrated Report
IRF	Integrated Reporting Framework
ISSB	International Sustainability Standards Board
MoE	Ministry of Environment
NGRS	National Green Reporting System
SASB	Sustainability Accounting Standards Board
SBE	Specified Business Enterprise
SDG	Sustainable Development Goal
SEC	Securities and Exchange Commission
SET	Stock Exchange of Thailand
SGX	Singapore Exchange
SGX RegCo	Singapore Exchange Regulation
SLAS, SLFRS	Sri Lanka Accounting Standards
SME	Small and Medium-sized Enterprise
SRAC	Sustainability Reporting Advisory Committee
TCFD	Task Force on Climate-related Financial Disclosures
TNFD	Task Force on Nature-related Financial Disclosures
UN	United Nations

[1] Established as Carbon Disclosure Project in 2000, but shortened to 'CDP' in 2013 to broaden the scope of environmental disclosures.

1. Executive Summary

In an era defined by climate urgency and a global shift toward sustainability, businesses face increasing pressure to disclose their environmental impacts transparently. Corporate environmental disclosures have emerged as critical tools for measuring, managing, and communicating a company's environmental footprint. From carbon accounting frameworks to sustainability reporting standards and disclosure regulations, an alphabet soup of acronyms governs the landscape of corporate accountability. These mechanisms not only guide companies in tracking their environmental performance but also provide stakeholders - investors, regulators, and consumers - with vital insights into corporate sustainability practices. Yet, navigating these complex and often overlapping standards can be a daunting task for organisations, especially as regulations tighten and stakeholders demand more sustainability-related information.

This knowledge primer delves into the essentials of corporate environmental disclosures, offering a comprehensive overview of their evolution, rationale, and implications. It traces the evolution of non-financial corporate disclosures, highlights the economic drivers behind their adoption, and outlines their expected outcomes. It examines the motivations and forces shaping these practices, with particular emphasis on the Global South scenario. The primer also explores voluntary and mandatory disclosure requirements, analysing the transition from voluntary initiatives to mandatory standards, the pros and cons of such mandates, and the role of the ‘comply-or-explain’ model in balancing flexibility and accountability. The primer reviews key reporting frameworks and standards such as the Global Reporting Initiative (GRI), Task Force on Climate-related Financial Disclosures (TCFD), and emerging frameworks like the Task Force on Nature-related Financial Disclosures (TNFD) and the International Financial Reporting Standards (IFRS) Sustainability Disclosure Standards, while addressing efforts to harmonise these systems. It further contextualises global practices by discussing sustainability reporting practices across comparable nations, drawing key lessons from their experiences. Finally, the primer focuses on Sri Lanka's environmental disclosure ecosystem, analysing its current landscape, motivations, and applicable frameworks, providing a localised perspective within a global conversation.

This knowledge primer aims to understand the multi-faceted realm of corporate environmental disclosures, examining their role in fostering accountability of companies as well as challenges posed by the complex landscape for various organisations. Ultimately, through further publications including research and policy briefs, the goal is to develop insights for Sri Lankan companies and policy-makers to adopt disclosure practices and align with the evolving global expectations.

2. Environmental Reporting Landscape

2.1 Evolution of non-financial corporate disclosures

Sustainability reporting and non-financial corporate disclosures are now gaining traction across the world. But the inception and development of environmental disclosures has had a long history of development and resistance. Two conflicting perspectives on sustainability in the business context are Friedman’s free market and capitalism school of thought (Friedman 1970) and Porter and Kramer’s concept of creating shared value (Porter and Kramer 2011). Friedman argued that the goal of a business is to enhance the economic benefits for its shareholders, and that the board and managers are only answerable to these shareholders. Porter and Kramer on the other hand argued that companies need to go beyond just economic progress and consider benefits to society, including a focus on environmental responsibility, ethical conduct of business operations and responsibility to other stakeholders like consumers, employees, suppliers, local communities and governments.

Before the 1970s, corporate reporting mainly revolved around financial reporting, specifically for the investors to make financial decisions based on “reliable corporate information” (Fischer et al. 2023).

To ensure reliability of these reports, national governments regulated financial reporting. Governments either developed or adopted accounting standards and financial reporting rules that outlined how companies should record and report financial data. Many governments required companies to undergo audits by independent, certified auditors. The reporting standards and auditing requirements were often modelled after or influenced by UK or US practices, but many countries like Germany and France developed their own accounting rules and regulations. In the 1970s, there was a push for international harmonisation of accounting standards, leading to the establishment of the International Accounting Standards Committee (IASC) in 1973, which later evolved into the International Financial Reporting Standards (IFRS). The IASC sought to create basic accounting standards that could be applied globally, thereby promoting their worldwide acceptance.

The United Nations (UN) Brundtland Report[2] in 1987 and the 'Triple Bottom Line'[3] concept by John Elkington in 1994 initiated broader reporting criteria to evaluate the risks and impacts of companies, and to provide information for not just investors and financial decision-makers, but to all stakeholders (Fischer et al. 2023; Siew 2015). Other than financial information, environmental, social and governance (ESG) aspects of corporate activities became increasingly important. Subsequently, the Global Reporting Initiative (GRI) was founded in 1997 by a multi-stakeholder initiative. It developed a standardised reporting framework that integrates economic, social and environmental metrics. This was one of the earliest tangible frameworks that provided guidelines for companies and firms to implement environmental reporting.

There are now a plethora of reporting frameworks and standards[4] available globally. The development of sustainability reporting over the last 30 years is indicated in Appendix 1. Different frameworks and standards serve different purposes based on the company's focus, geographic location, and industry. For example, the ISSB and the Sustainability Accounting Standards Board (SASB) lean heavily into financial materiality. The Global Reporting Initiative (GRI) framework is the most suitable for organisations emphasising social and environmental impact. The Task Force on Climate-Related Financial Disclosures (TCFD) and the Task Force on Nature-Related Financial Disclosures (TNFD) are ideal for companies facing climate and nature-related financial risks. CDP[5] runs a global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts. And European Sustainability Reporting Standards (ESRS) is mandatory and the most comprehensive for EU-based firms. While the major standards and frameworks cover similar material, they differ in their enforceability, implementation timescales, jurisdictional scope, approach to materiality, and other detailed requirements. This makes navigating the reporting landscape rather complex and cumbersome for companies.

There has been significant effort by different standard-setting bodies to formulate a uniform global framework. The Integrated Reporting Framework (IRF) developed by the International Integrated Reporting Council (IIRC) was an attempt at that. The IRF promotes integrated thinking that aligns organisational goals with sustainability performance to create a more holistic view of value creation (Value Reporting Framework 2022). This framework encourages firms to consider financial, environmental, social, and other forms of capital as interconnected and mutually dependent. The process of developing the IRF began in 2009, and was published in 2013. The framework guides companies to prepare Integrated Reports (IR) which are comprehensive reporting formats to address

[2] A book by Brundtland Commission, also known as 'Our Common Future'.
[3] The triple bottom line is a business concept suggesting that companies should dedicate themselves to assessing their social and environmental impact along with their financial success, rather than focusing solely on profits, or the conventional "bottom line." This approach is often summarised by the "three P's": Profit, People, and Planet.
[4] Frameworks typically refer to principles, initiatives or guidelines provided to corporations to assist them in their disclosure efforts. Frameworks like CDP, GHG protocol, etc. were initiated to address issues like audience and stakeholders targeted. Standards like ISO 14001, ISO 9001, EMAS etc. have similar functions as frameworks but exist in the form of more formal documentation that spell out the requirements, specifications or characteristics that can be used to ensure that sustainability efforts are consistently achieved.
[5] Established as Carbon Disclosure Project in 2000, but shortened to 'CDP' in 2013 to broaden the scope of environmental disclosures.

asymmetry in reporting. It focuses on a company's stakeholders, particularly investors and creditors, to facilitate a more efficient and effective allocation of financial capital. South Africa was the first country to adopt integrated reporting as a mainstream component of corporate governance (Integrated Reporting 2022). Companies that are listed on the Johannesburg Stock Exchange are required to publish an integrated report. Although most countries have not made the IRF mandatory, it is increasingly becoming so in many markets like Japan and Europe.

Currently, the most prominent and widely used sustainability disclosure frameworks are the GRI framework, the TCFD and TNFD frameworks, and the IFRS sustainability standards. However, over the last five years, there is an increasing trend of collaborations and consolidations between different frameworks. The details of the common frameworks and standards, along with their interoperability are discussed in detail in the sections below.

2.2 Economic rationale for implementing environmental reporting practices

Beyond their ethical and regulatory dimensions, environmental disclosures offer substantial economic benefits that make them integral to modern business strategy.

Cost Efficiency: While research on the connection between environmental disclosures and financial performance has shown mixed results, many studies suggest a positive relationship (Nor et al. 2016). Reporting encourages the identification of inefficiencies, such as excessive energy use or waste production, leading to cost savings through sustainable resource management. Additionally, environmental disclosures encourage the adoption of green innovations, further boosting a firm's financial success (Malik et al. 2023). Both voluntary and mandatory disclosures tend to enhance financial performance of companies, with mandatory disclosures being more effective (Wu and Li 2023).

Enhanced Investor Confidence: Implementing robust reporting practices has a strong economic rationale rooted in information economics and legitimacy. Disclosures from firms improve financial analysts' ability to forecast earnings and assess risks and opportunities. A firm's environmental disclosure also affects how both financial and non-financial stakeholders perceive its legitimacy, which in turn reduces the uncertainty that financial analysts face (Cormier and Magnan 2015). Increased transparency in environmental matters benefits external stakeholders, especially in regions or industries with low information penetration (Wu and Li 2023). Both economically driven environmental disclosures and sustainability-focused environmental reporting are valuable for analysts in making forecasts and enhancing a firm's legitimacy.

Risk Management: Sustainability is closely tied to resilience, particularly in a climate-impacted business landscape. Disclosing environmental risks allows businesses to identify, manage, and mitigate potential liabilities, reducing financial uncertainty and safeguarding long-term profitability. Reporting also helps in mitigating regulatory risks and securing a social license to operate (Deloitte 2020).

Strengthening Brand Reputation: Environmental reporting aids in cultivating a positive brand recognition for being a socially active and environmentally responsible organisation. Disclosures demonstrate transparency and accountability, and enhance the trust and loyalty of customers, employees and communities (Deloitte 2020). Companies with robust environmental practices gain a competitive edge by appealing to environmentally conscious consumers and stakeholders, improving market share and brand loyalty (Husain 2024).

Long-Term Value Creation: Environmental reporting aligns with global trends toward sustainability, fostering resilience and securing long-term economic gains in the face of climate change and resource scarcity (SAP 2024). In today's dynamic investment landscape, businesses that demonstrate commitment to sustainability through reporting are more likely to attract green financing since forward-thinking investors are drawn to companies that demonstrate a commitment to sustainability and responsible business practices. It also helps tap into new financial instruments that are linked to sustainability performance (Deloitte 2020).

2.3 Expected outcomes of environmental disclosures

Other than the economic benefits of environmental reporting discussed above, there are other outcomes resulting from companies and organisations implementing environmental disclosure practices.

Operational Improvements: Reporting practices lead to implementation of environmental management systems that span across strategising business models and governance, implementation of policies and action plans, and evaluation systems to track performance metrics. Reporting requirements, and subsequent operational changes to enhance sustainability, can create opportunities to gain economic benefits through increased efficiency and positive contributions to the bottom line (Oluwatobi Timothy Soyombo et al. 2024).

Stakeholder Engagement: Providing clear environmental information strengthens relationships with stakeholders, including customers, employees, regulators, and communities. Demonstrating environmental responsibility and sustainability can improve employee satisfaction and attract talent aligned with the company's values (Thesing 2023). Reporting can also create a feedback loop where stakeholders can increase pressure on firms regarding the status of their reporting and activities (Kilfoyle 2022).

Consumer Trust and Decision-Making: Consumers are increasingly shifting their spending towards sustainable products and services (Deloitte 2024). Through sustainability reports, consumers gain access to transparent information about a company's environmental and social practices, enabling them to make informed purchasing decisions aligned with their values (McKinsey 2023). Clear reporting builds trust by demonstrating a company's commitment to sustainability, fostering stronger consumer relationships and brand loyalty.

Compliance and Accountability: Governments and regulators have been increasingly mandating or promoting the inclusion of sustainability information in annual reports or in stand-alone sustainability reports (Bartels et al. 2016). Environmental disclosure practices based on global frameworks and standards lead to comparable systems to be established to analyse targets and track progress of different companies.

Potential Greenwashing Practices: The outcomes of environmental disclosures are not always positive. One challenge is the tension between symbolism and action. Voluntary reporting, in particular, can lead to greenwashing if the quality of reports is not carefully reviewed and metrics are not properly audited (Yu, Luu, and Chen 2020). Firms might appear transparent by disclosing large amounts of ESG data while actually performing poorly on sustainability measures.

Unfavourable Regulatory Environment: Industry pressures can impact the effectiveness of these disclosures. If the political and industry landscape is not conducive to sustainability and ESG-related progress, it can hinder the implementation of regulations and diminish the credibility of voluntary disclosures. This dynamic was evident in the case of the U.S. SEC Climate Disclosure Rule, where an unfavourable regulatory environment undermined the impact of voluntary efforts (Osborn and Nelson 2024).

2.4 Motivations and driving forces

Although there are numerous benefits of environmental reporting, the motivations and driving forces behind organisations adopting environmental reporting are multifaceted, reflecting the interplay of internal and external pressures. Internal organisational factors, particularly company characteristics such as size, industry, financial performance, and elements of corporate governance, including board size, gender diversity, board independence, and types of ownership, are influential (Almaqtari et al. 2023). Corporate policies also shape sustainability practices (Ali, Wilson, and Husnain 2022). Self-imposed regulatory measures driven by the corporate values held by top executives, and in some cases the managers and advocates of sustainability within the organisation, also play a crucial role. Companies also adopt reporting practices to improve their corporate reputation, improve their financial performance, access investment opportunities, and manage key stakeholders (Herremans and Nazari 2016).

Among the external factors influencing reporting practices, regulatory pressures, government actions, media attention, social and cultural factors, and industry-specific considerations like competition levels, customer expectations, and multiple firm listings[6] play a critical role (Herremans and Nazari 2016). Institutional isomorphism, where companies follow industry norms or the practices of innovative peers, drives many sustainability efforts. This is often a response to industry pressures, and it aligns with legitimacy theory[7], which suggests that firms seek to project a positive image on high-profile issues (Tavares and Dias 2018). Stakeholder theory[8] also emphasises that organisations are part of a social system with established norms and expectations, making it vital for companies to align their values with societal standards to maintain legitimacy (Tavares and Dias 2018). Stakeholder demands, including shareholder resolutions, are significant influencers. Information penetration plays a big role in how reporting practices are adopted. High information penetration within the society enables easy access to firm data for stakeholders, while low penetration limits access, highlighting the need for voluntary disclosures to improve transparency (Wu and Li 2023).

Normative and cognitive motivations are two key drivers influencing decision-making and behaviour in organisations regarding environmental disclosures (Herremans and Nazari 2016). Normative motivation is rooted in a sense of duty, moral obligation, or societal expectations. It reflects actions taken to align with ethical principles, values, or social norms, such as adopting sustainability practices to fulfil corporate social responsibility or meet stakeholder demands. In contrast, cognitive motivation is guided by logical reasoning, knowledge, and a focus on achieving practical outcomes. This type of motivation drives actions aimed at addressing challenges or leveraging opportunities, such as implementing sustainability measures to enhance efficiency, reduce costs, or mitigate risks. Together, these motivations shape organisational strategies by balancing ethical imperatives with pragmatic considerations.

2.5 Global South scenario

Environmental disclosure dynamics vary significantly between economically developed and less developed markets. As represented by the Kuznets Curve, albeit in simplistic terms, in mature economies where environmental degradation has historically accompanied growth, stakeholders are more sensitive to environmental information, making disclosure a tool for enhancing reputation and competitive advantage. In contrast, less developed economies prioritise economic growth over

[6] Multiple firm listings, also known as cross-listing, interlisting, or multi-listing, refers to when a company has presence in multiple markets and lists its shares on more than one stock exchange.
[7] Legitimacy theory posits that organisations seek to operate within the bounds of societal norms, values, and expectations to maintain their legitimacy. It emphasises the importance of aligning business activities and disclosures with societal standards to secure continued support and acceptance from stakeholders.
[8] Stakeholder theory asserts that organisations have a responsibility to consider the interests and expectations of all stakeholders, not just shareholders. It focuses on managing relationships with various stakeholder groups, such as employees, customers, investors, and the community, to achieve long-term success and sustainability.

environmental quality, leading to weaker ties between disclosure and financial performance (Wu and Li 2023). For instance, European countries tend to report more than Asian countries due to intrinsic motivations. However, reporting in Asia is developing, and is rapidly gaining traction in the last decade (Dissanayake, Tilt, and Xydias-Lobo 2016).

Sustainability reporting in the Global South is inconsistent and differs substantially, largely shaped by national business systems. A common practice in Global South countries is to report sustainability metrics as part of annual reports due to the high cost of resources needed to compile and comprehend the additional information (Dissanayake, Tilt, and Xydias-Lobo 2016). The scale and rate of adoption is dependent on internal factors like political and regulatory constraints, diverse cultural attitudes, and pressures from NGOs (Dissanayake, Tilt, and Xydias-Lobo 2016). Companies in the Global South often disclose sustainability or Corporate Social Responsibility (CSR) information to attract investments and enhance their reputation, focusing on impression management and legitimacy (Ali, Wilson, and Husnain 2022). The degree of globalisation influences reporting practices, with multinational corporations more likely to adopt sustainability disclosures than local firms. Furthermore, global value chains, international buyers, international NGOs, and international regulatory bodies pressure companies in developing countries to disclose social and environmental information (Dissanayake, Tilt, and Xydias-Lobo 2016). Corruption (or the absence of it) also plays a key role in the quality of disclosure information. A less corrupted system can also provide more opportunities for relevant stakeholder parties and firms to lessen the extent of greenwashing (Yu, Luu, and Chen 2020).

3. Voluntary and Mandatory Disclosure Requirements

Disclosure requirements for sustainability information can either be voluntary or mandatory. Voluntary disclosures allow companies to share information at their discretion, often going beyond compliance to showcase their commitment to sustainability and transparency. In contrast, mandatory disclosure requirements are imposed by governments or regulatory bodies, ensuring standardised reporting to address stakeholder demands and enhance accountability. Both approaches play a crucial role in promoting sustainability practices and informing decision-making across various stakeholder groups.

3.1 The shift from voluntary to mandatory requirements

The voluntary disclosure of environmental actions has surged as companies aim to attract sustainable investment and mitigate their environmental impacts. In 2022, almost 20,000 organisations reported sustainability-related information through CDP, reflecting a 38% increase from 2021. Furthermore, 67 out of 120 stock exchange members under the UN Sustainable Stock Exchanges initiative have issued guidelines on ESG and sustainability reporting[9] (IFC and CDP 2022). These increases in environmental and social disclosures have been primarily voluntary, driven by growing demands from investors, interest groups, employees, and other stakeholders for greater transparency (Kim et al. 2021).

However, voluntary reporting regimes face several limitations that reduce their effectiveness for investment analysis. While current standards emphasise quantitative metrics, voluntary disclosures often remain qualitative or narrative. Unlike financial reporting, voluntary regimes rely on reputational risks to encourage better disclosure, and tend to focus more on positive indicators than negative ones. Voluntary reporting also leads to the adoption of a broader definition of materiality to address diverse stakeholders rather than just investors. The reliability of these disclosures depends on private auditing or assurance, which remains inconsistent as companies can choose whether to

[9] The relationship between ESG and sustainability reporting is synergistic: ESG factors define the key metrics and benchmarks that guide reporting, while sustainability reporting communicates these metrics to stakeholders, including investors, regulators, and the public.

seek third-party verification. Moreover, there are no standardised frameworks for ESG assurance providers. Most importantly, voluntary reporting lacks uniformity in timing and consistency, with firms reporting on varying schedules, often less frequently than annually. This misalignment with financial reporting cycles complicates the integration of voluntary disclosures into comprehensive investment analyses (Harper Ho 2017).

The challenges of voluntary disclosures are not limited to investors alone. The absence of standardised sustainability reporting has hindered all decision-makers from effectively evaluating the sustainability efforts of companies and projects (IFC and CDP 2022). Voluntary disclosures often create reporting asymmetries between companies of varying sectors and sizes, leading to comparability issues. Organisations can choose the topics to report on and how to present their outcomes, typically based on what benefits them the most. This can result in generic or "boilerplate" sustainability texts, where reports may serve as a tool for greenwashing rather than providing meaningful information. Consequently, stakeholders may find it challenging to hold companies accountable due to the lack of relevant disclosures and quality data in these reports (Kilfoyle 2022).

Due to these issues, there is a growing shift from voluntary standards to mandatory regulations, and many countries and regions have implemented legislations regarding non-financial information reporting mandating firms to disclose their sustainability information.

3.2 Pros and cons of mandatory disclosure requirements

Mandatory disclosure requirements present both advantages and disadvantages. On the positive side, they help reduce information asymmetry by ensuring companies present data according to specified guidelines (Fischer et al. 2023). This also generates greater impact by forcing companies to disclose information while presenting a holistic and clear picture of the different areas of performance. Research has shown that firms with weaker information environments benefit more from ESG disclosure mandates, as this leads to increased access to more credible information (Krueger et al. 2024). Mandating reporting standards can help overcome concerns about greenwashing by increasing transparency and credibility, while also subjecting companies to greater media and political scrutiny (Kilfoyle 2022). Disclosures have increased in volume and quality in countries with reporting mandates, as seen in China, Denmark, Malaysia and South Africa (Kilfoyle 2022). A positive impact of mandating disclosure requirements is the companies' preparedness, where companies tend to enhance their CSR activities even before regulations take effect, leading to improved disclosure qualities. This was observed in the case of the companies' responses to the implementation of the European Union's Corporate Sustainability Reporting Directive (CSRD) (Kilfoyle 2022).

The transition to sustainable business models, necessitated by these mandates, often requires significant investment and changes to established operational processes, which can be met with resistance within organisations (Oluwatobi Timothy Soyombo et al. 2024). However, transitional support mechanisms, such as government subsidies, can alleviate costs and facilitate this shift. A study indicated that when the mandatory disclosure requirements are implemented and subsidies are transferred from the government to the listed companies, there is little actual cost for the transition of processes (Wu and Li 2023). Through such transitional support, the cost of the company will decline and directly enhance the profit and other financial indexes of the company.

As seen with the case of voluntary disclosures, mandatory disclosures can also have unintended consequences. For some companies, compliance may result in increased disclosures, while others might reduce them to maintain consistency of the new mandated reports with the previous voluntary reports (Perera, Jubb, and Gopalan 2019). Additionally, large companies may divest from highly polluting practices, passing them to small and medium enterprises (SMEs) that might not be bound by the same regulations or moving these operations overseas to jurisdictions with less stringent requirements (Kilfoyle 2022).

When implementing mandatory disclosure requirements, it's crucial to strike a balance between specificity and breadth. While detailed and verifiable metrics are important for transparency, they may be costly for companies, particularly smaller firms (Kilfoyle 2022). Additionally, the effectiveness of these regimes hinges on credible enforcement, which requires significant investment in audit infrastructure and expertise. For non-financial disclosure mandates to induce isomorphic pressure, they must also include effective sanctions to discourage non-compliance (De Villiers et al. 2024). Overall, careful design and implementation of these requirements are vital to ensure they achieve their intended goals without imposing undue burdens on companies.

3.3 Comply-or-explain model

Between the rigidity of voluntary and mandatory disclosure requirements is the comply-or-explain model. Comply-or-explain principles were introduced in the UK during the 1990s as part of corporate governance reforms, and have since been adopted globally. Recent examples of the model are the European Transparency Directive, and ESG reporting rules in leading markets such as Hong Kong and Singapore. This model requires companies to adhere to a set of best practices outlined by a regulatory authority, such as a stock exchange, by either implementing the provisions or explaining their reasons for non-compliance. Firms are considered non-compliant only if they fail to both implement the practices and provide a satisfactory explanation (Harper Ho 2017).

Regulators have broadly adopted the comply-or-explain principles as a soft law or self-regulatory framework for promoting corporate governance and ESG transparency (Harper Ho 2017). The comply-or-explain model offers great flexibility to companies by allowing them to choose their disclosures, given that their materiality may vary according to their industries. Typically, comply-or-explain models operate in tandem with legislative mandates rather than replace them. Mandatory rules establish a baseline that all companies must meet, while comply-or-explain codes set a higher benchmark for best practices (Harper Ho 2017). However, successful implementation of the model also requires unbiased and transparent evaluation systems to be set up. This may be a point of concern in the case of Global South countries where the lack of enforcement infrastructure may lead to companies taking advantage of the model. Hence, some studies argue that the effects are strongest if the disclosure requirements are mandated by government institutions, not on a comply-or-explain basis, and coupled with strong enforcement by institutions (Krueger et al. 2024).

4. Important Reporting Frameworks and Standards

While there are numerous standards and frameworks that exist within the corporate disclosure space, most countries and markets that encourage voluntary frameworks or have mandatory regulations are guided by the GRI standards, the TCFD and TNFD frameworks, and the IFRS sustainability disclosure standards.

4.1 Global Reporting Initiative (GRI)

Inception: Founded in Boston in 1997, GRI emerged in response to the public outcry over the environmental damage of the Exxon Valdez oil spill, eight years previously. With roots in non-profit organisations, the initial aim was to create an accountability mechanism for responsible environmental practices. GRI later expanded to encompass social, economic, and governance issues. In 2016, GRI introduced the first global standards for sustainability reporting, known as the GRI Standards, which have been regularly updated, including a significant revision of the Universal Standards (explained below) in 2021.

Scope: The GRI standards serve as a global benchmark for publicly reporting on various economic, environmental, and social impacts. It helps organisations, large or small, private or public, report on their overall sustainability performance. GRI targets a broader audience, including investors, policymakers, capital markets, and civil society. There is a strong emphasis on engaging diverse stakeholders to ensure that the most relevant sustainability issues are identified and reported transparently.

Scale of adoption: The GRI's Standards are used by more than 10,000 organisations in over 100 countries, emphasising their role as a benchmark for sustainability reporting. Voluntary encouragement is issued by 20 international organisations and 107 country-specific issuers. GRI integration is highest in developed economies and regions, while emerging markets show potential for growth in this respect.

Structure of the standard: The GRI Standards are a modular system consisting of three series: Universal Standards, Sector Standards, and Topic Standards, as outlined in Figure 1. Each Standard includes detailed guidance on its use and contains disclosures for organisations to report on their impacts. Disclosures may include requirements, which outline mandatory reporting information, and recommendations, which suggest additional actions or information that are encouraged but not obligatory

Figure 1: Structure of the GRI Standards

GRI STANDARDS		
UNIVERSAL STANDARDS	SECTOR STANDARDS	TOPIC STANDARDS
Three Universal Standards with requirements and guidance on: 1. Use of GRI Standards 2. Disclosures about the reporting organisations 3. Disclosures about the organisation's material topics	Sector Standards provide sector-specific guidance for 40 sectors. Organizations are required to use applicable Sector Standards to identify material topics and relevant disclosures for their sector.	Topic Standards provide disclosures for reporting on specific topics such as waste, occupational health and safety, and tax. Organizations use relevant Topic Standards based on the material topics identified.
All three Universal Standards be applied by all organisations	Organisations to use applicable standards based on sector	Organisations to use standards based on material topics

Source: Author's construction using data from GRI.

Reporting practices: Reporting using the GRI Standards involves several key steps to ensure a comprehensive and transparent sustainability report. The process begins with understanding the system and key elements of the GRI Standards. Organisations must then identify and assess their actual and potential impacts by understanding their context. These impacts are evaluated for significance, and the most critical ones are prioritised as material topics for reporting. Relevant information is disclosed using the Universal, Sector, and Topic Standards, with reasons for any omissions clearly stated. A GRI content index and statement of use are created and included in the publication. Reports using the GRI Standards may be published in various formats (e.g., electronic, paper-based) and made accessible across one or more locations (e.g., standalone sustainability report, webpages, annual report).

Governance: GRI's governance structure includes multiple bodies overseeing its operations and standards development, with members contributing their time and expertise on a voluntary basis. Key components are the Management Board, responsible for operational leadership, and the

Supervisory Board, which provides non-executive oversight. The Global Sustainability Standards Board exclusively manages the creation and maintenance of GRI Standards. Additionally, the Stakeholder Council and Due Process Oversight Committee offer strategic advice and ensure adherence to due processes. These bodies collaborate to uphold GRI's mission, supported by the operational GRI Secretariat.

4.2 Task Force on Climate-related Financial Disclosures (TCFD)

Inception: The Financial Stability Board established the TCFD to provide recommendations on the information companies should disclose.

Scope: While GRI provides a holistic approach to sustainability reporting, TCFD hones in on the financial implications of climate change. The TCFD disclosures aim to help investors, lenders, and insurers effectively evaluate and price risks associated with climate change. TCFD is also more aligned with financial disclosure requirements and helps organisations integrate climate-related risks into their financial decision-making processes. It targets investors and financial stakeholders by providing insights into how climate change can impact a company's financial performance, focusing on risks like regulatory changes, market shifts, and physical impacts of climate change.

Scale of adoption: The TCFD recommendations were initially intended to be voluntary, but they are increasingly becoming mandatory in countries like Brazil, Japan, Singapore, Switzerland, and the UK. Since 2017, various standards organisations and jurisdictions like the ISSB and European Union have incorporated the TCFD recommendations into their climate-related disclosure frameworks, proposals, and regulations. As of October 2023, over 4,900 companies had adopted TCFD reporting, reflecting its growing global importance (TCFD 2022).

Structure of the standard: The TCFD 'recommendations' are organised into four key themes central to corporate operations: governance, strategy, risk management, and metrics and targets, as indicated in Figure 2. These four overarching recommendations are supported by key 'recommended disclosures', providing essential information to help investors and stakeholders understand how organisations assess and address climate-related risks and opportunities. It also includes general guidance for all organisations and supplemental guidance tailored to specific sectors. These interconnected themes are supported by 11 detailed disclosures designed to provide insights into how organisations identify and address climate-related risks and opportunities, helping investors and stakeholders better understand their approach.

Figure 2: TCFD Recommendations

TCFD RECOMMENDATIONS			
GOVERNANCE	STRATEGY	RISK MANAGEMENT	METRICS & TARGETS
Disclose the organisation's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organisations businesses, strategy, and financial planning where such information is material.	Disclose how the organisation 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.

Source: Author's construction using data from TCFD.

The Task Force recommends organisations disclose the resilience of their strategies under various climate scenarios, including a 2°C or lower scenario. This disclosure highlights how strategies may adapt to climate-related risks and opportunities, offering insights into the potential impacts of climate change. While scenario analysis is relatively new and evolving, it is seen as vital for enhancing the usefulness of climate-related financial information for decision-making.

Reporting practices: Climate-related financial disclosures are included in the public annual financial filings, aligning with legal obligations in many G20 nations to disclose material information. This aims to enhance compliance with existing national requirements while being applicable across sectors and jurisdictions. Companies need to ensure their disclosures meet local legal standards and focus on material climate-related risks and opportunities, complementing broader reporting frameworks without overriding national regulations.

Governance: As of November 2023, TCFD was disbanded and the IFRS foundation has taken over the monitoring of the progress of companies' climate-related disclosures (IFRS 2023).

4.3 Task Force on Nature-related Financial Disclosures (TNFD)

Inception: In July 2020, an initiative to create TNFD was launched, with a preparatory phase running until June 2021. The TNFD officially began in June 2021, receiving global backing from leaders such as the G7 and G20, along with support from its founding partners and funders. It builds upon the frameworks of TCFD, and also has an interoperability mapping with the GRI standards (GRI 2024).

Scope: The TNFD standard focuses on nature-related risks and opportunities, expanding beyond climate to include biodiversity, ecosystem services, and natural capital. It covers a broader array of environmental concerns, such as deforestation, water use, pollution, and habitat loss, which are often underrepresented in traditional climate frameworks. Like TCFD's approach to climate risks, TNFD centres on the financial impacts of nature-related risks, encouraging businesses to integrate nature dependencies and impacts into their financial strategies. It is also aligned with the global policy goals in the Kunming-Montreal Global Biodiversity Framework.[10] This approach goes beyond the focus on climate alone and aims to address risks that might arise from degrading ecosystems, loss of biodiversity, and the sustainable use of natural resources. One of TNFD's key innovations is its focus on natural capital - recognising the value of ecosystems and biodiversity as critical to long-term economic stability. It brings attention to how companies depend on nature (e.g., water, pollination, raw materials) and the risks they face if these resources are degraded.

Scale of adoption: At COP16 in Colombia in October 2024, it was announced that 502 organisations worldwide have committed to TNFD-aligned nature-related risk management and reporting - a 57% increase in just six months since January 2024, highlighting the rising importance of nature in business risk and opportunity management. The two regions with the most number of early adopters are the Asia-Pacific region and Europe. Asia-Pacific ranks the highest accounting for 47% of adopters, and Europe accounts for 36.5% of adopters (TNFD 2024).

Structure of the standard: The TNFD disclosure framework outlines general requirements and recommendations across four key pillars: governance, strategy, risk and impact management, and metrics and targets. This is similar to the approaches of the TCFD, with conceptual foundations for nature-related disclosures. This goes beyond the climate-related disclosures of the TCFD, as indicated in Table 1. TNFD also includes 14 recommended disclosures, as opposed to TCFD's 11 recommended disclosures.

[10] The Kunming-Montreal Global Biodiversity Framework is an international agreement adopted during the 15th Conference of the Parties (COP15) to the Convention on Biological Diversity (CBD) in December 2022. It is a landmark framework aimed at addressing the global biodiversity crisis by setting ambitious targets and strategies to halt and reverse biodiversity loss by 2030.

Table 1: Differences in recommendations under the core pillars of TCFD and TNFD

	RECOMMENDATIONS			
	GOVERNANCE	STRATEGY	RISK MANAGEMENT*	METRICS & TARGETS
TCFD	Disclose the organisation's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organisations businesses, strategy, and financial planning where such information is material.	Disclose how the organisation 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.
TNFD	Disclose the organisation's governance of nature-related dependencies, impacts, risks and opportunities.	Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organisation's business model, strategy and financial planning where such information is material.	Describe the process used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risk and opportunities.	Disclose the metrics and targets used to assess and manage material nature-related dependencies, impacts, risks and opportunities.

Source: Author's construction using data from TCFD and TNFD.

* Risk and Impact Management in TNFD

In addition to the above requirements, the reports are expected to apply six general requirements across all four pillars of recommended disclosures. These are:

1. The application of materiality.
2. The scope of disclosures.
3. The location of nature-related issues.
4. Integration with other sustainability-related disclosures
5. The time horizons considered.
6. The engagement of Indigenous Peoples, Local Communities and affected stakeholders in the identification and assessment of the organisation's nature-related issues.

Reporting practices: TNFD metrics include a small set of core metrics ('core global metrics' across all sectors and 'core sector metrics' that are sector-specific metrics, required on a comply-or-explain basis) and a larger set of optional additional metrics for assessment and disclosure where relevant.

Governance: The Taskforce includes 40 senior executives from financial institutions, corporates and market service providers, and with expertise in nature and finance. Members are chosen for their sectoral and geographical coverage. They represent high-impact sectors including agribusiness, the blue economy, food and beverage, mining, construction, and infrastructure, across eighteen countries on five continents.

4.4 International Financial Reporting Standards (IFRS) S1 and S2

Inception: The IFRS Sustainability Disclosure Standards are formulated by the ISSB, which is an independent standard-setting body within the IFRS Foundation. The formation of ISSB was announced in November 2021 at COP26 in Glasgow, as a result of strong market demand for its establishment. The ISSB was formed through the consolidation of the Climate Disclosure Standards Board (CDSB) and the Value Reporting Foundation which oversaw the SASB and IIRC frameworks.

Scope: IFRS Sustainability Standards aim to improve investor-company communication by providing globally consistent and decision-relevant sustainability disclosures. The IFRS standards are a set of high-quality, comprehensive global baseline of sustainability disclosures focused on the needs of investors and the financial markets. The standards are set through close collaborations with a wide network of advisory committees and bodies across different stakeholder groups that are affected by or are interested in financial reporting. The IFRS standards are built on the TCFD framework.

Scale of adoption: As of September 2024, 30 jurisdictions are adopting or preparing to implement ISSB Standards within their regulatory frameworks. Over a 1000 companies have referenced the ISSB in their reports, with 82% disclosing information in line with at least one TCFD recommended disclosures (IFRS 2024).

Structure of the standard: IFRS S1 and S2 incorporate relevant IFRS Accounting Standards, align with TCFD recommendations, and build on materials from the CDSB, IIRC, and SASB. IFRS S1 outlines the conceptual framework and content for disclosing sustainability-related financial information, while IFRS S2 builds on this by specifying requirements for reporting climate-related risks and opportunities. The IFRS Standards are structured across four core TCFD recommendations of governance, strategy, risk and impact management, and metrics and targets, and 11 supporting recommended disclosures. The standards emphasise decision-usefulness, mirroring the objectives of IFRS Accounting Standards, to provide relevant and reliable information that supports the needs of investors, creditors, and other stakeholders. Adopting a principles-based approach allows organisations the flexibility to tailor disclosures to their specific contexts while maintaining comparability across entities and industries. Additionally, the integrated materiality concept ensures that sustainability-related risks and opportunities are disclosed only when they are likely to influence the decisions of primary financial statement users.

Reporting practices: The IFRS Sustainability Disclosure Standards are carefully structured to align with existing financial reporting practices, ensuring coherence with IFRS Accounting Standards. This integration creates a unified reporting framework where sustainability-related disclosures complement traditional financial statements, offering a holistic view of an organisation's financial and sustainability performance. By using familiar principles, terminology, and presentation methods, the standards ensure consistency and ease of application for preparers and users alike, minimising the learning curve associated with new reporting requirements.

Governance: The governing body of the IFRS Foundation is the Board of Trustees, which oversees the foundation's governance, strategy, and fundraising while ensuring the independence of its standard-setting processes. Under the foundation, two key boards operate: the International Accounting Standards Board (IASB)[11] and the ISSB. The IASB is responsible for developing and maintaining IFRS Accounting Standards, while the ISSB focuses on creating and maintaining IFRS Sustainability Disclosure Standards. Both boards are composed of independent members who are experts in their respective fields, including accounting, sustainability, corporate reporting, and financial analysis, with diverse representation of geography, professional background, and experience. Additionally, the foundation is supported by the Monitoring Board, which ensures public accountability and that the foundation's work remains aligned with the public interest.

[11] The IASB was formed in 2001 to replace the International Accounting Standards Committee (IASC).

4.5 The convergence of different frameworks and standards

Navigating the different frameworks begins with understanding organisational needs and stakeholder focus. GRI is best for organisations prioritising broader stakeholder engagement, with emphasis on transparency and accountability across all sustainability impacts including environmental, social and governance practices. TNFD is focused on helping companies disclose the financial risks posed by nature-related challenges, similar to TCFD with climate-related disclosures. TNFD specifically addresses nature-related risks with broader reporting requirements, making it suitable for organisations focused on biodiversity and ecosystem impacts. This is particularly relevant as investors increasingly demand insights into how biodiversity loss and nature degradation might affect future financial performance. The IFRS excels in providing financially material information tailored for investors, emphasising integration with financial reporting and industry-specific guidance. The key differences between the different frameworks are outlined in Table 2.

Table 2: Key differences between GRI, TNFD and IFRS S1 and S2[12]

TOPIC	GRI	TNFD	IFRS S1 & S2
Scope and issues not covered	GRI focuses on impacts on economy, environment, and people, and does not cover nature- dependencies, risks and opportunities	Requires disclosing material information on nature-related dependencies, impacts, risks, and opportunities. There is a focus on biodiversity and recognition of the interconnectedness of nature and people	Sustainability-related risks and opportunities (including climate-related risks and opportunities) that affect a company's financial prospects
Materiality	Double materiality[13]	Double materiality	Financial materiality
Reporting	Standalone report	Integrated into corporate reporting and strategic planning	Integrated into financial reporting cycles
Audience	Broader audience, including investors, policymakers, capital markets, and civil society	Investors, financial market participants and regulators	Investors and financial markets

Source: Author's construction.

Since 2022, the various organisations are increasingly working together for more harmonisation of the disclosure landscape (IFC 2024). There is increased consolidation of different standards including CDP, TCFD, IR and SASB into the IFRS framework. The updated Universal Standards mark the most significant revision since GRI began setting standards in 2016. The forward-looking approach for the revision equips organisations to align their reporting with emerging regulatory requirements, such as the EU CSRD and IFRS enterprise value standards (GRI n.d.). The TNFD has developed correspondence mapping with GRI as well as ESRS. Based on the TNFD recommendations, some jurisdictions of the IFRS framework have already begun developing nature-related reporting guidelines under the IFRS S3 standard (TNFD n.d.). The details of convergence of different standards and frameworks are outlined in Appendix 2.

[12] The TCFD framework is not considered for this comparison, since it was disbanded after convergence with the IFRS framework, and the jurisdiction now falls under ISSB.
[13] Double materiality is a model for Environmental, Social, and Governance (ESG) reporting that requires companies to consider the impact of their activities on the environment and society, as well as how sustainability issues affect the company's financial performance.

5. Sustainability Reporting Practices Across Regional Nations

Sustainability-related information disclosure is increasing across South Asia and Southeast Asia. The implementation of mandatory regulations like the ESRS have driven higher adoption of reporting in most countries. However, implementation, monitoring, and regulatory frameworks vary between countries. Sri Lanka can draw lessons from nations with more advanced sustainability disclosure practices. A report on sustainability reporting by territory in 2022 indicated that among South Asian and Southeast Asian countries, Singapore, Malaysia and Thailand had the highest rate of environmental reporting adoption (KPMG Asia Pacific 2023). The sections below highlight the different frameworks and regulatory mechanisms for sustainability disclosures in each of these countries.

5.1 Singapore

Sustainability reporting rate [14] : 100%
Rate of sustainability information in annual financial reports[15] : 68%

Stock Exchange requirements: The Accounting Corporate Regulatory Authority and the Singapore Exchange Regulation (SGX RegCo) set up the Sustainability Reporting Advisory Committee (SRAC) in June 2022 to provide a roadmap for sustainability reporting in the country. Based on the SRAC recommendations, companies listed on the Singapore Exchange (SGX) have been required to publish an annual Sustainability Report based on TCFD recommendations since the 2022 financial year. The SGX RegCo has now amended its Listing Rules and made sustainability reporting mandatory in a phased approach for both listed and non-listed[16] companies from the 2025 financial year.

Other requirements: The Singapore Code of Corporate Governance emphasises sustainability governance, requiring boards to consider and manage ESG risks and opportunities as part of their oversight responsibilities

Sector-specific guidelines: Certain industries, such as real estate and financial services, follow additional ESG disclosure requirements tailored to their specific risks and impacts.

Regulatory oversight: The SGX uses a ‘comply-or-explain' model for regulating disclosures (SGX Group 2016). SGX and SRAC allowed for a phased approach to implementation, where all listed companies began reporting from 31 December 2017, but could adopt different components on a comply-or-explain basis based on the capacity and resources of the entity reporting.

5.2 Malaysia

Sustainability reporting rate [17] : 99%
Rate of sustainability information in annual financial reports[18] : 97%

Stock Exchange requirements: Publicly listed companies on Bursa Malaysia were required to publish a Sustainability Statement as part of their annual reports from 2016. This statement discloses material sustainability issues, focusing on ESG factors relevant to the business. Bursa Malaysia provides a Sustainability Reporting Guide based on TCFD-aligned climate-related disclosures to assist companies in preparing reports.

[14] For the top 100 companies, based on data from KPMG Asia Pacific (2023).
[15] For the top 100 companies, based on data from KPMG Asia Pacific (2023).
[16] Non-listed companies of annual revenue ≥$1B and total assets ≥ $0.5B.
[17] For the top 100 companies, based on data from KPMG Asia Pacific (2023).
[18] For the top 100 companies, based on data from KPMG Asia Pacific (2023).

Other requirements: The Securities Commission Malaysia has introduced the National Sustainability Reporting Framework, which adopts ISSB standards as the baseline for sustainability reporting. Developed through extensive public consultations led by the Advisory Committee on Sustainability Reporting, the framework applies to listed companies on Bursa Malaysia's Main and ACE markets[19], as well as large non-listed companies with annual revenues exceeding RM2 billion. Additionally, the Malaysian Code on Corporate Governance encourages companies to integrate sustainability into their business strategies and governance practices, including climate-related risk management and reporting.

Sector-specific guidelines: Specific industries, such as palm oil and manufacturing, follow tailored sustainability standards like the Roundtable on Sustainable Palm Oil and environmental certifications.

Regulatory oversight: The Securities Commission Malaysia and Bursa Malaysia actively monitor compliance with sustainability reporting requirements, ensuring transparency and accountability.

5.3 Thailand

Sustainability reporting rate [20] : 97%
Rate of sustainability information in annual financial reports[21] : 86%

Stock Exchange requirements: The Stock Exchange of Thailand (SET) mandated sustainability reporting through the 56-1 form ("One Report") for all listed companies to disclose sustainability-related initiatives and ESG as part of their annual reporting from 2022. Companies must comply with the guidelines developed by the Securities and Exchange Commission (SEC) based on the GRI framework, requiring disclosures on policy and objectives of sustainable management, management of impact on stakeholders in the business value chain, environmental sustainability management, and social sustainability management.

Other requirements: Thailand's Corporate Governance Code emphasises the integration of ESG considerations into corporate governance, requiring boards to oversee and manage sustainability-related risks and opportunities effectively.

Sector-specific guidelines: The Thailand Greenhouse Gas Management Organization promotes climate-related reporting, encouraging companies to report emissions and adopt climate resilience strategies. TCFD-aligned disclosures are also gaining traction, supported by regulatory encouragement.

Regulatory oversight: The SET and SEC are the main bodies that drive sustainability reporting. The SET set up the Thailand Sustainability Investment Index with 170 companies to recognise the rms demonstrating strong ESG performance and to incentivise companies to enhance their disclosure practices.

5.4 Reporting landscape in other countries

Other than the countries discussed above, Indonesia and the Philippines are also notable for their reporting practices. Indonesia has made sustainability reporting mandatory for banking corporations since 2019 and for listed companies since 2020 in a phased manner. Similarly, the Philippines adopted a comply-or-explain approach for listed companies beginning with the 2019 reporting period, transitioning to mandatory compliance from 2022. Hong Kong, on the other hand, has a combination of blanket comply-or-explain disclosures for all companies and mandatory standards

[19] ACE Market is a sponsor-driven market designed for companies with growth prospects.
[20] For the top 100 companies, based on data from KPMG Asia Pacific (2023).
[21] For the top 100 companies, based on data from KPMG Asia Pacific (2023).

for firms under the Main Board listing rules, with disciplinary action in case of failure to comply. The Hong Kong Exchanges (HKEX) supports TCFD compliance, including Scope 1 to 3 emissions reporting. Interestingly, in countries like Bangladesh, certain mandatory requirements have had extensive impacts on the reporting landscape. Following the enforcement of the Green Policy Guidelines 2011 by the Bangladesh Bank which align with GRI standards, there was a significant shift in corporate attitudes toward environmental reporting. Corporate disclosures increased dramatically from 2.23% in 2010-2011 to nearly 50% by 2015, indicating that mandatory mechanisms are particularly effective in driving market trends in Bangladesh (Akhter et al. 2023).

The most commonly used voluntary reporting frameworks include the GRI, TCFD, and the United Nations Sustainable Development Goals (SDGs) (KPMG Asia Pacific 2023). While the adoption of TNFD is gaining traction globally, it remains limited in the region compared to more developed economies. However, the lack of mandatory frameworks leads to inconsistencies in disclosures and their analysis across companies. Mandatory disclosures are now gaining momentum, driven by the implementation of mandatory ESRS in Europe and the development of the IFRS sustainability standards. Much of the momentum for regulated and mandatory disclosures comes from the active development of stock exchange guidelines for phased mandatory reporting of listed companies. The IFRS S1 and S2 Standards are increasingly becoming mandatory in the region, signalling a shift towards standardised reporting.

6. Environmental Disclosure Ecosystem in Sri Lanka

6.1 Current disclosure landscape in Sri Lanka

Environmental disclosures practices in Sri Lanka are at a primitive stage when compared to the global developments, but have been on a growing curve over the last decade (Dissanayake, Tilt, and Xydias-Lobo 2016). A 2022 survey by KPMG reveals that ESG reporting is relatively prominent among Sri Lanka's top 100 companies, with 76% reporting on ESG matters. However, only 31% acknowledge climate change as a business risk, highlighting that lower priority of environmental reporting within ESG disclosures. Additionally, the adoption of environmental disclosure frameworks like TCFD remains very low, despite their global adoption doubling in recent years (KPMG Sri Lanka 2022).

Sri Lanka has a long history of corporate philanthropy towards society and the environment, largely led by individual values and actions and cultivated from religious and cultural views (Nimanthi and Priyadarshanie 2021). Given that Sri Lanka is now emerging from the era after the civil war and subsequent economic challenges, the economic and social issues arising during these transitions dominate the country's agenda more than environmental issues. The government's focus on infrastructure development and social welfare may also mean that companies may feel less pressure to disclose environmental information at this point (Dissanayake, Tilt, and Xydias-Lobo 2016).

Non-financial disclosures have been generally high in banks, nance and insurance companies compared to other peer countries (Dissanayake, Tilt, and Xydias-Lobo 2016). However, as seen with corporate disclosures, reporting largely focuses on social aspects, rather than environmental aspects. This is largely driven by expectations of specific stakeholder groups that heavily influence disclosure priorities. For example, Sri Lankan businesses are often motivated by a desire to improve welfare, such as supporting orphanages, elderly homes, hospitals, and health services. Banks, in particular, play a key role through lending for development projects and may face additional stakeholder pressure from the government when policies focus on these areas.

6.2 Motivations and influencing factors in Sri Lanka

There is a shift in focus from shareholder value creation to stakeholder value creation. Stakeholders' theory and legitimacy theory seem to be the driving forces for sustainability reporting in Sri Lanka as well, further emphasising the findings from the studies carried out globally (Niresh and Silva 2017).

Company characteristics play a crucial role in influencing corporate disclosures in Sri Lanka (Dissanayake, Tilt, and Xydias-Lobo 2016). Company size significantly influences the extent of sustainability reporting. Companies with higher revenue growth, larger size and market capitalisation, and better performance have greater and better disclosure of environmental and sustainability issues (Almaqtari et al. 2023). This could be a result of two factors. Firstly, larger companies cause greater impacts, are more visible to stakeholders and, hence, face greater stakeholder scrutiny, such as more media attention, and more potential regulation. Second, larger companies have higher ability and resources to bear the costs of reporting non-financial information (Dissanayake, Tilt, and Xydias-Lobo 2016). Reporting in energy, pharmaceutical, utility and mining industry sectors is particularly prominent due to high environmental and social impacts prevalent. These sectors are also more likely to be regulated and respond to sector specific stakeholder and legitimacy pressures (Dissanayake, Tilt, and Xydias-Lobo 2016). Interestingly, company ownership and industry do not show strong influences on the extent of sustainability reporting, a point of difference from other countries and regions. Reporting is primarily driven by the composition of the board of the company, with managers having limited degree of control over ESG reporting decisions. Company size, market capitalisation and employee size are some of the factors that seem to influence reporting (Dissanayake, Tilt, and Qian 2019).

Increased investment by foreign companies in Sri Lanka, after the end of war and conflict in 2009 has also led to more companies being pressured to incorporate non-financial disclosures. Awards such as the Association of Chartered Certified Accountants sustainability awards, the Ceylon Chamber of Commerce Best Corporate Citizen Awards, and National Energy Efficiency Awards have also encouraged sustainability practices and reporting as this is seen as a legitimising factor (Dissanayake, Tilt, and Qian 2019).

6.3 Environmental reporting frameworks and standards in Sri Lanka

The environmental reporting landscape has been primarily voluntary in Sri Lanka. Among the main frameworks, GRI is most commonly used. However, not all the organisations report on all aspects of the GRI framework. A 2021 study showed a marginal number of companies (2 out of 55 in the research sample) had disclosed all the criteria given in the GRI index. On an average, companies disclosed only 6 out of 30 environmental disclosure items (20% of requirements) given in the index (Nimanthi and Priyadarshanie 2021). TCFD is one of the least used frameworks. TCFD requires complex scenario-based reporting with extensive quantitative data. Given that Sri Lanka is not a data-rich country, many organisations in Sri Lanka do not have the necessary capacity or resources to incorporate such extensive metrics.

In addition to global frameworks voluntarily adopted by companies, various national organisations recommend or regulate country-specific guidelines that influence Sri Lanka's reporting landscape to varying degrees.

6.3.1 The National Green Reporting System (NGRS)

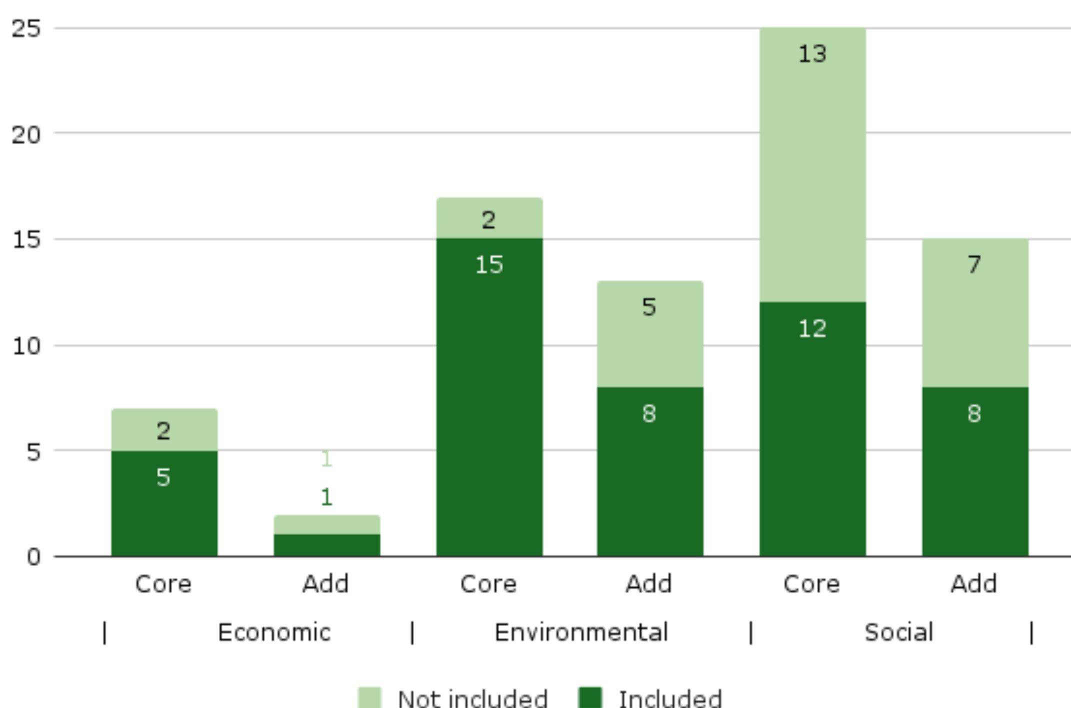
Inception: Launched in 2011 and approved by the Cabinet of Ministers in 2012, the NGRS is a voluntary reporting framework based on the triple bottom line basis of profit, people, and planet. It provides guidance for organisations in preparing sustainability reports. The Ministry of Environment (MoE) formulated the guidelines with technical assistance from the Ceylon Chamber of Commerce through the EU SWITCH-Asia program.

Scope: The NGRS applies to both public and private organisations in the manufacturing and services sectors.

Scale of adoption: While more than 150 organisations have registered with the NGRS, few (10 in 2016) have successfully submitted reports, and less than half of these organisations have been awarded the NGRS certification. Since 2020, the NGRS has not been implemented. Both the National Environmental Action Plan 2022-2030 and the NDC Implementation Plan have made it a target to annually increase NGRS registrations and NGRS-compliant annual reports by 20 percent and 50 percent respectively from 2021-2030.

Structure of the framework: The standard was formulated based on the GRI G3 Guidelines of 2006 and recommends the use of ISO 26000 for the design and implementation of internal sustainability measures. Out of the 50 indicators in the NGRS, 49 are adopted directly from GRI G3, while 1 indicator (ENVT 24) is endemic (See Appendix 3). Though most of the core economic and environmental indicators of GRI G3 are included in the NGRS, some indicators especially in the social indicators category have not been included [22]. The number of GRI indicators included under the NGRS is indicated in Figure 3.

Figure 3: The inclusion of Core and Additional (Add) GRI G3 indicators in the NGRS, per GRI category[23]



Source: Author's Calculations based on NGRS and GRI G3 (2006).

The NGRS is structured as a 5-tier program (outlined in Table 3) where registered entities graduate incrementally from Tier 1 to 5. Reporting of indicators begins from Tier 3 onwards with Tier 5 members being required to report all 50 indicators in the NGRS.

[22] This is largely driven by the non-inclusion of the Human Rights Performance Indicators under the GRI G3 Social category.
[23] Core indicators: "Core Indicators have been developed through GRI's multi-stakeholder processes, which are intended to identify generally applicable Indicators and are assumed to be material for most organisations. An organisation should report on Core Indicators unless they are deemed not material on the basis of the GRI Reporting Principles."
Additional indicators: "Additional Indicators represent emerging practice or address topics that may be material for some organisations, but are not material for others."

Table 3: Minimum indicator reporting obligations per NGRS Tier

TIER	INDICATOR CATEGORY			TOTAL INDICATORS
	ECONOMIC	ENVIRONMENT	SOCIAL	
1	0	0	0	0
2	1 (Not externally verified)	1 (Not externally verified)	1 (Not externally verified)	10 (Not externally verified)
3	1	1	1	10
4	1	3	1	20
5	6	24	20	50

Source: NGRS Reporting Guidelines.

Governance: The MoE has put in considerable effort to engage with the framework and its adoption, with the symbolic launch of the website as well as hosting various capacity-building workshops. The MoE has started reviewing and updating the NGRS in collaboration with the United Nations Industrial Development Organisation (UNIDO)[24]. Organisations are being enrolled for the year 2025 and a call for submissions under the updated NGRS is to be made.

6.3.2 Sri Lanka Accounting Standards - SLFRS S1 and S2

Inception: The Sri Lanka Accounting and Auditing Standards Act No. 15 of 1995 mandates the adoption of Sri Lanka Accounting Standards (SLAS) for Specified Business Enterprises (SBEs) through recommendations by the Accounting Standards Committee, which was established to assist the Council of the Institute of Chartered Accountants of Sri Lanka (CA Sri Lanka). Since January 1, 2012, Sri Lanka has aligned its accounting standards with the latest pronouncements issued by the IASB. The increasing demand from investors for reliable ESG information led CA Sri Lanka to adopt the Sustainability Disclosure Standards under the SLFRS corporate sustainability disclosure framework. In close collaboration with the ISSB, the SLFRS S1 and S2 were adapted for the local context, and will be effective from January 1, 2025. These standards are based on IFRS S1 addressing general requirements for sustainability-related financial information, and IFRS S2 focusing specifically on climate-related disclosures respectively.

Scope: As in the case of the IFRS, the SLRFS sustainability disclosures caters to the users of general purpose financial reports by presenting sustainability risks and opportunities.

Scale of adoption: These standards will come into effect from 1 January 2025 for the first 100 listed entities of the Colombo Stock Exchange (CSE), with the scale of adoption set to increase incrementally, as listed in Table 4. There is however a two-year transition relief period that the entities can choose to adopt during which all disclosures do not have to be included in the annual report.

[24] Online correspondence with the MoE.

Table 4: Timeline of adoption of SLFRS S1 and S2

ADOPTION DATE	ORGANISATION TYPE
1 January 2025	First 100 listed entities of the CSE
1 January 2026	All entities listed in the Main Board of the CSE
1 January 2027	All listed entities on the CSE, except for those on the Empower Board
1 January 2028	Companies using the SLAS (is annual turnover exceeds Rs. 10B)
1 January 2029	Companies using the SLAS (is annual turnover exceeds Rs. 5B)
1 January 2030	All SBE's[25]
	Entities listed on the CSE's Empower Board as of 1 January 2024[26]

Source: CA Sri Lanka.

Structure of the standards: The SLFRS S1 and S2 standards follow the structure of the IFRS S1 and S2, with similar general requirements across four core pillars of governance, strategy, risk management, and metrics and targets. However, the SLFRS allows organisations to apply GRI or ESRS standards if deemed more appropriate, provided they do not obscure or underreport any requirements specified by the SLFRS.

Reporting Practices: The reporting should be in accordance with SLAS financial reporting. However, the interim sustainability-related financial disclosures are intended to be an update on the latest complete set of annual disclosures of sustainability-related information to avoid duplicated information that is already reported.

Governance: The CA Sri Lanka has set up the Sustainability Disclosure Standards Committee to review and recommend best practices for the Sri Lankan context.

6.3.3 Other organisations driving environmental reporting

In 2023, the CSE amended its listing rules, requiring all listed companies to publish an ESG policy on their websites as part of their corporate governance obligations (s.9.2.1(h)). The Central Bank of Sri Lanka (CBSL) also urges licensed banks to disclose the environmental and social impacts of their business activities, following the GRI guidelines and the recommendations of TCFD (Direction No.5 of 2022, 8.2). Formal and regular environmental reporting is also promoted by the Institute of Chartered Accountants (ICA) and the Securities and Exchange Commission (SEC) through the Code of Best Practice on Corporate Governance. Key regulatory bodies, including the Securities and Exchange Commission (SEC), CSE, and CBSL, are actively shaping these requirements. Recognising the cumulative impacts of the SMEs in Sri Lanka, the Inclusive and Sustainable Businesses strategy was set up under the monitoring of the Sustainable Development Council. Through collaboration and multi-stakeholder partnerships, the goal is to steer SMEs towards positive social and environmental impacts by focussing on capacity building and providing financial incentives for the transition.

[25] Specified Business Enterprises (SBE) includes companies engaged in the business of banking, insurance, leasing, factoring, financial services, fund management and stock broking, all companies listed under the Colombo Stock Exchange and companies with a turnover in excess of Rs.500 million, companies having shareholders' equity in excess of Rs. 100 million, companies having gross assets in excess of Rs. 300 million, companies with liabilities in excess of Rs. 100 million to banks and other financial institutions, companies employing in excess of 1,000 employees, and public corporations engaged in the sale of goods or the provision of services.
[26] For entities that are listed or will be listed after 1 January 2024, adoption date applies for annual reporting periods after the fifth anniversary of their listing in the Empower Board.

7. Key Takeaways

Corporate environmental disclosures are no longer optional; they are essential tools for fostering accountability, building trust, and aligning with the global transition toward sustainability. As this primer has demonstrated, these disclosures serve as a bridge between companies and their stakeholders, offering a structured approach to assess and communicate climate and environmental risks, impacts, and opportunities. However, navigating the complex and evolving landscape of frameworks, standards, and regulations requires concerted effort and strategic foresight.

Environmental reporting is steadily growing across all countries in the Asian and South Asian region, reflecting market pressures and regional commitment to sustainability practices. Countries like Singapore have established advisory committees to develop roadmaps for phased and incremental implementation of sustainability disclosure practices. Thailand's Sustainability Investment Index provides a unique example of a subtle name-and-shame approach, encouraging top companies to improve their disclosure practices by providing comparable data with competitors through the index. Some countries including Hong Kong, Singapore and Philippines have adopted a comply-or-explain model to push companies to adopt disclosure practices in a phased manner. It is reasonable to assume that while the region is committed to sustainability, countries have tailored implementation strategies based on their regulatory, economic and market context to increase adoption rates of sustainability reporting.

For Sri Lanka, the journey toward robust environmental disclosure practices presents both challenges and opportunities. The complexity of navigating the reporting landscape, compounded by the push from global mandates, such as the ESRS, and evolving local requirements driven by CSE and CA Sri Lanka, adds significant pressure on businesses. The fast-changing regulatory and policy landscape leaves organisations scrambling to keep up with new mandatory requirements, creating uncertainty and capacity gaps. Furthermore, companies face challenges in collecting accurate, comprehensive, and verifiable data to meet these stringent standards, which often require advanced systems and expertise that may be lacking. Despite these hurdles, Sri Lanka can leverage global best practices and frameworks to build a tailored approach that aligns with local realities. By prioritising transparency and integrating sustainability into business practices, companies can strengthen their competitiveness, attract investment, and contribute meaningfully to climate goals.

This knowledge primer lays the groundwork for deeper exploration into the intricacies of corporate environmental disclosures and their implications for Sri Lanka. Through subsequent research, policy briefs, and stakeholder engagement, the aim is to provide actionable insights that enable policymakers and businesses to adopt effective disclosure practices. By doing so, organisations can work towards a sustainable economic recovery and foster long-term growth that aligns economic development with environmental responsibility.

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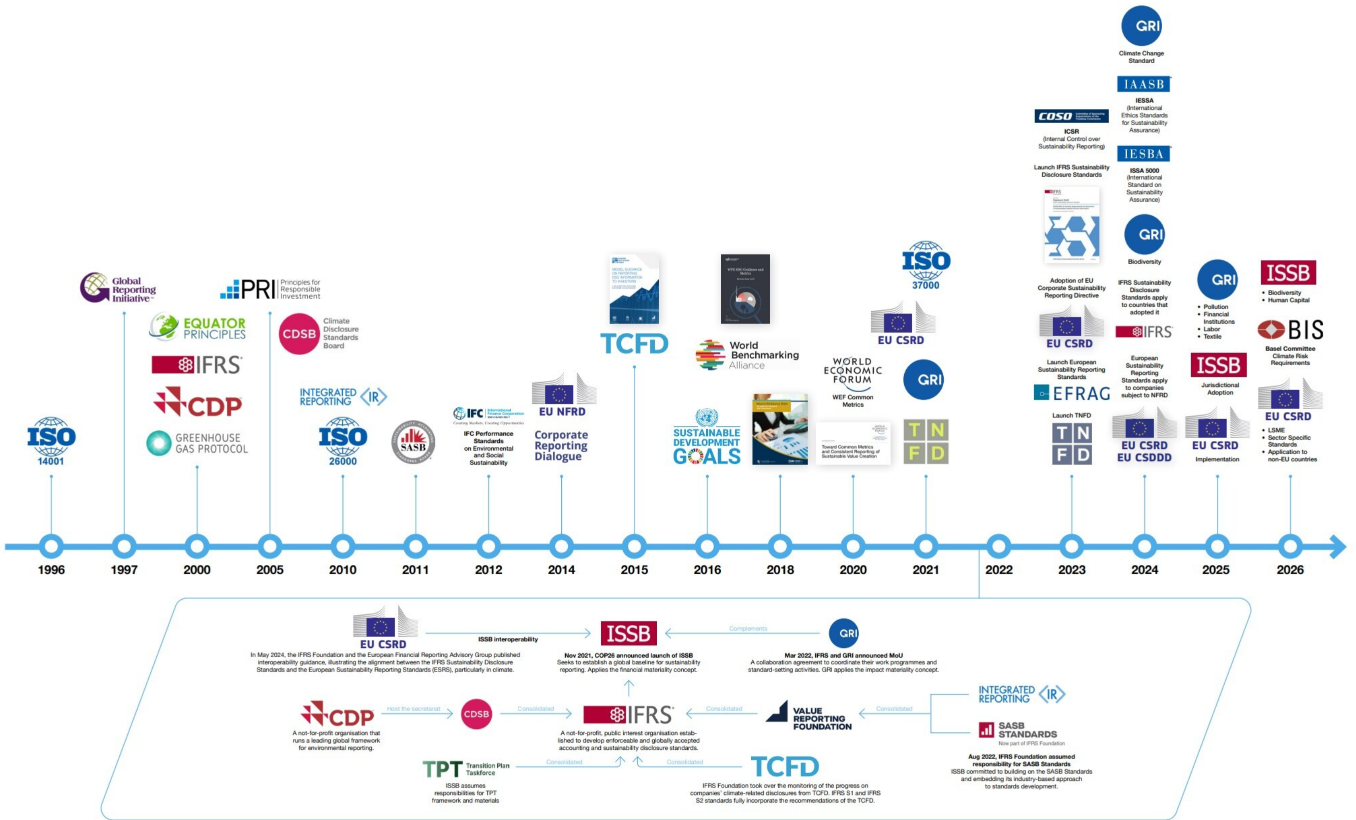
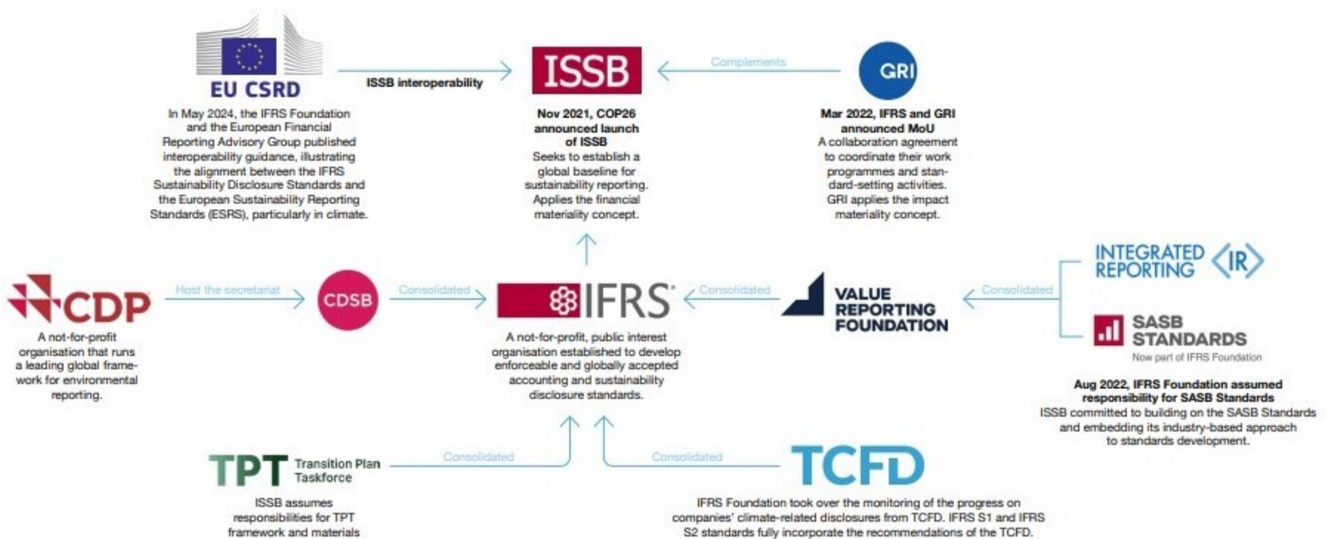
Appendix

Appendix 1: Timeline of the development of ESG disclosure frameworks



Source: IFC 2024

Appendix 2: Consolidation and interoperability of different standards and frameworks



Source: IFC 2024

Appendix 3: Mapping of NGRS indicators to GRI G3 (2006) Indicators

NGRS Aspect	NGRS Indicator	Counterpart GRI G3 Indicator	Core / Additional status	GRI G3 Aspect	GRI Dimension
Profit/Economic Performance	ECON 1	EC1	Core	Economic Performance	Economic
	ECON 2	EC3	Core		
	ECON 3	EC4	Core		
	ECON 4	EC6	Core	Market Presence	
	ECON 5	EC7	Core	Market Presence	
	ECON 6	EC9	Add	Indirect Economic Impacts	
Planet/ Environmental Performance	ENVT 1	EN1	Core	Materials	Environmental
	ENVT 2	EN2	Core		
	ENVT 3	EN3	Core	Energy	
	ENVT 4	EN4	Core		
	ENVT 5	EN5	Add		
	ENVT 6	EN6	Add		
	ENVT 7	EN7	Add		
	ENVT 8	EN8	Core	Water	
	ENVT 9	EN9	Add		
	ENVT 10	EN10	Add		
	ENVT 11	EN11	Core	Biodiversity	
	ENVT 12	EN12	Core		
	ENVT 13	EN16	Core	Emissions, Effluents, and Waste	
	ENVT 14	EN18	Add		
	ENVT 15	EN20	Core		
	ENVT 16	EN21	Core		
	ENVT 17	EN22	Core		
	ENVT 18	EN23	Core		
	ENVT 19	EN24	Add		
	ENVT 20	EN26	Core	Products and Services	
	ENVT 21	EN27	Core		
	ENVT 22	EN28	Core	Compliance	
	ENVT 23	EN30	Add	Overall	
	ENVT 24	NA	NA	NA	NA

Appendix 3 (continued...)

NGRS Aspect	NGRS Indicator	Counterpart GRI G3 Indicator	Core / Additional status	GRI G3 Aspect	GRI Dimension
People/Social Performance	SOCL 1	LA1	Core	Employment	Labor Practices and Decent Work
	SOCL 2	LA2	Core		
	SOCL 3	LA3	Add		
	SOCL 4	LA6	Add	Occupational Health and Safety	
	SOCL 5	LA7	Core		
	SOCL 6	LA8	Core		
	SOCL 7	LA10	Core	Training and Education	
	SOCL 8	LA11	Add		
	SOCL 9	LA13	Core	Diversity and Equal Opportunity	
	SOCL 10	SO5	Core	Public Policy	Society
	SOCL 11	SO06	Add		
	SOCL 12	SO08	Core	Compliance	
	SOCL 13	PR2	Add	Customer Health and Safety	Product Responsibility
	SOCL 14	PR3	Core	Product and Service Labelling	
	SOCL 15	PR4	Add		
	SOCL 16	PR5	Add		
	SOCL 17	PR6	Core	Marketing Communications	
	SOCL 18	PR7	Add		
	SOCL 19	PR9	Core	Compliance	
	SOCL 20	PR1	Core	Customer Health and Safety	

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