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A Review of Environmental, Social and Governance (ESG) Regulatory Frameworks: Their Implications on Malaysia

Kuok Ho Daniel Tang

Department of Environmental Science, The University of Arizona, Tucson, AZ 85721, USA

Correspondence: daniel.tangkh@yahoo.com

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ABSTRACT: The increasing emphasis on sustainability has led many nations to introduce ESG-related regulatory frameworks. These frameworks aim to regulate and guide financial investments based on the ESG performance of companies while ensuring transparency to prevent the manipulation of sustainability-related information concerning investment products. This article reviews the regulatory and disclosure frameworks implemented in different nations and regions to identify their key components. The review reveals that these regulatory frameworks capture the environmental aspects encompassing climate change adaptation and mitigation, identification, evaluation and management of climate risks, circular economy practices, and pollution prevention. They also cover the social aspects, which include community development, employee welfare, and human rights. Additionally, governance aspects comprising anti-corruption measures, diversity within company boards and management, and the implementation of due diligence were included. The increased emphasis on transparency underscores the importance of disclosure. In this regard, the disclosure frameworks largely align with the recommendations of the Task Force on Climate-related Financial Disclosures, which cover governance, strategies for identifying and assessing risks and opportunities, their impacts on a company's finances and operations, resilience-building through scenario analyses, risk management integration with the overall organizational risk management, and the use of metrics and targets to measure performance. Malaysia could benefit from adopting comprehensive regulatory and disclosure frameworks that address ESG holistically, with elements related to the circular economy and dual materiality included in the frameworks. Future studies could focus on standardizing the development of metrics and targets to facilitate performance comparisons.

KEYWORDS: Disclosure; environment; framework; governance; regulatory; social

1. Introduction

ESG (Environmental, Social, Governance) has gained significant popularity in recent years as a decision-making tool for investors, helping them determine which companies to invest in based on their approach to environmental, social, and governance issues [1]. ESG has evolved from the early emphasis on sustainable development, encouraging companies to adopt practices that protect the environment and promote the well-being of workers and society [2]. Sustainable development serves as the overarching concept driving the formation of ESG, which systematically evaluates a company's sustainable performance [2]. The term 'ESG' was first introduced in a report called 'Who Cares Wins', jointly published by the Swiss Federal Department of Foreign Affairs and the United Nations, with input from the financial sector [3]. This report aimed to integrate ESG into investment decisions and initially focused on the financial market, drawing the attention of financial advisors and asset managers to ESG considerations [4].

ESG can also be seen as a variant of corporate social responsibility (CSR), commonly adopted by international private companies on a voluntary and self-regulated basis to contribute to community development through charitable activities, which may include environmental initiatives like tree planting and public space cleaning [5]. However, CSR's voluntary nature and lack of government intervention have led to variations in its implementation and inadequate monitoring of its outcomes. It can also be susceptible to 'greenwashing,' where companies overemphasize their engagement in CSR for branding purposes. Besides, CSR is also viewed as companies' willingness to go beyond compliance to support social well-being [7]. However, the fluid nature of CSR, the absence of clear frameworks, and the limited focus on environmental and governance factors have prompted a gradual shift towards ESG [3]. ESG initially lacked proper frameworks and guidelines but has seen increased government push, resulting in the gradual introduction of regulations and guidelines. Some countries have made ESG mandatory, and governments have provided incentives to encourage its adoption [4]. While ESG's inception was closely related to the financial sector, its application has now expanded to other sectors, helping improve the sustainability of their operations and meet stakeholder expectations [1]. ESG remains closely linked to the financial sector, influencing capital allocation and investment decisions made by financial institutions and asset managers worldwide. Many financial institutions now consider ESG performance when making funding decisions, aiming to balance risk, return, and social and environmental impacts [3].

Despite the global push for ESG and the availability of guidelines, it lacks clear definitions, standards, and metrics for efficient implementation across regions and sectors. Regional variability in ESG requirements contributes to this issue [6]. The absence of clear definitions, standards, and metrics could lead to fragmented and inconsistent implementation, making ESG susceptible to greenwashing and manipulation [8]. Some argue that measuring ESG can be challenging, and even if measured, the reliability and validity of ratings and indices may be questionable [2]. In the context of Malaysia, an upper-middle-income economy, there is growing emphasis on ESG, demonstrated by the introduction of a voluntary carbon market in the 2022 budget. This market aims to facilitate carbon credit trading to promote low-carbon practices and achieve carbon neutrality by 2023 [10]. However, ESG implementation in Malaysia faces challenges, including a lack of clear definitions, standards, transparency, and accountability. These challenges could complicate and hinder the engagement of various stakeholders in ESG, and the support and enforcement of ESG in Malaysia may not be adequate for effective implementation [11].

While there is a clear gap in ESG practices in Malaysia, few studies have examined how ESG can be improved through better definitions and frameworks. Existing studies have primarily focused on disclosure practices and the benefits associated with ESG implementation, particularly in terms of environmental and financial performances [12, 13].

Although Razak et al. analyzed the legal framework in Malaysia driving ESG implementation, their study did not delve into defining or establishing an ESG framework to streamline its implementation [14]. This paper aims to address this gap by reviewing existing ESG laws and standards from different countries and providing recommendations for enhancing ESG practices in Malaysia. These recommendations will serve as the foundation for establishing a comprehensive ESG framework and improving ESG disclosure. This review is unique in synthesizing practical recommendations for ESG practices in Malaysia based on a comprehensive analysis of ESG frameworks from multiple countries, an aspect often overlooked in regional ESG literature, which typically focuses on disclosure and co-benefits resulting from ESG implementation

2. Method

To achieve the aim of this review, we conducted a comprehensive search for relevant peer-reviewed scholarly articles using major journal databases, including Web of Science, Scopus, and ScienceDirect [15]. The search was carried out using a set of keywords, including ESG, framework, laws, regulations, guidelines, and standards. We also used keyword combinations such as 'ESG frameworks' and 'ESG regulations' to further refine the search. The articles retrieved were subjected to a screening process based on the following criteria:

- The articles must be published in the past 10 years.
- The articles must be peer-reviewed.
- The articles must cover the legal requirements and the guidelines for ESG including the indicators, indices and metrics.

The search for ESG-related legal requirements, frameworks and guidelines have also been extended to official websites which often contain updated regional or international information concerning ESG [16]. More than 40 relevant articles and websites have been examined in this review. Content analysis was performed on the screened articles by examining their abstracts first to extract the relevant information and the texts subsequently to extract further information required for the review. Besides, contents of the relevant websites were also analyzed to glean information related to regulations, frameworks, standards and metrics for ESG.

3. Results and Discussion

3.1.Regulatory frameworks for ESG.

The regulatory frameworks for ESG are relatively new and many developed countries such as Canada, the United States (US), and the United Kingdom (UK) are still in the process of finalizing the requirements [17 – 19]. This review intends to cover most of the available ESG frameworks, especially those of the developed countries and the selection of frameworks was based on this intention, in addition to the availability and completeness of information on the frameworks. Compared to other regions, the European Union has a more comprehensive and mature legal frameworks of ESG, despite that most of the requirements are recent. The EU has recently passed several directives related to ESG, namely the EU Taxonomy promoting sustainable investments through establishing a classification system for economic activities according to their sustainability level [20], the Corporate Sustainability Reporting Directive specifying ESG reporting requirements [21], and the Sustainable Finance Disclosure Regulation to prevent greenwashing via enhancing the transparency of sustainable investment (also see Table 1) [22]. The EU's Corporate Sustainability Due Diligence Directive, which necessitates the exercising of due diligence by companies and their value chains to safeguard human rights and prevent environment risks, was also passed in 2023 but will only come into force in 2025 [23]. These directives catalyze the formation of regulatory frameworks in the member nations, leading to the rollout of the German Supply Chain Due Diligence Act in response to the EU's Corporate Sustainability Due Diligence Directive. Correspondingly, the Act requires companies and their supply chains to meet certain social and environmental standards while monitoring their operations and those of their suppliers globally [24].

Globally, countries may already have existing laws prompting the disclosure of certain ESG aspects. For instance, the EU's Non-Financial Reporting Directive introduced in 2014 requires the reporting of matters related to the environment, social responsibility, human rights and board diversity, similar to its latest ESG reporting requirements but is limited in its coverage of climate risks, anti-corruption measures and target-setting or metrics as well as its scope of companies. This is complemented by the Corporate Sustainability Reporting Directive which expands the scopes of reporting particularly to the environmental aspects, and the companies covered [21]. Similarly, the UK has an existing Streamlined Energy and Carbon Reporting Guidance produced in 2019 but it focuses on energy consumption and carbon emissions as well as measures to improve energy efficiency, and there is limited emphasis on the social and governance aspects (Table 1) [25]. This prompts the development of the Sustainability Disclosure Requirements currently in progress.

The rollout of guidance and guidelines is a prevalent step taken by many countries in addressing ESG disclosure. Guidelines are commonly not legally binding and serve to support the existing legal requirements without modifying them. An example is the Prudential Practice Guide on Climate Change and Financial Risks CGP 229 of Australia, which provides information on climate-change related risks and opportunities as well as how to uphold transparency in decisions on investment, lending and underwriting [26]. In Canada, staff notice on ESG-related Investment Disclosure for Fund Guidance was also issued in 2022 to help companies align their disclosure of ESG-related investment funds with the current regulatory requirements on securities [17]. The same has been observed for Singapore with the availability of Guidelines on Environmental Risk Management to ensure disclosure is in parallel with international frameworks such as the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) by the Financial Stability Board [27]. The Revisions of Corporate Governance Code 2021 of Japan also require ESG reporting to adopt international frameworks or the recommendations of the TCFD [28]. Besides, elements of the TCFD's recommendations are incorporated into the Green and Sustainable Finance Strategy of Hong Kong encompassing climate-related governance, strategies, risk management, metrics and targets [29].

While ESG is applicable to all sectors to improve their sustainability, the current regulatory frameworks invariably revolve around the financial sector to ensure environmental, social and ethical components are taken into account in investments and economic activities. This aims to prevent greenwashing of financial products, for instance by striving for transparency in the ESG of the companies or assets these products invest in [1]. It also enables financial stakeholders such as asset managers and insurers to manage risks associated with climate change, transition towards low-carbon economy, pollution and governance bearing implications on a company's reputation [2, 30]. Financial agencies such as Financial Conduct Authority of the UK, Central Bank of Brazil, Canadian Securities Administrators and China Securities Regulatory Commission, therefore, play crucial roles in establishing the regulatory frameworks for ESG disclosure (Table 1). Invariably, the regulatory frameworks address aspects related to 1) environmental matters including climate risks, adaptation to and mitigation of climate change, managing climate risks, circular economy and pollution prevention, 2) social matters related to community development and employees' welfare, ensuring human rights, etc. 3) governance encompassing anti-corruption, ensuring the independence and diversity of company boards and management, 4) transparency in decision-making and through disclosures using established frameworks, 5) exercising of due diligence through assessing, mitigating and monitoring adverse impacts of operations, and 6) using indicators and metrics to gauge performance. In the EU and UK, classification and labels of the sustainability of investment or economic activities are of interest [19, 20].

Table 1. ESG-related regulatory frameworks of different countries/regions.

Country/ Region	Regulatory Framework	Date in effect	Purpose	Regulator	Ref.
European Union	EU Taxonomy	January 1, 2023	Promote sustainable investments and define economic activities that are considered sustainable; prevent greenwashing and enable environmental considerations in investments; set the evaluation criteria for investments, i.e. 1) mitigate climate change, 2) adapt to climate change, 3) adopt circular economy principles, 4) prevent/ minimize pollution, and 5) reduce impacts on water and biodiversity.	European Commission	[20]
	Non-financial Reporting Directive	2014	Mandate the reporting of 1) environmental matters, 2) social matters and employees' welfare, 3) upholding of human rights, 4) measures to prevent corruption, and 5) board diversity.	European Commission	[31]
	Corporate Sustainability Reporting Directive	January 5, 2023	Regulate the reporting of sustainability, including 1) environmental matters covering science-based targets and climate risk, 2) social responsibility encompassing the welfare of employees and community development, 3) efforts made in upholding human rights, 4) measures to prevent corruption, and 5) board diversity; adopt double materiality involving the assessment of internal and external impacts of an entity; applicable to a larger number of companies than Non-financial Reporting Directive.	European Commission	[21]
	Sustainable Finance Disclosure Regulation	January 1, 2023	Improve transparency of sustainable investment to prevent greenwashing; attract investment of sustainable products to facilitate the realization of a low-carbon economy; categorize investment products based on their level	European Commission	[22]

Country/ Region	Regulatory Framework	Date in effect	Purpose	Regulator	Ref.
			of sustainability; standardize disclosure by 1) gathering company data, 2) reporting principal adverse impact indicators, and 3) adopting stipulated methodologies in reporting.		
	Corporate Sustainability Due Diligence Directive	Passed on June 1, 2023; expected to be in effect in 2025	Require due diligence of a company's business line and value chain to safeguard human rights and prevent environmental risks through 1) incorporating due diligence into policies, 2) analyzing the potential and actual negative impacts of its operations, 3) stopping the actual negative impacts while preventing and mitigating the potential ones, 4) making a complaint mechanism available, 5) monitoring if the due diligence policy and programs are effective, 6) informing the due diligence to the public, 7) formulating climate transition plans parallel to Paris Agreement's goals, and 8) if there are 1000 employees, the compensation of directors will be associated with the achievement of the climate transition plans.	European Commission	[23]
UK	Sustainability Disclosure Requirements	2023 (consultation paper)	Introduce sustainable investment labels; set the requirements on disclosure and anti-greenwashing; regulate the use of words on products and during their marketing.	Financial Conduct Authority	[19]
	Streamlined Energy and Carbon Reporting	April 1, 2019	Necessitate the annual reporting of energy consumption and carbon emission; encourage efforts to improve energy efficiency; applicable to a larger number of companies than its predecessor, the Carbon Reduction Energy Efficiency Scheme; complement other responsibilities of companies under other regulations such as greenhouse gas reporting.	Department for Business, Energy and Industrial Strategy	[25]
Germany	The German Supply Chain Due Diligence Act	January 1, 2023	Mandate the meeting of social and environmental standards by companies and their supply chains; prompt companies to monitor their own operations and those of their suppliers globally; impose a fine amounting to 2% of a company's annual turnover for incompliance.	Federal Office for Economic Affairs and Export Control	[24]
Australia	Prudential Practice Guide on Climate Change and Financial Risks CGP229	November, 2021	Support the existing legal requirements on risk management and governance; guide companies in managing climate risks, hence not legally binding; analyze risks and opportunities stemming from climate change; ensuring transparency in decisions on investment, lending and underwriting; promoting adequate	Australian Prudential Regulation Authority	[26]

Country/ Region	Regulatory Framework	Date in effect	Purpose	Regulator	Ref.
			governance, risk management and sound disclosure practices.		
Brazil	Management and Disclosure of Social, Environmental and Climate Risks	August 1, 2022	Mandate the inclusion of social, environmental and climate-related risk management, in addition to traditional financial risks; dictate the identification, measurement, assessment, monitoring and management of adverse impacts caused by the interactions of the risks; specify how information related to social, environmental and climate related risks and opportunities should be disclosed.	Central Bank of Brazil	[32]
Canada	ESG-related Investment Disclosure for Funds Guidance CSA Staff Notice 81-334 2022	January 19, 2022 (staff notice without legal effect)	Intended for investment funds with ESG considerations; does not put forth new legal requirements or alter the current ones; explain the application of current securities regulatory requirements on the disclosure of investment funds with ESG elements.	Canadian Securities Administrato rs	[17]
China	ESG-related Amendments to the Disclosure Rules Applicable to Listed Companies	June 1, 2022	Promote environmental protection and social responsibility among listed companies; mandate the disclosure of penalties resulted from environmental breaches; promote the disclosure of carbon emissions reduction in line with the national goal of emission peak and carbon neutrality; encourage disclosure of efforts to alleviate poverty.	China Securities Regulatory Commission 2021	[33]
Hong Kong	Enhancement of Climate-related Disclosures under the ESG Framework	2023 (consultation paper)	Warrant climate-related disclosures in ESG reports encompassing governance, strategies, risk management, metrics and targets.	Hong Kong Exchanges and Clearing Limited	[29]
Japan	Revisions of Corporate Governance Code 2021	June, 2021	Strengthen the independence of company boards and diversity of senior management; promote sustainability and ESG by adopting international frameworks or the recommendations of the TCFD.	Financial Services Agency and Tokyo Stock Exchange	[28]
Singapore	Guidelines on Environmental Risk Management	December, 2020	Guide the management and disclosure of environmental risk without being legally-binding; promote an environmentally sustainable economy; align disclosure with international frameworks such as the recommendations of the TCFD covering 1) governance, 2) strategy, 3) risk management, 4) metrics and targets.	Monetary Authority of Singapore	[27]
US	Climate Disclosures for Public Companies	In proposal stage as of July 2023	Mandate publicly listed companies to disclose the assessment and management of climate-related risks annually in a standardized manner.	Securities and Exchange Commission	[18]

3.2. Aspects of disclosure.

With ESG disclosure mentioned in most of the regulatory frameworks in Table 1, it is of interest to examine the disclosure requirements or guidelines to identify the crucial and common aspects. Recommendations of the TCFD is promulgated by the regulatory frameworks of Japan and Singapore for ESG disclosure [27, 28] while the Hong Kong's Enhancement of Climate-related Disclosures under the ESG Framework resembles that of the TCFD's recommendations [29]. The Australian Prudential Practice Guide on Climate Change and Financial Risks CGP229 is also modelled largely after the TCFD's recommendations, focusing on the financial risks of climate change [26]. Therefore, comparison was made against other requirements deemed to have more distinctive elements. The EU's Corporate Sustainability Reporting Directive was chosen due to its differentiated features while the UK's Sustainability Disclosure Requirements include evaluation of investment products' risks and opportunities though it contains other elements which were modified from the TCFD's Recommendations [19, 21]. The Brazilian Management and Disclosure of Social, Environmental and Climate Risks has an extended scope covering the social and environmental facets [32].

Generally, Table 1 shows that there are two streams of disclosure, one confined to climate-change risks while another covers sustainability-related risks including social and environmental risks. Emphasis has been given exclusively to climate change in some instances due probably to the increasing attention on mitigating and adapting to the changing climate as portrayed in international treaties such as the recent Paris Agreement as a result of intensifying global warming and extreme weather events [34 – 36]. Most of the regulatory frameworks contain the elements of governance, strategy, risk management as well as metrics and targets development. Table 2 shows that the regulatory frameworks reviewed adopt a wider scope covering other sustainability-related issues besides climate change. Governance is related to the approaches and visions of an organization on ESG which affect its subsequent implementation [8]. Table 2 shows that the frameworks have similar disclosure requirements for governance except that the Corporate Sustainability Reporting Directive requires the description of sustainability-related incentive schemes offered [21] and the Sustainability Disclosure Requirements cover product-level governance in addition to that of a firm, prompting board oversight of risks related to investment products [19]. The outlining of management's role is required by all frameworks in Table 2. Exercising of due diligence is an approach to ensure ESG requirements are complied with to avoid undesirable consequences. Due diligence is explicitly mentioned in Corporate Sustainability Reporting Directive but not in the other frameworks [23].

In terms of strategies, the Corporate Sustainability Reporting Directive and the Management and Disclosure of Social, Environmental and Climate Risks require the identification of actual and potential negative impacts without emphasizing the classification of short-, medium- and long-term risks like the TCFD's recommendations [21, 32]. The UK's framework is extended to the impacts of investment products on the environment and society [19]. All the frameworks seem to focus on the financial aspect of the climate-related or ESG-related risks with the addition of product-level risks for the UK's framework, though there is a growing emphasis on meeting ESG requirements across all sectors. The applicability of ESG in non-financial sectors may result in companies meeting ESG requirements to gain competitive edge in funding and investment by the financial sector [2]. Scenario analysis is an approach mentioned in all the frameworks in Table 2 when assessing how the financial performance of a company can be impacted under different climate or sustainability scenarios. The impacts could be physical factors brought by extreme weather events or transition risks as companies shift to a low-carbon economy [37]. The EU's framework aligns its strategies of managing ESG risks with the 1.5^{o}C goal of the Paris Agreement as the scenario [21]. Brazil also has its scenarios under its own stress-testing criteria for financial stability analysis [32].

Risk management is mandated by all frameworks in Table 2, typified by risk identification, assessment and management, as well as integration of ESG risks to the overall organizational risk management. As aforementioned, due to integration of the UK Green Taxonomy with its Sustainability Disclosure Requirements, risk identification, assessment and management are extended to investment products [19]. The EU's framework states the management of actual or potential negative impacts. This reflects the concept of double materiality it upholds, which examines the impact and the financial perspectives. The former concerns the actual and potential environmental and social impacts caused by the operations of an organizations while the latter centers on the ESG-related risks and opportunities that impact an organization's development, reputation and performance. As such, the EU's framework extends beyond the financial aspect [21]. The use of metrics and targets to measure performance is crucial in all disclosure frameworks, with the disclosure of greenhouse gas emissions and the risks mentioned in all frameworks except the Brazilian one [19, 21, 32]. Disclosure of greenhouse gas emissions is subdivided into Scope 1, Scope 2 or Scope 3 where Scope 1 represents the direct emissions from an organization or its operations, Scope 2 comprises indirect emissions from energy sourced by an organization and Scope 3 covers indirect emissions from an organization's value chain [37].

Table 2. Comparison of ESG disclosure frameworks with that of the TCFD.

ESG Aspect/ Applicable region	**Recommendations of the TCFD [37]/ International**	**Corporate Sustainability Reporting Directive/ EU**	**Sustainability Disclosure Requirements/ UK**	**Management and Disclosure of Social, Environmental and Climate Risks/ Brazil**
<u>Governance</u>				
Board's vision on risks and opportunities	Climate-related risks and opportunities	Sustainability-related incentive schemes offered; the business model addresses stakeholders' interests	Sustainability-related; extended to product-level	Social, environmental and climate-related
Management's role in the assessment and management of risks and opportunities	Climate-related risks and opportunities	Sustainability-related	Sustainability-related	Social, environmental and climate-related
Due diligence	Not specified	Implementation of due diligence procedure	Not specified	Not specified

ESG Aspect/ Applicable region	**Recommendations of the TCFD [37]/ International**	**Corporate Sustainability Reporting Directive/ EU**	**Sustainability Disclosure Requirements/ UK**	**Management and Disclosure of Social, Environmental and Climate Risks/ Brazil**
<u>Strategy</u>				
Short-, medium- and long-term risks and opportunities	Climate-related risks and opportunities; focus mainly on financial aspect.	Principal actual or potential negative impacts arising from a company's operations and those of its value chains	Sustainability-related; also cover the impacts of firms and investment products on the environment and society	Actual and potential impacts of social, environmental and climate-related
Impacts of risks and opportunities on planning, finance and operations (include adaptation and mitigation)	Climate-related risks and opportunities; focus mainly on financial aspect	Sustainability-related risks and opportunities	Sustainability-related; also cover the impacts of firms and investment products on the environment and society	Social, environmental and climate-related
Resilience under a particular scenario, including aspects on implementation of the strategies	Climate-related; scenario of 2^{o}C or lower	Sustainability-related; scenario of 1.5^{o}C as per the Paris Agreement	Sustainability-related; extended to products	Social, environmental and climate-related; scenario analyses under the stress test program
<u>Risk management</u>				
Risk identification and assessment procedures	Climate-related risks	Actions to identify and monitor the actual or potential negative impacts; sustainability-related risks	Sustainability-related risks; extended to products	Social, environmental and climate-related risks
Risk management procedures	Climate-related risks	Actions to prevent, mitigate, remediate or terminate the actual or potential negative impacts	Sustainability-related risks; extended to products	Social, environmental and climate-related risks
Integration of ESG risk identification, assessment and management into overall risk management	Climate-related risks	Not specified	Sustainability-related risks; extended to products	Social, environmental and climate-related risks
<u>Metrics and targets</u>				
Metrics used to assess risks and opportunities	Climate-related risks and opportunities	Relevant sustainability related indicators	Sustainability performance metrics	Social, environmental and climate related; classification of risk exposures and concentrations of credit risk exposure

ESG Aspect/ Applicable region	Recommendations of the TCFD [37]/ International	Corporate Sustainability Reporting Directive/ EU	Sustainability Disclosure Requirements/ UK	Management and Disclosure of Social, Environmental and Climate Risks/ Brazil
Disclosure of greenhouse gas emissions and the risks	Based on Scope 1, Scope 2 and Scope 3	Based on Scope 1, Scope 2 and Scope 3	As per the TCFD's recommendations	Not specified
Organizational targets to manage risks and measure performance	Climate-related	Sustainability related	Sustainability related	Social, environmental and climate-related

4. Implications on ESG in Malaysia

Currently, there is a lack of ESG regulatory framework in Malaysia. The only sustainability requirement available comes under the Listing Requirements of Bursa Securities Malaysia [38] as with other countries such as the US, Japan, China and Canada where the requirements are made by the respective securities administrators, implying that the development of ESG frameworks is a progressing trend not only in developing countries but also in developed countries. Bursa Malaysia has published the 3rd Edition of its Sustainability Reporting Guide at the end of 2022 to improve the disclosures of sustainability information while helping companies to manage the risks and opportunities associated with sustainability matters. The guide is itself not legally binding and it is not imperative for companies to follow the guide though they are encouraged to do so [38]. The guide also mentions the alignment of sustainability reporting to other international guidelines such as the Global Reporting Initiative besides the recommendations of the TCFD, though there seems to be an emphasis on the latter with a chapter dedicated to it [38]. The extensive guide provides examples of sustainability reporting by various companies on different components of the reporting requirement but could be difficult to follow through without streamlining the information to clearly set out the format of the report in the beginning before guiding the reporting of each part of the report with clear examples. The guide has a very clear list of indicators and the methods of calculating the respective indicators. It also encourages the extension of disclosure practice to operations within the value chain of the disclosing company though the emphasis is not perceived to be strong.

The review has two main implications on the ESG regulatory and disclosure frameworks of Malaysia. The first is the establishment of a dedicated regulatory framework, ideally a legally binding one, that incorporates all aspects of ESG while clearly defining the companies that need to comply with it. Under the environmental aspect, the concept of double materiality can be embedded to examine not only the potential and actual impacts caused by a company's operations but also the implications of ESG-related risks on finance. The current framework appears to focus more on the former under material sustainability [38]. Circular economy can be promulgated as an approach to mitigate the risks and impacts [20]. Human rights could be accentuated as a social matter to deter discrimination, forced labor, unfair treatment of migrant workers, etc. [31] In terms of governance, anti-corruption is crucial, in addition to the independence and diversity of company boards and management. The regulatory framework could specify mechanisms to ensure transparency, disclosure and the exercising of due diligence, including the use of indicators and metrics. The regulatory framework may be linked to other ESG aspects such as the taxonomy and labelling of financial products or economic activities, where applicable. In addition, the concept of due diligence could be introduced.

The second is related to the disclosure framework which is already comprehensive as reflected by the 3rd edition of the guide. The guide would benefit from a close alignment with a regulatory framework which sets out the overarching approach and major facets of ESG in Malaysia. The guide may capture the elements of circular economy by incorporating aspects related to more efficient use of resources from the design to the end-of-life management of a product or from the inception to the delivery/ commissioning/ decommissioning of a service or project. This could contribute to waste minimization and reduction of greenhouse gas emissions [39, 40]. The guide may also promote human rights reporting through explicitly including the relevant indicators. In addition, it may extend from the current material sustainability to double materiality by also assessing the ESG-related risks and opportunities on the finance of a company, which is lacking in the current framework focusing on addressing and mitigating external impacts created by a company.

While the Malaysian Sustainability Reporting Guide suggests the metrics to be used for measuring ESG performances, there are a few challenges. There is a lack of consensus and clarity on what constitutes ESG performance and how to measure it despite an attempt of the guide to provide the methods for measuring the metrics. Even if the measurement methods are agreed on, there may be a lack of reliable and comparable data on ESG issues, particularly the non-financial and qualitative aspects [38]. Another challenge to ESG disclosure is that different stakeholders may have different expectations and preferences for ESG reporting and it is crucial to harmonize the expectations through stakeholder consultation which could be beneficial to yield a commonly accepted reporting format as well as the performance metrics to be used and the methods they are measured [41]. In addition, ESG reporting is often perceived as an end in itself, resulting in a lack of alignment and communication between ESG reporting and decision-making. Rather, ESG should be upheld as a means to inform and influence the actions and strategies of companies, investors, regulators and other stakeholders [6]. To facilitate stakeholder engagement in Malaysia for different purposes such as garnering support, determining reporting strategies and performance metrics, regular dialogues and consultations between the regulators and other stakeholders can provide the avenues for collection of feedback and suggestions. This helps to build trust, transparency, accountability and collaboration between the parties. ESG reports can be made accessible to stakeholders through various platforms and channels such as websites and social media [12].

To overcome the lack of support for ESG integration in investment decisions, tax incentives can be granted to companies with good ESG performance or investors of these companies to promote capital flows to businesses prioritizing ESG performance, thus driving overall ESG improvement [13]. There is a need to build capacity and expertise in ESG management and reporting particularly for small and medium-sized enterprises which are likely to have difficulty understanding and implementing ESG frameworks due to a lack of resources and skills [11]. In reference to the regulatory and disclosure frameworks proposed above, the implementation of ESG in Malaysia requires a reinforcement of the current ESG practices through a more regulated approach. The concept of circular economy is already captured through waste minimization but there is generally a lack of systemic approach to circular economy in the nation that enables effective design and manufacturing to reduce waste as well as recovery and recycling of resources [42]. This could be scaled up alongside the development of the system. Other challenges on lack of ESG support and expertise have been discussed above.

5. Conclusion

As increasing attention is paid to preventing greenwashing and ensuring sound investments backed by transparency in ESG and climate-related performances of investment products or economic activities, ESG disclosure has come into the limelight. A review of the regulatory frameworks reveals central components addressing the environmental, social and governance aspects with the mention of human rights, anti-corruption, transparency and due diligence. The emerging idea of circular economy is also captured by the regulatory frameworks, signifying a paradigm shift to more efficient utilization of resources and waste materials, thus resulting in less end-of-life wastage. The need for transparency prompts a sound disclosure framework with development of metrics and targets to gauge performances. The various disclosure frameworks available currently merge at the recommendations of the TCFD, with differences mainly in the emphasis of due diligence, the extension from climate-related to ESG-related risks, the inclusion of double materiality and the integration with product-level risks. In the context of Malaysia, addressing the overarching ESG-related risks and opportunities, with double materiality could help raise the standard of regional ESG disclosure requirements. It could help investors and financial institutions to better identify and manage ESG-related risks and opportunities as well as integrate ESG factors into decision-making. This could enhance their risk-adjusted returns, reduce volatility, improve their reputation and promote legal compliance. Future studies can look into defining the metrics and targets for financial and non-financial sectors to enable more standardized performance reporting, hence permitting the comparison of performances. Examples of metrics that can be standardized are GHG emissions, the percent revenue invested for ESG-related matters as well as the percentage of employees by gender, age group and ethnicity.

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Competing Interest

The author declares that there is no competing interest.

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