



The ASEAN Sustainability Assessment Market: A Case Study on Malaysia and Singapore

Consultancy project
Global Sustainable Enterprise System
Date of Publication: February 2nd, 2024

Authors:

Dani Abdoellakhan, Julia van den Anker, Kizi Huijsman,
Beer Kwak, Rick Markus, Rutger Lucassen, and Julia Uijttewaal

Contributors:
Oriane Wisser
Abe de Ruijter

Abstract

This article highlights the evolving ASEAN sustainability market, driven by increasing consumer awareness. Consumer pressure serves as a key force prompting companies to adopt sustainable practices, though challenges hinder customer follow-through. To address this, companies can align branding strategies with consumer preferences.

Examining sustainability reporting regulations in the EU, Malaysia, and Singapore, the article emphasizes a blend of mandatory and voluntary frameworks enhancing transparency. The EU's CSRD, with its stringent guidelines, may influence ASEAN toward mandatory reporting, bolstering global sustainability initiatives.

A business-oriented vision characterizes sustainability reporting in Malaysia and Singapore, driven by regulations and corporate image concerns. Key focus areas include CSR and Health and Safety, while challenges persist in achieving corporate sustainability performance, especially in manufacturing. Areas such as Circular Economy, CO2 emissions, biodiversity, and Sustainable Procurement require further incorporation into sustainability reporting.

Exploring widely used ecolabels in Singapore and Malaysia, the article underscores the role of ESG platforms in monitoring and disclosing organizational efforts across various domains. ESG considerations significantly impact investment decisions and consumer choices, making them strategic imperatives for long-term success and stakeholder satisfaction.

This paper concludes that the rapidly evolving ASEAN market demands stringent sustainability reporting. The article foresees continued growth in this trend, offering opportunities for sustainability rating companies and ESG platforms to guide ASEAN businesses in their sustainability journey.

Table of Contents

Acknowledgments	2
Introduction	3
Chapter 1: Societal Motivations	4
Chapter 2: Legal Motivations	9
Chapter 3: Sustainability reporting practices of Malaysian and Singaporean companies	17
Chapter 4: Enablers of Sustainability	24
Concluding remarks	28
References	29

Acknowledgments

As the authors of this report, we would like to thank the following stakeholders for facilitating the establishment of the report. First, the Netherlands Asia Honors Summer School 2023 (NAHSS) for providing us the opportunity to learn more about Southeast Asia and its growing influence on an academic, business and cultural level. Secondly, the Global Sustainable Enterprise System (GSES). As a part of the NAHSS, we got to do a consultancy project for this growing company, and it enabled us to publish this report. We would like to speak our gratitude to Oriane Wisser, program manager of GSES, for providing content-related feedback and supervising this project. Finally, Abe de Ruijter, a former delegate of the NAHSS in 2022, who enhanced the collaboration between the authors of this report and shared his experiences in working with big companies.

Introduction

The Association of Southeast Asian Nations (ASEAN) region is a dynamic and fast-developing economy. The recent economic developments have brought great economic prosperity to ASEAN countries. However, due to a lack of regulations regarding sustainable business operations, this economic growth gave rise to two new problems: environmental pollution and excessive carbon emissions. This paper aims to discuss and give an overview of recent developments in the ASEAN sustainability market, focussing mainly on Malaysia and Singapore, diving deeper into the attitude of ASEAN consumers towards sustainability, the latest developments of sustainability legislation, and the guidelines and ESG platforms that help measure the sustainability of ASEAN business. This paper is intended for professionals working in the sustainability field or anyone who would like to obtain in-depth insights into the current ASEAN sustainability market.

Chapter 1 focuses on the recent change in sustainability perception by ASEAN consumers and provides an overview of how companies respond to this change in perception. Chapter 2 describes the current sustainability reporting legislation of Europe, Singapore, Malaysia, and ASEAN. Chapter 3 looks at the current implementation of sustainability reporting by Singaporean and Malaysian companies and categorize these implementations under GSES' House of Sustainability. Additionally, we provide an analysis of local companies' partnerships as part of their sustainability strategy, aiming to illustrate the motivation of Singaporean and Malaysian companies to engage in sustainability reporting. The final chapter (chapter 4) describes local reporting guidelines and the most widely used ecolabels.

This paper aims to provide the reader with a comprehensive overview of the ASEAN sustainability market, serving mostly as a starting point for further research.

Chapter 1: Societal Motivations

Sustainable development can be described as “a value-based concept” (Mahadi et al., 2017, p.32). Values, attitudes, and motivations regarding sustainability issues are shaping the actions of citizens, officials, and everyone in between. Among the motivations to engage in sustainability practices is the societal pressure experienced by companies. The following chapter explores the societal motivations of Asian companies to actively engage in sustainability management, with a particular focus on trends in consumer pressure.

Increasing sustainability awareness and convergence between Asia and Europe

Over the years, climate change has increasingly gained attention in Singapore. In 2019, 94.9% of Singaporeans had heard of climate change compared to 80.6% in 2015 (*Climate Change Public Perception Survey 2019*, 2019). About 90% of Singaporeans were aware of the consequences of climate change. Moreover, 95.4% supported Singapore making a shift towards a more sustainable economy. 78.2% were willing to play their own part in the reduction of CO₂ emissions, despite possible additional costs or inconveniences. Only 48.3%, however, knew what actions could be taken to reduce climate change.

Similar developments are also observed in Asia in general. In 2022, Bain & Company surveyed 16,000 consumers in eleven Asian countries and supplemented this quantitative research method with 55 in-depth interviews. The aim was to generate more insight into the perspective of Asian consumers regarding sustainability. The following countries were investigated: China, India, Thailand, Malaysia, Singapore, Indonesia, Japan, South Korea, Philippines, Vietnam, and Australia. There is an increasing consumer interest in sustainability practices (Lightowler et al., 2022). The Google searches for environmental, social, and corporate governance (ESG terms) have increased enormously. Between 2017 and 2022, the increase in search terms was over 30-fold in Indonesia and more than 20-fold in South Korea.

The purchasing criteria of consumers also support this increasing interest in sustainability (Lightowler et al., 2022). ‘The brand/product is healthiest for me/and or my family’ is the most prominent criterion, followed by ‘product quality’ and ‘good for the planet.’ Importantly, Asia-Pacific consumers are just as involved in, and bothered by, social and environmental issues as European consumers, and they are even more concerned about health issues. This sustainability interest is equally distributed among age groups and income levels, showing the urgency of the topic in the entire population. Table 1.1 displays the differences between European and Asia-Pacific consumers and reveals very similar results between the continents. Therefore, one can conclude that sustainability awareness strongly

increases in Asia and that these developments converge with current European percentages regarding sustainability topics.

Table 1.1

Purchasing criteria: differences between Asia-Pacific and European consumers

Relative importance of key purchasing criteria. <i>The brand, product:</i>	Asia-Pacific consumers	European consumers
...is the healthiest for me/and or my family	81%	68%
...offers the highest quality	71%	72%
...is good for the planet	51%	45%
...is lowest price/offers best value for the money	48%	56%
...is easiest for me to consume/prepare (less time, effort)	40%	34%
...offers the newest items, varieties, flavours	29%	33%
...treats its employees and suppliers well	26%	40%

Note: Adopted from “Unpacking Asia-Pacific Consumers’ New Love Affair with Sustainability” by Lighthowler and colleagues (2022) <https://www.bain.com/insights/unpacking-asia-pacific-consumers-new-love-affair-with-sustainability/>

Exploring Market Variances

There seems to be a variation in the degree to which consumers express concerns about environmental, health and social issues (Lighthowler et al., 2022). The consumers in the more mature markets (e.g., Singapore, Japan) rank lower on consumer sustainability interest than consumers in fast-growing markets (e.g., Malaysia, China, Philippines, India, Thailand). This could be due to the extent to which consumers experience the impact of environmental troubles. In the fast-growing markets, such as China and India, the environmental threats are more substantial in the personal lives of citizens. For example, the average pollution level is higher in the fast-growing markets.

Say-do gap

The study conducted by Bain and Company reveals that many consumers claim to be highly conscious of sustainability and assert that elevated prices for sustainable products would not deter them from making purchases (Lighthowler et al., 2022). However, the discrepancy between consumers' expressed intentions and their actual behavior creates a phenomenon known as the 'say-do gap.' This issue is particularly pronounced in rapidly growing Asian markets. Various barriers impede consumers from following through on their sustainability intentions, contributing to this gap. These barriers are outlined in Table 1.2.

In a survey conducted by Chan (2022), nearly 10,000 consumers across nine Asian countries participated in the Global Foundation Study. A noteworthy discovery was that 63% of respondents do not perceive sustainability as their personal responsibility. Paradoxically, these consumers believe that businesses should take the lead in investing in sustainability and addressing climate change. While they actively seek brands with environmental and social purposes, consumers also express a desire for sustainability practices to be integrated throughout the supply chain of companies.

Table 1.2

Most important constraints, mentioned by Asia-Pacific consumers

Constraint	Percentage
High prize	16%
Lack of information	15%
Products are not entirely sustainable	14%
Lack of variety	12%
Time consuming to find sustainable products	11%
Low availability	10%
Lack of sustainable alternatives	9%
Lower quality	7%
Do not trust what brand claims	6%

Note: Adopted from “Unpacking Asia-Pacific Consumers’ New Love Affair with Sustainability” by Lighthowler and colleagues (2022) <https://www.bain.com/insights/unpacking-asia-pacific-consumers-new-love-affair-with-sustainability/>

Companies' response to these trends

Customers are increasingly aware of the topic of sustainability and therefore making further efforts to gain information regarding sustainability. This incentivises companies to provide this information. They care about the external appearance of their company and are involved in disseminating details, facts, and figures to customers about the environmental impact of their operations. This becomes especially important since customers mention the lack of information about sustainability products as a barrier to purchasing these products. Kasua and colleagues (2022) emphasise that organisations in Asia communicate about their sustainability involvement to maintain their transparency and legitimacy in the public eye. Additionally, on a global level, enterprises are increasingly directed to become more socially responsive as they face scrutiny from stakeholders (Das & Hassan, 2021; Gong et al., 2019).

It was found that perceived consumer pressure is company-specific (Eltayeb et al., 2010). Companies that deliver to multinational companies experience more consumer pressure as they must live up to both worldwide and regional legislation, and thus demand the same from their suppliers.

Moreover, cultural influences are important to take into account as these shape the sustainability attitudes of consumers and companies. Ghazali and colleagues (2017) showed that Malaysian culture is collectivistic, masculine, uncertainty-avoidance, and long-term oriented, but not power distant. Because of the high uncertainty avoidance, Malaysian consumers prefer ecolabels. Their long-term-oriented vision results in Malaysian consumers preferring long-term benefits (e.g., low operational costs) above short-term benefits (e.g., low purchasing price). The low power distance aspect implies that Malaysian companies' branding should focus on creating a communal feeling rather than focusing on individual benefits.

A final interesting finding is that green building in Singapore resulted in a higher pro-environment perception among the residents, stimulating the sustainability behaviour of citizens (Zhang & Tu, 2021).

Concluding note

The main societal pressure source for companies to become more sustainable, and report more extensively about their sustainability practices, is consumer pressure. This can be perceived as an extrinsic motivational factor to become more sustainable. Furthermore, this chapter showed that companies could design branding strategies based on the studies conducted about consumer preferences and needs.

Chapter 2: Legal Motivations

Sustainability reporting legislation in ASEAN, Malaysia, and Singapore

In this chapter, a detailed overview of the current developments regarding sustainability reporting regulations in the EU and ASEAN is presented. Within the ASEAN region, special attention is paid to Singapore and Malaysia. To point out the prominence of legal motivations, regulations (87%) were identified as the most significant driver for Malaysian companies to adopt green practices in their businesses. This was found in a meta-study covering 30 studies by Eltayeb and colleagues (2010).

The first part of this chapter will highlight several important regulations in the EU and ASEAN that promise high motivation to engage in sustainability reporting. Firstly, the most important regulation in the EU, the Corporate Sustainability Reporting Directive (CSRD) will be discussed. Also, an overview of the legal frameworks, both mandatory and voluntary, in the ASEAN region will be discussed. The last part of this chapter will dive into the integration of motivational drivers from a business perspective.

EU's Corporate Sustainability Reporting Directive (CSRD)

Since 2023, the CSRD has been enforced on the member states of the EU, to make the sustainability performances of companies transparent for consumers, investors, civil societal organisations, and other stakeholders (Directive 2022/2464). This directive is part of a policy initiative to make the EU the first climate-neutral continent by 2050, namely the European Green Deal. The new directive modernises the already enforced Non-Financial Reporting Directive (NFRD) which applies to large, listed, public-interest companies with more than 500 employees, which covers approximately 11,700 companies in the EU. These companies must report their financial year as of 2024. Because of the CSRD, large enterprises and listed SMEs should also abide by the reporting rules. Large companies are companies that meet two of the following three criteria; 1) a balance total of 20M, 2) net sales of 40M, 3) an average workforce of 250 FTE (full-time equivalent) and must report their financial year as of 2025.

Listed SMEs must report their financial year as of 2026. These two categories sum up to approximately 50,000 companies in total. Additionally, businesses subject to the CSRD regulation must publish a report on ESG-related issues according to the European Sustainability Reporting Standards (ESRS).

In the mandatory ESG-related issues report, the supply chain is also considered. Since a lot of European companies have suppliers in ASEAN, companies are in need to become more sustainable. This paper assumes that sectors contributing more to a country's export value or GDP, have more potential and/or bigger clients. According to the Association of Southeast Asian Nations (2022), the export of ASEAN companies to the EU is 8.9% of the total export, which makes it the third biggest trade relationship, after China and the USA. For Singapore, the EU is the biggest importer of goods with a share of 13.7% (Department of Statistics Singapore, 2023a). For Malaysia, the EU is the third biggest importer of goods with a share of 9.5% (Department of Statistics Malaysia, 2022a) after the USA and Singapore. These statistics promise a great opportunity for the sustainability assessment market in ASEAN and the EU.

ASEAN's legal framework

Similarly to the EU, Southeast Asia has its own regional organisation (ASEAN). One of the similarities between those regional organisations is the integration of the member states' economies into a single market with the purpose of enhancing the welfare and stronger negotiating power. However, there are some big differences to notice. ASEAN is a much smaller and inter-governmental organisation, whereas the EU is a supranational organisation, which means that the EU member states have pooled their sovereignty in areas such as trade and the environment (Koh and Hwee, 2020). This means that European laws can be binding. Oppositely, ASEAN member states solely have their own sovereignty to abide by. In ASEAN countries, sustainability goals can only be integrated at a national level and are not legally forced upon states.

Bursa Malaysia Listing Requirements (mandatory)

All listed companies in Malaysia should abide by the Bursa Malaysia Listing Requirements. Bursa Malaysia is the stock exchange of Malaysia and is one of the largest exchanges in ASEAN. Bursa Malaysia counted 1001 listed companies in 2023 (Bursa Malaysia, 2023). The Sustainability Reporting Guide and Toolkits (3rd edition) by Bursa Malaysia (2022) provides guidance on the information that should be disclosed in the annual report in accordance with the Bursa Listing Requirements. Companies should disclose about themes such as sustainable governance, performance targets, and statements of assurance.

The Malaysian Code on Corporate Governance (voluntarily)

The Malaysian Code on Corporate Governance (MCCG) is a framework that contains corporate governance best practice guidelines for companies. These guidelines apply to boards of directors that are responsible for the governance of their company. However, these guidelines are voluntary (Securities Commission Malaysia, 2021), the MCCG encourages reporting about corporate governance, sustainability risks & opportunities, and the use of audits. According to the Securities Commission's Corporate Governance Monitor (CG Monitor) 2022 report, publicly listed companies are progressively adopting corporate governance best practices. Good governance is frequently used for transparency. It increases sustainability and meets stakeholder's expectations (Suruhanjaya Sekuriti, 2022).

Singapore Exchange: SR Guide (Mandatory)

Singapore Exchange (SGX) is the exchange conglomerate, including the stock market of Singapore with 776 listings (SGX, 2023). The Sustainability Reporting Guide is mandatory for all their listed companies. Most of them are based on the Task Force on Climate-Related Financial Disclosures (TCFD) (Task Force on Climate-Related Financial Disclosures | TCFD), 2023). TCFD is a global organisation that started with voluntary recommendations. However, many jurisdictions followed the TCFD. The guidelines require all listed companies to publish an annual report on sustainability practices. Content that should be reported on includes material ESG factors, climate risks & opportunities, policies, practices & performance, targets, sustainability reporting framework, and board statement (SGX, 2018).

ASEAN Green Bonds Standards (Voluntarily)

The ASEAN Green Bonds Standards (GBS) are voluntary process guidelines for the ASEAN capital markets to stimulate green finance for projects, which is an effort of the ASEAN Capital Market Forum (ACMF). When an investment is determined green, according to the GBS, it becomes attractive to stakeholders that support sustainable regional growth. The ACMF has developed the GBS based on the International Capital Market Association's (ICMA) and the Green Bond Principles (GBP). The GBS guidelines are nationally accepted and widely used to enhance transparency and credibility regarding a company's sustainability performance. The GBS promotes disclosure of the use of proceeds and encourages companies to report more frequently than the annual reporting. Moreover, the GBS stimulates the use of an external reviewer (audit) to increase the confidence of the investors. Issuers are recommended to use qualitative performance indicators and, where feasible, quantitative performance measures (e.g., energy capacity, electricity generation, greenhouse gas emissions reduced/avoided, number of people provided with access to clean power, decrease in water use, reduction in the number of cars required, etc.) (ACMF, 2018).

The current state of the Bonds Market in ASEAN

Climate Bonds Initiatives did research on the state of the ASEAN sustainable finance market in 2022 (Almeida & Wong, 2023). Although the financial market contracted (-32% YOY) in 2022, partly because of inflation, the volume was twice the level of 2020. Singapore and Malaysia are among the most developed financial markets in Southeast Asia according to ASEAN. The report showed that investors and underwriters from countries with further developed capital markets are more willing and prepared to invest and underwrite green bonds than those with less developed capital markets. On top of that, the Climate Bonds Initiative perceived Singapore as the most developed market in the region in 2022.

Promising growth sectors in the ASEAN region's green bond market are renewable energy, energy efficiency, and clean transportation, according to the Asian Development Bank and the Global Green Growth Institute (2022). The biggest motivation for investors is portfolio diversification opportunities and for issuers, it is to attract more investors, but also to integrate the SDG goals which contributes to a greener image. Interestingly, this research

found that most respondents believed that green bond issuance and investments offer no distinct advantages over conventional bonds, which could be an obstacle to market expansion. However, tax incentives could be an incentive to increase the demand and supply of green bonds, which shows the presence of a financial motivation in the green bonds market.

Other ASEAN sustainability reporting regulations

In 2022, governments in the ASEAN region seemed to grow interest in developing their sustainability markets, which resulted in several policies and initiatives, such as the release of the ASEAN Taxonomy Version 2 (2023), as well as launching taxonomies in Malaysia and Singapore. The Net-Zero GHG emissions by 2050 policy and the ASEAN Sustainability-linked Bonds Standards (SLBS) were also established. The prior policies, which are currently not mandatory in ASEAN, may serve as building blocks for more severe policies in the future and align with recent developments in sustainability reporting globally.

Non-country specific ESG reporting frameworks (voluntarily)

Global Reporting Initiative (GRI)

The Global Sustainability Standards Board (GSSB) has developed the Global Reporting Initiative (GRI); a widely used material, non-financial, sustainability reporting standard that covers topics such as biodiversity, tax, waste emissions, diversity, and equality to health & safety, etc. (GSSB, 2023) The guidelines are primarily for disclosure, but could also help businesses to operationalize metrics, like GSES does. These guidelines encourage companies to use internal or external assurance.

Global Real Estate Sustainability Benchmark (GRESB)

GRESB involves the disclosure of material, financial, and non-financial ESG, tailored for the real estate sector (GRESB, 2023). Their reporting rules are aligned with the other four frameworks, such as GRI, TCFD, SASB, and SDGD.

Sustainable Development Goals Disclosure (SDGD)

The SDGD is developed by the International Federation of Accountants and offers a framework for businesses to disclose information of material, non-financial ESG info, namely the United Nations Sustainable Development Goals (UN SDGs) Adams et al. (2020). The SDGD covers topics such as governance, strategy, management, performance tracking, or target setting and is not operationally focused. External assurance is recommended.

Task Force on Climate-Related Financial Disclosures (TCFD)

The TCFD framework is a recommendation to help companies report about their capital allocation and climate-related risks & opportunities (Task Force on Climate-Related Financial Disclosures | TCFD, 2023). This framework is an example of the category ‘financial materiality’ and is structured around four themes: governance, strategy, risk management, and metrics and targets. External assurance is not required.

Sustainability Accounting Standards Board (SASB)

The SASB Standards is a financial, materiality reporting framework based on industry-based sustainability disclosures (SASB, 2023). Topics to write about are environmental, social, and governance issues most relevant to financial performance and enterprise value. No external assurance is required.

Chapter 3: Sustainability reporting practices of Malaysian and Singaporean companies

To depict the current motivations of Malaysian and Singaporean companies in embracing sustainability reporting, this chapter conducts a review focused on their existing sustainability practices. The examination is specifically narrowed down to encompass their external sustainability reporting activities. This includes a review of local sustainability reporting standards in Malaysia and Singapore and the representation of the GSES pillars of the House of Sustainability. In Appendix 6 (see linked report), a subsection about the commercial statements of MPOCC and Control Union Malaysia can be found, which are potential and current partner companies of GSES, respectively. Additionally, this chapter provides an analysis of local companies' partnerships as part of their sustainability strategies. These current sustainability reporting practices and the strategic partnerships that firms engage in, show where the motivation to do so comes from.

Formal and informal sustainability reporting

Part of this analysis is to see what the current sustainability reporting standards are. This comprises both formal and informal (e.g., commercial) communication of sustainability reporting by these companies. The analysis of commercial statements (Appendix 6, see linked report) provides the following strategic insights. The vision of the MPOCC is to transform the Malaysian palm oil market for global supply chain compatibility by driving sustainability (Appendix 6: MPOCC, 2023). Their concrete mission is to make the MSPO-norm a credible certification scheme that is accepted by relevant stakeholders (Appendix 6: MPOCC, 2023). This is particularly interesting for Malaysian palm oil companies, as it is mandatory to obtain palm oil certification.

The following is an analysis of sustainability reporting practices in Singapore and Malaysia. This analysis shows what companies are focusing on to demonstrate where opportunities for GSES might lie in this regard.

Local formal sustainability reporting standards

Online publications on company performance, such as quarterly or annual reports, show how companies perform in a qualitative sense. Importantly, the view of companies on their own performance is possibly communicated through such a report, showing the focus areas of the company. Since 2006, reporting mandates have been issued by Bursa Malaysia, although these started out as socially focused reports (i.e. focusing on people and communities) (Ngu and Amran, 2021). Since 2016, the Bursa Malaysia mandate has been further holistic with the issuance of its sustainability reporting guide (Bursa Malaysia Securities Berhad, 2015). In paragraph 7.1.2, the content of this guide is categorised under some of the GSES pillars.

Abdullah et al. (2011) found that CSR reporting is more elaborate amongst listed Malaysian companies as these companies are more environmentally conscious. It should be noted that this source is dated, and a contemporary factor to be included could be the fact that these companies are more exposed and, therefore, need to be compliant. However, in Malaysia, many family-owned offices show less focus on environmental sustainability. These firms do not use CSR reporting as a tool to boost their image or legitimacy (Abdullah et al., 2011). This is a known tendency, as family firms are more interested in protecting their own interests (Morck and Yeung, 2004). Family firms might have their own internal practices of “informal corporate governance” (Abdullah et al., 2011), something which could be investigated further. As Haniffa and Cooke (2005) show, firm size drives CSR reporting, as the effects of CSR practices increase with firm size. This effect allows for a “double-loop positive effect” of better CSR practices and better exposure, an incentive for CSR reporting that remains absent for smaller-sized firms.

Since 2011, Singapore has always had a more economic focus, with sustainability reporting on a voluntary basis. Since 2016, sustainability reporting has been mandated in Singapore (Tan 2022). Firms have great flexibility regarding what they report, relying on peer pressure to engage companies to not “under-disclose” or opt out of disclosure requirements (Liu et al., 2019).

GRI standards are adopted for sustainability reporting in Singapore. These cover a broad range of sustainability topics and all GSES pillars (GRI Standards Glossary 2022). A sustainability report is of sufficient quality if produced in accordance with these standards

(Boiral et al. 2019). A report of sufficient quality must be transparent and verified (Azman and Rashid, 2020).

Tan (2022) shows that Singaporean sustainability reporting standards are performance-oriented (such as GRI standards), which results in business-oriented sustainability practices. It is through policy transfer agents (i.e. regulators, accountants, consultants, and standard setters) that companies follow this economic framing of sustainability (Peck and Theodore, 2010). However, through the history of global partnerships, Singaporean businesses must comply with worldwide sustainability concerns (Tan, 2022).

Azman and Rashid (2020) show that for a sample of Malaysian listed companies, their board size, board independence, and gender diversity show a significant positive relation to the quality of their sustainability reporting.

Different Sustainability Areas in Local Sustainability Reporting Standards

Academic literature shows that in Malaysia, several sustainability drivers within companies can be recognised, showcasing the implementation of various sustainability areas. The literature findings can be categorised in the following six sustainability areas:

Corporate Social Responsibility (CSR): since 2019, Bursa Malaysia has mandated that businesses report on their social sustainability (Shaharudin et al. 2022). This shows that the Malaysian government has prioritised social sustainability in its aim to reach the Sustainable Development Goals of 2030. However, in practice, social responsibility is categorised as less important than sustainability in economic terms and sustainability in the company's environment (Sundström et al., 2019). Company image is one of the main driving forces of CSR efforts in Singapore (Abdullah et al. 2011). In Malaysia, international recognition and enhancing companies' reputations incentivise companies in the same way (Amrina and Yusof, 2012).

Circular Economy: research has shown less proactive engagement in Malaysia regarding the recycling of recovering products that have reached the end of their life cycle, especially for products with significant residual value (Shaharudin et al., 2017; 2019). Shaharudin et al.

(2020) conclude that Malaysian manufacturing firms should increase efforts to improve their product and environmental sustainability. By stepping away from conventional manufacturing and increasing the implementation of product recovery and end-of-life product recycling, companies can reduce their dependence on natural resources and actively engage in a circular economy (Shaharudin et al., 2015). According to Amrina and Yusof (2012), the benefits of reducing waste and more efficient use of resources are driving forces in sustainability strategies as part of a growing attention to sustainability in the Malaysian automotive industry. Additionally, the Malaysian government has embraced the circular economy as a part of the updated current nationwide vision (Twelfth Malaysia Plan, 2021), albeit still as a mere encouragement to companies.

Carbon Dioxide (CO₂): CO₂ is covered in the GRI Standards (2022). CO₂ is also an indicator of emission reporting for companies, following the Bursa Malaysia Sustainability Reporting Guide (2015). Reducing greenhouse gas emissions and CO₂ is covered as a strategic goal in the Twelfth Malaysia Plan (2021).

Sustainable Procurement: sustainable procurement is covered by the GRI standards. However, as Eltayeb and Zailani (2010) find, the reporting of sustainable procurement by Malaysian companies is low. Twenty years ago, green purchasing by Malaysian manufacturing companies was so new that it was “virtually nonexistent (GPNM, 2003). Even though sustainable procurement is increasing in many countries, relevant knowledge remains limited (Philips and Walker, 2009). Few empirical studies show the reasons for the low adoption rate of green purchasing in Malaysia; however, regulations are the main driver for companies to report sustainable procurement (Eltayeb and Zailani, 2010).

Health and Safety: companies in the Malaysian manufacturing industry focus on compliance with Malaysian occupational health and safety laws (Che Hassan et al., 2007). Occupational health and safety have been priorities for these companies in their efforts to improve social sustainability (Shaharudin et al., 2022), showing their internal focus on complying with regulations. Amrina and Yusof (2012) found that personnel health is also a driving force for car manufacturers’ sustainability strategies. Additionally, the Malaysian government shows a transformation of water management as part of the updated current nationwide vision (Twelfth Malaysia Plan, 2021).

Biodiversity: according to Shahrudin et al. (2022), Malaysian manufacturing companies show limited practices to ensure environmental sustainability because the focus of the manufacturing industry lies more on economic sustainability.

The Malaysian government, however, aims to transform water management as part of the updated current nationwide vision (Twelfth Malaysia Plan, 2021), as well as the conservation of coastal and marine areas. Loss of Biodiversity is mentioned as one of the challenges faced by the country (Twelfth Malaysia Plan 2021).

Local external sustainability strategy partnerships

Reviewing how companies engage in sustainability partnerships is the first step in discovering what motivates these companies. What are the incentives to create such sustainability initiatives?

Malaysian companies pursue various collaborations and partnerships as part of their external sustainability strategy. These initiatives typically aim to enhance environmental, social, and ESG practices; promote sustainable development; and address global challenges.

External factors

In Malaysia, the promotion of sustainable practices among manufacturing companies seems to lack a proactive approach from regulatory bodies such as The Electrical and Electronics Association of Malaysia (TEEAM), Federation of Malaysian Manufacturers (FMM), and Malaysia Institute of Accountants (MIA), as highlighted by Teh et al. (2018). However, concerns about climate change and the associated institutional pressures have prompted an increase in corporate environmental reporting (CER) practices among Malaysian companies, as noted by Jaffar (2018).

Since 2007, sustainability reporting has become mandatory for Malaysian publicly listed companies (PLCs). This requirement aligns with the goal of achieving sustainable development and emphasises the importance of responsible practices in the Malaysian manufacturing sector. Malaysian palm oil companies are motivated to obtain sustainability certification through organisations such as RSPO and MSPO. This certification enables them to produce certified palm oil for both domestic and international markets in line with sustainable development goals (SDGs).

Internal factors

The advancement of sustainable development in Malaysia is not dependent solely on external factors. Jasni (2021) revealed that internal business factors, such as financial and human resources, play a significant role in driving sustainable development among Malaysian PLCs.

This finding highlights the importance of integrating sustainability practices into the core operations of companies operating in the country. The Malaysian government has also taken

steps to encourage manufacturing organisations to adopt green practices in their working environments to achieve corporate sustainability performance (Aziz et al, 2018). This finding indicates a broader commitment to sustainable practices beyond the private sector.

Real Estate Investment Trusts (REITs) and property-listed companies in Malaysia have implemented corporate sustainability practices following a framework encompassing economic, environmental, and social sustainability dimensions. The aim is to ensure a comprehensive approach to sustainability within the real estate sector (Zahid 2015).

In terms of conservation and biodiversity, companies in sectors such as palm oil and forestry with partners from NGOs promote sustainable land use and protect Malaysia's rich biodiversity. For example, Sime Darby Plantation, one of the largest plantation palm oil companies, partners with organisations such as the Malaysian Nature Society and WWF Malaysia to implement sustainable land management practices and protect endangered species (Sime Darby Plantation Sustainability Report, 2022). Malaysian companies work with NGOs to achieve sustainability goals. Many NGOs are already integral to the external sustainability strategy of Malaysian companies.

In the context of higher education institutions, sustainability models and indicators have been reviewed to promote sustainability practices and ensure their long-term viability. This demonstrates the commitment of Malaysian educational institutions to incorporate sustainability principles into their operations (Aziz et al, 2018). Furthermore, Malaysian companies have established partnerships with international organisations to align their practices with international standards for sustainable development (Razali, 2023). This collaborative approach ensures that Malaysian companies keep up with global sustainability trends and best practices. The impact of business strategies on online sustainability disclosures has also been examined. Companies with diversified product lines tend to disclose more sustainability information (Amran 2013). Additionally, corporate sustainability efforts have a significant relationship with a brand name, suggesting that companies recognise the importance of their sustainability image in the current market.

Chapter 4: Enablers of Sustainability

To become more sustainable or to measure your sustainability performance as a company, ecolabels, and ESG (environmental, social, and governance) reporting platforms are used. There are guidelines such as the Global Reporting Initiative (GRI) and assessments through ecolabels or certifications to help companies measure sustainability, abide by legislations regarding sustainability, and demonstrate to their consumers that they are more sustainable than they were before or in comparison with their competitors. Companies can be helped in assessing their sustainability performance using an ESG platform that verifies their sustainability performance to help them communicate it transparently.

Global Ecolabelling Network (GEN)

GEN is an international non-profit association of independent ecolabelling organizations that sets the worldwide standard for ecolabels (Global Ecolabelling Network, 2023). Their goal is to make it easier for businesses and governments to avoid greenwashing, stimulate the global market for sustainability services and goods, and overall make future-proof decisions. GEN currently has 37 members across 57 countries and becoming a member is a precise process that is independently verified to ensure transparency. As consumers' awareness is increasing about how their consumption impacts worldwide sustainability, eco-labeling can help consumers make mindful purchases, and compare the sustainability performance of products.

Ecolabels in Singapore and Malaysia

Assessing the emerging ecolabel market of Singapore and Malaysia, this piece primarily focuses on ecolabels with a national origin or presence in these countries. In evaluating the ecolabels in how much environmental value they provide; we have analysed six key themes at the organizational level and four themes at the product level. The organizational level themes include Corporate Social Responsibility (CSR) based on ISO 26000, Sustainable Procurement (SP) based on ISO 20400, CO₂ Reduction (CO₂) based on ISO 50001 & GhG, Circular Economy (CE) based on ISO 59000, Health & Safety (HS) based on ISO 45001, and Biodiversity (BD) based on UNDP. On the product level, the themes encompass Environmental Footprint LCA certification, Health Footprint REACH certification, Circular Footprint, and Social Footprint based on ISO 26000.

The most encompassing product-focused ecolabels in Singapore are the Electronic Product Environmental Assessment (EPEAT) and Singapore Green Label (SGL). EPEAT focuses on offering consumers an easy way to access the environmental performance of computer hardware and displays (Recycling Today Staff, 2016). EPEAT contains a registry of more than 1000 products and more than 40 manufacturers that participate globally. SGL is Singapore's leading environmental standard and certification mark with 3700 unique products certified across 43 countries and joined the ranks of the GEN in 1994 (Singapore Environment Council, 2023). The National Environment Agency (NEA) Energy Label is another important ecolabel in Singapore. It uses a 1-5 tick rating system to measure the energy efficiency level of various electrical products (Tan, 2022). In this case, a higher rating means a higher energy efficiency level. To help consumers compare the energy efficiency of regulated goods, the Mandatory Energy Labelling Scheme (MELS) was introduced (National Environment Agency, 2023). Any importer and manufacturer that wants to supply any regulated goods in Singapore must apply to the NEA to be a registered supplier. The Mandatory Water Efficiency Labelling Scheme (Mandatory WELS), on the other hand, is a grading system using 0-3 ticks to rate a product's water efficiency level that started in 2009 (PUB, 2023). Here, a higher rating means a higher water efficiency level. This followed the scheme from the Voluntary Water Efficiency Labelling Scheme (Voluntary WELS) in 2006. While the Mandatory WELS focuses on taps, mixers, urinal flush valves, and household washing machines, the Water Efficiency Index (WEI) reflects the amount of water that is used per gross floor area annually (PUB, 2023). The WEI is a performance indicator for water efficiency.

In Malaysia, the most encompassing ecolabels are the Malaysian Sustainable Palm Oil (MSPO), the Malaysian Timber Certification Scheme (MTCS), and the Green Building Index (GBI). MSPO has been mandatory for every palm oil operator in Malaysia since December 2019 and is designed to ensure sustainable practices throughout the supply chain; such as transparency in business operations, respect for the rights of workers and local communities, compliance with legal requirements, conservation of the environment and biodiversity, and implementation of best practices in palm oil plantations and mills (Senawi, 2019). MTCS is a type of certification that certifies timber and timber products coming from sustainably managed forests. The MTCS does not just look at the product itself, but also includes a Chain of Custody (CoC) certification. This means that it also tracks and certifies the entire supply chain, from the harvesting of the timber in the forest, through the processing and

manufacturing stages, and finally to the distribution of the finished product. This ensures that all stages of the production and distribution processes are sustainable and responsibly managed (Malaysian Timber Certification Council, 2021). GBI is not an ecolabel for a product or a supply chain. Instead, it is a rating system for buildings and towns. It is meant to assess buildings or towns for their environmental impact. Upon completing the assessment, buildings are awarded GBI – Platinum, Gold, Silver, or Certified ratings depending on the scores achieved (Green Building Index, 2022).

ESG platforms

ESG, which stands for environmental, social, and corporate governance, entails evaluating a company's performance beyond traditional financial metrics. Despite widespread criticism, utilizing ESG criteria, particularly when third-party verified, serves as a robust anti-greenwashing tool. Moreover, the verification and rating of a company's ESG criteria facilitate transparent communication about its sustainability performance, fostering comparisons across organizations. This capability enables procurement managers to make well-informed decisions in tender processes. By considering sustainability performance expectations alongside cost comparisons, they can maintain supply chain environmental and social standards. The GSES platform plays a pivotal role in this process, allowing organizations not only to measure, verify, and rate their sustainability performance but also to assess the performance of their products and supply chain. GSES members benefit from a verified ESG score, authenticated by third-party auditors who are accredited and recognized as certification institutions. GSES distinguishes itself through a unique approach that places transparency at the forefront of the organization. This commitment ensures that the ESG ratings provided by GSES are not only legitimate but also foster trust among stakeholders.

ESG platforms offer a holistic assessment of corporate performance. ESG platforms are meant as a tool for organisations to monitor and disclose their efforts in environmental, health, regulatory, social, and safety management. Traditional financial statements often fail to capture assets such as reputation, brand equity, safety, workplace culture, and strategic capabilities. ESG indicators fill this gap by providing a comprehensive view of non-financial data related to environmental, social, and governance aspects (Tarmuji et al., 2016).

In 2018 Allianz North America conducted a study to find out how important ESG's are for consumers and how they play a role in their investment decisions. This study revealed that customers are increasingly interested in firms with clear ESG strategies and policies, aligning their buying choices with social concerns. About 73% stated that a company's stance on Environmental, Social, and Governance (ESG) issues are essential for their investment decisions. 74% of the companies interviewed think an ESG investment strategy is not just something that provides a sense of satisfaction but also one that demonstrates long-term financial viability (Alliance, 2019).

Research on environmental performance has grown significantly. While some studies show a positive relationship between environmental practices and organisational performance, others suggest a limited impact on financial metrics. In regions like Malaysia and Singapore, there is a growing need for companies to adopt ESG score indices to assess comprehensively and globally their environmental, social, and governance practices. A study that used regression analysis to examine the relationships between ESG practices and the economic performance of 80 companies from Malaysia and Singapore, indicates that environmental practices significantly correlate with economic performance in both countries, while social practices show a significant influence on economic performance in Singapore. Corporate governance practices positively influence economic performance in Malaysia. (Tarmuji et al., 2016).

Both of these results show that ESG considerations are crucial factors influencing investment decisions and consumer choices. As ESG practices become not only a measure of responsibility but a strategic imperative for long-term success and stakeholder satisfaction. An ESG platform provides a comprehensive and standardised approach to assessing and managing ESG factors. By using ESG platforms, companies can systematically evaluate their environmental impact, social initiatives, and governance practices. This not only aligns with the growing societal expectations for responsible business conduct but also positions the company to attract and retain investors and customers who prioritise sustainability.

Concluding remarks

The ASEAN sustainability market is a rapidly developing market. As described in chapter 1, consumers have become more aware of the environmental impact of a company's operations. Consequently, the main societal pressure source for companies to become more sustainable, and report more extensively about their sustainability practices, is consumer pressure. However, customers still face some barriers that impede them from following through on their sustainability intentions. To cope with this recent trend, companies could design branding strategies based on the studies conducted about consumer preferences and needs.

Chapter 2 showed that the sustainability reporting regulations in the EU, Malaysia, and Singapore combine mandatory and voluntary frameworks to boost transparency. The EU's CSRD imposes strict guidelines, potentially influencing ASEAN to move towards mandatory reporting, especially as numerous European supply chains extend into the ASEAN region. These regulations underscore an increasing focus on sustainability, fostering transparency and investor trust across regions. As global sustainability initiatives progress, these mechanisms establish a foundation for greater integration and alignment in adopting comprehensive sustainability practices.

In Chapter 3, the current implementation of sustainability reporting in Malaysia and Singapore was investigated. Singapore and Malaysia have a strong business-oriented vision of sustainability reporting, where regulations as well as company image are the main driving forces behind adopting sustainability reporting practices. The most important and frequently implemented focus areas for sustainability are CSR (as a tool for company image) and Health and Safety (focussing on employees). The achievement of corporate sustainability performance is a crucial challenge across various sectors in Malaysia, including manufacturing. Sustainable transportation has been identified as a key factor to be integrated into business strategies. The sustainability areas that have not yet been extensively incorporated in sustainability reporting are: Circular Economy, CO₂ emissions, biodiversity (although these are all elements of the Twelfth Malaysia Plan), and Sustainable Procurement (which falls partially under the circular economy aims of the Malaysian government). Future research will have to demonstrate what incentives could motivate companies to engage in the latter fields of sustainability reporting.

Chapter 4 discusses widely used ecolabels in Singapore and Malaysia. Additionally, ESG platforms were discussed. In sustainability reporting, ESG platforms play a crucial role in monitoring and disclosing organisations' efforts in various aspects, such as environmental,

health, regulatory, social, and safety management, addressing gaps left by traditional financial statements. Research indicates that ESG considerations significantly influence investment decisions and consumer choices, making ESG practices not only a measure of responsibility but a strategic imperative for long-term success and stakeholder satisfaction.

In short, ASEAN is a fast-changing market in need of strict sustainability reporting. We predict that in the near future, this trend will go on, providing excellent opportunities for sustainability rating companies and other ESG platforms offering businesses to guide ASEAN companies in their sustainability transition.

References

- Abdullah, S. N., Mohamad, N. R., & Mokhtar, M. Z. (2011). Board independence, ownership and CSR of Malaysian large firms. *Corporate Ownership and Control*, 8(2), 467–483. <https://doi.org/10.22495/cocv8i2c4p5>
- ACMF. (2018). ASEAN GREEN BOND STANDARDS. In *Securities Commission Malaysia*.
<https://www.sc.com.my/api/documentms/download.ashx?id=75136194-3ce3-43a2-b562-3952b04b93f4>
- Adams, C. A., Druckman, P. B., & Picot, R. C. (2020). Sustainable Development Goals Disclosure (SDGD) Recommendations [Pdf]. ACCA, Chartered Accountants ANZ, ICAS, IFAC, IIRC and WBA.
https://www.integratedreporting.org/wp-content/uploads/2020/01/ICAS5045_SDGD_Recommendations_A4_22pp_AW3-1.pdf
- Allianz. (2019). *How environmental, social, and governance issues impact consumers and investors*. New York, USA: Allianz Life Company.
<https://www.allianzlife.com/-/media/files/allianz/pdfs/newsroom/fact-sheet-esg.pdf>
- Almeida, M., & Wong, C. X. (2023). ASEAN SUSTAINABLE FINANCE STATE OF THE MARKET 2022. In *www.climatebonds.net*. Climate Bonds Initiative.
- Amrina, E., & Yusof, S. (2012). Drivers and Barriers to Sustainable Manufacturing Initiatives in Malaysian Automotive Companies. *Proceedings of the Asia Pacific Industrial Engineering & Management Systems Conference, 2012*, 629–634.
- ASEAN Taxonomy Board. (2023). ASEAN Taxonomy For Sustainable Finance.
<https://asean.org/wp-content/uploads/2023/03/ASEAN-Taxonomy-Version-2.pdf>

- Asian Development Bank & the Global Green Growth Institute. (2022). Survey on Green Bonds and Sustainable Finance in ASEAN. In adb.org. <https://doi.org/10.22617/tcs220535-2>
- Association of Southeast Asian Nations (2022, December). ASEAN statistical yearbook 2022 [report]. Retrieved from https://www.aseanstats.org/wp-content/uploads/2023/04/ASYB_2022_423.pdf
- Aziz, N., Ong, T., Foong, S., Senik, R., & Attan, H. (2018). Green initiatives adoption and environmental performance of public listed companies in malaysia. *Sustainability*, 10(6), 2003. <https://doi.org/10.3390/su10062003>
- Azman, M. I. K. B. K., Rashid, A. B. A. (2020). Board Composition and Characteristics' Effect on the Quality of Sustainability Reporting Among Companies in Malaysia. *Global Business and Management Research: An International Journal*, 12(4), 278-296.
- Boiral, O., Heras-Saizarbitoria, I., & Brotherton, M.-C. (2019). Assessing and Improving the Quality of Sustainability Reports: The Auditors' Perspective. *Journal of Business Ethics*, 155(3), 703–721. <https://doi.org/10.1007/s10551-017-3516-4>
- Bursa Malaysia. (2022). *Sustainability Reporting Guide (3rd ed.)*. https://bursaacademy.s3.ap-southeast-1.amazonaws.com/Print-PDF/Sustainability%20Reporting%20Guide%202022_FINAL.pdf
- Bursa Malaysia. (2023). *Who We Are*. https://www.bursamalaysia.com/Bursa_malaysia_sustainability_reporting_guide-final.pdf. (n.d.). Retrieved May 16, 2023, from https://www.bursamalaysia.com/sites/5bb54be15f36ca0af339077a/content_entry5ce3b5005b711a1764454c1a/5ce3c83239fba2627b286508/files/bursa_malaysia_sustainability_reporting_guide-final.pdf?1570701456
- Bursa Malaysia. (2022). *Sustainability Reporting Guide (3rd ed.) [Pdf]*.
- Chan, T. (2022). Getting sustainability right: How brands can help Asia make sustainable choices. *WARC*. <https://www.warc.com/newsandopinion/opinion/getting-sustainability-right-how-brands-can-help-asia-make-sustainable-choices/en-gb/5635>
- Che Hassan, C. R., Basha, O. J., & Wan Hanafi, W. H. (2007). Perception of building construction workers towards safety, health and environment. *Journal of Engineering Science and Technology*, 2(3), 271–279.

- Climate Change Public Perception Survey 2019*. (2019, December 16). <https://www.nccs.gov.sg/media/press-release/climate-change-public-perception-survey-2019>
- Das, S., & Hassan, H. K. (2021). Impact of sustainable supply chain management and customer relationship management on organizational performance. *International Journal of Productivity and Performance Management*, 71(6), 2140–2160. <https://doi.org/10.1108/ijppm-08-2020-0441>
- Department of statistics, Malaysia (2022a, June). Statistics of international trade in services [report]. Retrieved from <https://www.dosm.gov.my/uploads/publications/20221007094959.pdf>
- Department of statistics Singapore (2023a, February 27). Singapore’s international trade in services [report]. Retrieved from <https://www.singstat.gov.sg/-/media/files/news/tis2021.ashx>
- Directive (EU) 2022/2464. Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment. <http://data.europa.eu/eli/dir/2022/2464/oj>
- Director General, Economic Planning Unit, Prime Minister’s Department. (2021). *Twelfth Malaysia Plan: 2021—2025*. PNMB.
- Eltayeb, T. K., Zailani, S., & Filho, W. L. (2010). Green business among certified companies in Malaysia towards environmental sustainability: Benchmarking on the drivers, initiatives and outcomes. *International Journal of Environmental Technology and Management*, 12(1), 95. <https://doi.org/10.1504/IJETM.2010.029983>
- Ghazali, I., Abdul-Rashid, S. H., Dawal, S. Z. M., Aoyama, H., Tontowi, A. E., & Sakundarini, N. (2017). Cultural influences on choosing green products: an Empirical study in MALAYSIA. *Sustainable Development*, 25(6), 655–670. <https://doi.org/10.1002/sd.1685>
- Global Ecolabelling Network. (2023, May 8). *Global Ecolabelling Network*. <https://globalecolabelling.net/>
- Global Sustainability Standards Board . (2023). GRI Sustainability Reporting Standards (Version 2023). GRI. <https://www.globalreporting.org/standards/>
- Gong, M., Gao, Y., Koh, L., Sutcliffe, C., & Cullen, J. B. (2019). The role of customer awareness in promoting firm sustainability and sustainable supply chain management. *International Journal of Production Economics*, 217, 88–96. <https://doi.org/10.1016/j.ijpe.2019.01.033>

- Green Building Index (2022). GBI RATING SYSTEM. <https://www.greenbuildingindex.org/how-gbi-works/gbi-rating-system/>
- Green Purchasing Network Malaysia (GPNM). (2003). *An introductory study on green purchasing activities in Malaysia*. GPNM. http://www.apo-tokyo.org/gp/e_publi/survey_gpp/malaysia_report_mgpn.pdf
- GRESB. (2023, May 22). GRESB. <https://www.gresb.com/>
- GRI - GRI Standards English Language. (n.d.). <https://www.globalreporting.org/how-to-use-the-gri-standards/gri-standards-english-language/>
- Haniffa, R. M., & Cooke, T. E. (2005). The impact of culture and governance on corporate social reporting. *Journal of Accounting and Public Policy*, 24(5), 391–430. <https://doi.org/10.1016/j.jaccpubpol.2005.06.001>
- Jasni, Yusoff, Wibowo (2021). Internal Business Factors for Business Sustainability: A realistic view from sustainability managers. *E-BPJ*, 18(6), 3-8. <https://doi.org/10.21834/ebpj.v6i18.3015>
- Kasuma, S. a. A., Rahman, N. a. A., & Saleh, M. S. M. (2022). Sustainability Communication across Asia. In *Routledge eBooks*. Informa. <https://doi.org/10.4324/9781003309642>
- Koh, T., & Hwee, Y. L. (2020, October 16). ASEAN and EU: The untold story. Ministry of Foreign Affairs Singapore. <https://www.mfa.gov.sg/Overseas-Mission/Ministry-of-Foreign-Affairs---Permanent-Mission-of-the-Republic-of-Singapore/Recent-Highlights/2020/10/ASEAN-and-EU-The-untold-story#:~:text=THE%20DIFFERENCES,such%20as%20trade%20and%20environment>
- Lightowler, Z., Yang, J., Mattios, G., & Zehner, D. (2022). Unpacking Asia-Pacific Consumers' New Love Affair with Sustainability. <https://www.bain.com/insights/unpacking-asia-pacific-consumers-new-love-affair-with-sustainability/>
- Liu, F. H. M., Demeritt, D., & Tang, S. (2019). Accounting for Sustainability in Asia: Stock Market Regulation and Reporting in Hong Kong and Singapore. *Economic Geography*, 95(4), 362-384. <https://doi.org/10.1080/00130095.2018.1544461>

- Mahadi, Z., Mohamad, R. J., & Sino, H. (2017). Public Development Sustainability Values: A Case Study in Sepang Malaysia. *Akademika*. <https://doi.org/10.17576/akad-2017-8702-03>
- Malaysian Timber Certification Council. (2021, September). MC&I SFM: Malaysian Criteria and Indicators for Sustainable Forest Management. Retrieved from <https://mtcc.com.my/wp-content/uploads/2022/02/MTCS-ST-1002-2021-MCI-SFM-Final-B5.pdf>
- Morck, R., & Yeung, B. (2004). Family Control and The Rent-Seeking Society. *Entrepreneurship Theory and Practice*, 28, 391–409. <https://doi.org/10.1111/j.1540-6520.2004.00053.x>
- National Environment Agency. (2023). *About Mandatory Energy Labelling Scheme and Minimum Energy Performance Standards*. <https://www.nea.gov.sg/our-services/climate-change-energy-efficiency/energy-efficiency/household-sector/about-mandatory-energy-labelling-and-minimum-energy-performance-standards>
- Ngu, S. B., & Amran, A. (2021). Materiality Disclosure in Sustainability Reporting: Evidence from Malaysia. *Asian Journal of Business and Accounting*, 14(1), Article 1. <https://doi.org/10.22452/ajba.vol14no1.9>
- Peck, J., & Theodore, N. (2010). Mobilizing policy: Models, methods, and mutations. *Geoforum*, 41(2), 169–174. <https://doi.org/10.1016/j.geoforum.2010.01.002>
- PUB. (2023). *About Water Efficiency Labelling Scheme*. PUB Singapore's National Water Agency. <https://www.pub.gov.sg/wels/about>
- PUB. (2023). *Water Efficiency Benchmarks*. PUB Singapore's National Water Agency. <https://www.pub.gov.sg/savewater/atwork/WaterEfficiencyBenchmarks#:~:text=For%20the%20office%20building%20sector,each%20gross%20floor%20area%20annually.>
- Razali, Mohamad, Yaakob, Johari (2023). PAKEJ RANGSANGAN EKONOMI BAGI KELESTARIAN INDUSTRI PELANCONGAN DI MALAYSIA. *MySE*, 1(10), 97-124. <https://doi.org/10.24191/myse.v10i1.21253>
- Recycling Today Staff. (2016, February 16). EPEAT Electronics Rating System Expands to Singapore. *Recycling Today*. <https://www.recyclingtoday.com/news/epeat-singapore/>
- SASB. (2023, June 20). SASB. <https://sasb.org>

- Securities Commission Malaysia. (2021). Malaysian Code On Corporate Governance [Pdf].
<https://www.sc.com.my/api/documentms/download.ashx?id=239e5ea1-a258-4db8-a9e2-41c215bdb776>
- Senawi, R., Rahman, N. K., Mansor, N., & Kuntom, A. (2019). Transformation of oil palm independent smallholders through Malaysian sustainable palm oil. *Journal of Oil Palm Research*, 31(3), 496-507.
- Shaharudin, M. R., Govindan, K., Zailani, S., Tan, K. C., & Iranmanesh, M. (2017). Product return management: Linking product returns, closed-loop supply chain activities and the effectiveness of the reverse supply chains. *Journal of Cleaner Production*, 149, 1144–1156. <https://doi.org/10.1016/j.jclepro.2017.02.133>
- Shaharudin, M. R., Tan, K. C., Kannan, V., & Zailani, S. (2019). The mediating effects of product returns on the relationship between green capabilities and closed-loop supply chain adoption. *Journal of Cleaner Production*, 211, 233–246. <https://doi.org/10.1016/j.jclepro.2018.11.035>
- Shaharudin, M. R., Zailani, S., & Tan, K. C. (2015). Barriers to product returns and recovery management in a developing country: Investigation using multiple methods. *Journal of Cleaner Production*, 96, 220–232. <https://doi.org/10.1016/j.jclepro.2013.12.071>
- Singapore Environment Council. (2023). *Singapore Green Labelling Scheme*. <https://sgls.sec.org.sg/>
- Sime Darby. (2022). *Sime Darby Plantation Sustainability Report 2022*. <https://www.insage.com.my/ir/cmn/downloading.aspx?sFileName=23118000052290&sReportType=AR&sCompanyCode=SIMEPLT>
- Singapore Exchange - Singapore Exchange (SGX). (2023). <https://www.sgx.com/securities/corporate-information>
- Sundström, A., Ahmadi, Z., & Mickelsson, K. (2019). Implementing Social Sustainability for Innovative Industrial Work Environments. *Sustainability*, 11(12), 3402. <https://doi.org/10.3390/su11123402>
- Suruhanjaya Sekuriti (2022). SC REPORT: ADOPTION LEVELS OF CORPORATE GOVERNANCE AND SUSTAINABILITY BEST PRACTICES BY PLCS REMAIN POSITIVE. <https://www.sc.com.my/resources/media/media-release/cgmonitor2022>

- Tan, S. (2022). Eco-labels in Singapore: How aware are consumers of these green certification marks? *YouGov*.
<https://business.yougov.com/content/42171-ecolabels-singapore-consumer-awareness>
- Tan, G. K. S. (2022). Assembling sustainability reporting in Singapore. *Competition & Change*, 26(5), 629–649. <https://doi.org/10.1177/10245294211020624>
- Tarmuji, I., Maelah, R., & Tarmuji, N. H. (2016). The impact of environmental, social and governance practices (ESG) on economic performance: Evidence from ESG score. *International Journal of Trade, Economics and Finance*, 7(3), 67.
- Task Force on Climate-Related Financial Disclosures | TCFD). (2023, February 27). Task Force on Climate-Related Financial Disclosures. <https://www.fsb-tcfd.org/>
- Teh, Ong, Chong, Jaffar (2018). Environmental Capabilities Indicators are Prominent for Organizational Competitiveness and Performance. An Empirical Study of Malaysian Manufacturing Industry. *TJSSR, SPI6*, 553-562.
<https://doi.org/10.32861/jssr.spi6.553.562>
- Walker, H., & Phillips, W. (2009). Sustainable procurement: Emerging issues. *International Journal of Procurement Management*, 2(1), 41.
<https://doi.org/10.1504/IJPM.2009.021729>
- Zahid, M., & Ghazali, Z. (2015). Corporate sustainability practices among Malaysian REITs and property listed companies. *World Journal of Science, Technology and Sustainable Development*, 12(2), 100-118.
- Zhang, D., & Tu, Y. (2021). Green building, pro-environmental behavior and well-being: Evidence from Singapore. *Cities*, 108. Scopus.
<https://doi.org/10.1016/j.cities.2020.102980>