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CHALLENGES IN IMPLEMENTING ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) PRINCIPLES IN FACILITIES MANAGEMENT AND MAINTENANCE: A PRELIMINARY SURVEY

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Abstract

Facilities Management and Maintenance (FMM) play a crucial role in ensuring the efficient operation and sustainability of buildings. The integration of Environmental, Social, and Governance (ESG) principles into FMM is increasingly important to promote ethical governance, social responsibility, and environmental stewardship within Malaysia's built environment. However, the key industry players continue to face multiple constraints that hinder effective ESG implementation (i.e., inadequate technical expertise and inconsistent policy enforcement). Therefore, this study aims to identify the key challenges that hinder the implementation of ESG principles in FMM practices. Semi-structured interviews were conducted with seven key players in FMM practices using purposive sampling, and the data were analysed thematically. The findings reveal four major challenges, which include contract complexity, financial constraints, limited data sharing, and knowledge gaps. These challenges weaken transparency, financial planning, and professional competency, which are essential for sustainable facility management. Although the small sample size limits the generalisation of the findings, the study provides valuable insights for policymakers and practitioners. It highlights the need for standardised contract frameworks, transparent data systems, and capacity building efforts to strengthen Malaysia's i-ESG Framework and support national sustainability goals.

Keywords: Facilities Management and Maintenance, Environmental, Social, Governance, Challenges

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INTRODUCTION

Facilities Management and Maintenance (FMM) serve as a cornerstone in the development and administration of government infrastructure and other sectors including commercial, educational, healthcare and industrial facilities, ensuring operational efficiency and asset longevity (Hoxha et al., 2022). Globally, FMM has grown into a multi-disciplinary field that integrates various services such as financial management, operational management and others to optimize facility operations (Wiggins, 2021). Over time, FMM has evolved from a simple workspace organization into a comprehensive discipline that encompasses not only the efficient use of space but also the well-being and productivity of the occupants (Wiggins, 2021). This is supported by the definition of Facilities Management by International Facilities Management Association (IFMA, 2024), where FM integrates people, place and process to ensure the functionality, comfort and safety of the occupants in the building. In Malaysia, the development of FMM has slowly mirrored global trends, with significant advancements over the past few years. This progress is further reinforced by the introduction of Sustainable Development Goals (SDGs), particularly SDGs 11: 'Sustainable cities and communities', which emphasizes the optimization of building operations and resource utilization (Lok et al., 2021). Initially, FMM practices in Malaysia were primarily reactive, focusing on repairs and ad hoc maintenance without comprehensive strategic. However, as Malaysia's economy and infrastructure expanded, coupled with the government's initiative, Malaysia's maintenance service has shift from reactive maintenance towards preventive maintenance (Hauashdh et al., 2022). This shift aimed to reduce the frequency of breakdowns and extend the lifespan of facilities through regular inspection (Dzulkifli et al., 2021). As FMM practices continue to evolve, their implementation plays a pivotal role in managing the nation's infrastructure. However, despite its critical function, FMM faces numerous challenges that impede its effectiveness. These challenges range from budgetary constraints to knowledge limitations, making it difficult for the government to maintain infrastructure assets optimally (Ochieng & Ominde, 2020).

In recent years the adoption of Environmental, Social and Governance (ESG) principles has gained prominence as a means of enhancing the sustainability and accountability of FMM practices (IFMA, 2024). ESG serves as a strategic framework that encourages organizations to integrate responsible environmental management, ethical labour practices and transparent governance into their operations, aligning FMM with broader sustainability goals (Delova-Jolevska et al., 2024; MITI, 2024). Among principles of ESG are environmental (natural resource use, carbon emissions, energy efficiency), social (workforce, diversity, supply chain) and governance (board independence, diversity, shareholder rights, corporate ethics). The adoption of ESG principles is closely

aligned with broader national initiatives such as Malaysia's 'Ekonomi Madani' policy, that highlights sustainable development as a key component in the structural reforms of Malaysia's economy (Krishnan, 2023). The Malaysian government through Ministry of Investment, Trade and Industry (MITI) had launch i-ESG Framework in the third quarter of 2023 to promote the ESG principles within various sectors including FMM (MITI, 2024). The i-ESG framework aims to enhance ESG practices in Malaysia by assessing its readiness and providing support for its implementation. It focuses on four pillars which are standards, capacity building, financing and market mechanisms, to guide the companies in evaluating their ESG compliances and continuously monitor their progress. By the end of 2026, the framework intends to enhance awareness, conduct training, and provide financial support to assist the industrial sector in embarking on their ESG journey (MITI, 2024). By integrating ESG into FMM, it does not only support the operational and business objectives of an organization, but also mitigates adverse effects on the environment, society and governance (IFMA, 2024). Although ESG is important in FMM, Gray (2024) stated that by putting these principles into practice comes with its own challenges. FMM key players often struggles to balance the operational demands with long-term sustainability goals, especially when these principles are not fully incorporated early in the planning stages of FMM operations (Hamid et al., 2021). Thus, the objective of this research is to identify the challenges faced by the FMM key players in implementing FMM practices for office building, particularly in relation to the integration of ESG principles.

LITERATURE REVIEW

FMM in Malaysia and its Challenges

FMM in Malaysia has become increasingly essential as the nation continues to develop its infrastructure. Recognizing the importance of effective FMM, the Malaysian government has implemented several initiatives to enhance the sector through various policies and initiatives and the additional budget allocated for FMM through Malaysia's Plan and Malaysia's budget (MOF, 2023). The establishment of regulatory frameworks and guidelines aims to promote best practices in FMM, fostering an environment that prioritizes safety, efficiency and sustainability (Hauashdh et al., 2022).

In recent years, Malaysia's FMM focus has shifted toward integrating technology in FMM practices. The adoption of smart building solutions and data analysis has allowed facility managers to optimize operations and improve decision making processes (Olimat et al., 2023). This technological advancement helps in addressing some of the persistent challenges within the sector, such as resource management and operational efficiency (Hauashdh et al., 2024). As Malaysia aspires to align with international standards, there is an increasing

emphasis on training and developing the skills of professionals in the field (MITI, 2024). This continuous professional development is crucial to provide facility managers with the latest knowledge and tools that are necessary to navigate the complexities of modern FMM (Ishak et al., 2023). Effective FMM practices are crucial for ensuring the longevity and optimal functioning of facilities, yet several significant challenges hinder their successful implementation (Ensafi & Thabet, 2021).

Firstly, knowledge gaps present significant challenges in FMM practices. Azzran Sh Said and Hayani (2025) mentioned that the occupant's lack of understanding in FMM practices has significantly influences building maintenance works. Adding to this, Moayedi et al., (2023) stated that to provide an effective FMM strategies, the occupants must possess a comprehensive knowledge in various aspects such as resource consumption, maintenance reporting and compliance with safety protocols. Yang and Bayapu (2020) stated that facility managers can be overwhelmed by the wide range of data sources, such as sensor data and maintenance records. There is a need for robust data management solutions to be developed. Moayedi et al. (2023) and Razali et al. (2021) added that a well-structured data storehouse that is consistently updates can improve the overall efficiency of FMM. Thirdly, challenges related to contract issue. One of the primary concerns in the FMM is, it is often characterized by inaccuracies in information exchanged between service providers and clients (Asare et al., 2021; Zou et al., 2019). These inaccuracies can lead to misunderstanding and affect the performance and quality of the service delivery (Abdul-Malak & Ezzeddine, 2023). Lastly, financial challenges. Inadequate financial resources and a limited understanding of the precise allocation requirements can lead to delays in maintenance, which in turn heightens the likelihood of facility malfunctions (Mewomo et al., 2022).

ESG in Malaysia and its Challenges

Environmental, Social and Governance (ESG) principles in Malaysia have emerged as one of the critical factors in the management of facilities, influencing the operational practices and strategic decision-making across various sectors (Wan Mohammad & Wasiuzzaman, 2021). In Malaysia, the integration of ESG into FMM practices reflects a growing recognition of the need for sustainable development a corporate responsibility (Lok et al., 2021). ESG is a framework that evaluates a company's commitment to sustainable practices to ensure the companies operate sustainably while considering their environmental impact, social equity and governance integrity (Huang, 2024).

The environmental aspect emphasizes in reducing the ecological footprint of the facilities through energy-efficient operations, the social aspect focuses on enhancing the occupant well-being and ensuring safety within the

building, while for governance aspect, it involves establishing a clear policies and frameworks to ensure transparency and ethical conduct in an organization (Delova-Jolevska et al., 2024). The implementation of ESG in Malaysia is still in the transition phase (MITI, 2024). In line with ESG, the Malaysian government had introduced various policies and frameworks to encourage their adoption. However, the full implementation of these ideas within the industry are still not yet being achieved (Tang & Teoh, 2023).

The implementation of ESG principles in Malaysia faces several challenges namely difficulty in understanding and quantifying ESG risks, training costs associated with adopting new technologies, the presence of multiple standards and framework that create confusion and rapid evolution of international standards to be adhere to (MITI, 2024). These challenges have created barriers for organization, particularly for small and medium enterprise, where the additional costs related to the training, technology adoption and digital platforms can be particularly burdensome, as they often lack resources to keep up with the revolving ESG principles (Bakri et al., 2021).

Additionally, the low awareness of ESG principles among Malaysians has also limited its incorporation into daily life (Tang & Teoh, 2023). Many individuals and business are still unfamiliar with how ESG can be practically applied to enhance sustainability, reduce environmental impact and foster better governance in everyday practices. Salin et al. (2023) points out that the ESG principle is driven for a longer-term impact where it aims to reduce the usage of fossil fuels-based and carbon intensive energy towards a cleaner energy source from the solar, wind and hydro by 2030. These become a challenge when business organisations are more interested in making the best return for the company and they do not aware of the concept and benefits of ESG practices that can contribute to their business's long-term growth. Moreover, Moayedi et al. (2023) pointed out that the insufficient efforts in promoting ESG and lack of training developed by the government also contributes to the lack of ESG implementation in Malaysia. This is also supported by Shapsugova (2023) stating that lack of standardize framework for ESG poses a significant challenge towards business as it results into different interpretation among the stakeholders on the extent and nature of ESG.

Challenges of FMM in implementing ESG in Malaysia

Environmental Challenges in FMM

Hauashdh et al. (2024) and Feng et al. (2020) both recognise the construction sector to be one of the major drivers of energy consumption, highlighting its critical impact on environmental sustainability. This is further emphasized by Zhao et al. (2022), who note that the operation and maintenance (O&M) phase contributes 75% to 80% of the total lifecycle costs of a building. these findings

shows that the financial expenditure and environmental harm associated with ingoing building management costs. Hauashdh et al. (2024) claim that building expenditure typically increases when the maintenance is inadequately performed or it is being neglected entirely, especially if the building is intended to endure for 50 years or longer. This increases not just impacting the finances, but it also contributes to the environmental issues including the higher carbon emissions as per discussed by Feng et al. (2020). FMM practices that fail to prioritize the reduction of carbon footprints, particularly through inefficient heating, ventilation, and air conditioning systems, often result in higher greenhouse gas emissions. This is supported by Alghanmi et al. (2022) where having an early detection and timely diagnosis of system faults, it can reduce the energy waste, from 25%- 50% to less than 15%.

Social Challenges in FMM

Social principle in ESG relates to the issues on social responsibility such as human rights, employee well-being and others and they directly impact the workforce dynamics (Martiny et al., 2024). One of the reported social issues happening is ensuring fair labour practice, safe working conditions and ethical supplier management (Alghababsheh & Gallear, 2022). Concerns regarding fair labour practices encompass human rights violations, including insufficient wages, excessive working hours, and unsafe working environments. These issues are particularly prevalent in industries where low-skilled labour is predominant, making workers more vulnerable to exploitation (Boufkhed et al., 2022). In FMM, the modern slavery can happen both directly and indirectly (Obeirne, 2023). This may happen through their operations, partnerships with businesses or through their supply chains, particularly when employing temporary workers through third party agencies or outsources. This could lead to a decline in the quality of work as employees become disengaged and demotivated due to unfair compensation. As a result, companies may face reputational damage and other businesses may become reluctant to collaborate, fearing a negative impact on their own standards and operations (Heil, 2018). Other than that, Wadock and Graves (1997) as cited by (Mohd Radzi et al., 2023) mentioned that organizations that are sensitive towards social issues often have better financial results, and this is correlated with efficient business management.

Human rights, employee well-being and social responsibility are all part of the social principles of ESG, which has big effect on how people work together (Martiny et al., 2024). Studies shows that fair labour practices, safe working conditions and ethical supplier management are important part of the social issue where concerns arise regarding the human rights violations during working such as low wages, low working-hours and unsafe environments (Alghababsheh & Gallear, 2022; Boufkhed et al., 2022). Within FMM, modern slavery among the

workers can happen both directly and indirectly through its operations and partnerships, especially when it involves temporary workers that are hired from third-part agencies (Obeirne, 2023). This kind of exploitation could lower the quality of works by making the employees less interested and motivated due to the unfair payment. As a result, companies may suffer reputational harm and face challenges in terms of making partnership, as other businesses tend to avoid from relationship that might negatively impact their own standards (Heil, 2018). Waddock and Graves (1997), cited by Mohd Radzi et al. (2023) further reinforce the importance of social responsibility by linking sensitivity to social issues with better financial performance and efficient business management. These results show that taking social aspect in ESG is not only a moral imperative but also strategically beneficial for organizational success.

Governance Challenges in FMM

According to Zahari et al. (2024), governance in the context of ESG is closely tied to issues such as bribery and corruption within an organization. Jin and Kim (2022) further highlight that governance practices significantly influence corporate performance, emphasizing that strong governance frameworks can mitigate unethical behaviour while enhancing overall business outcomes. In FMM, the lack of transparent decision-making process and insufficient regulatory compliance can lead to unethical practices such as mismanagement of contracts, fraud and favouritism in procurement (Ali et al., 2016). Another issue is the lack of proper monitoring and reporting structures. Without clear guidelines on how ESG performance is tracked and disclosed, organizations may fail to demonstrate their commitment to governance transparency (Shapsugova, 2023). The implications of weak governance practices in FMM not only leads to financial losses but also affect the quality of services provided (Kshaf et al., 2022). Additionally, this governance issues also affect the procurement process where favouritism in procurement can distort competitive bidding process, leading to suboptimal selections of service providers (Wang, 2020). Such practices can erode trust among stakeholders and damage the reputation of organizations involved.

In FMM, governance is very important in making sure that the services are ethical and transparent. According to Zahari et al. (2024), weak governance system often causes problems within the organization, such as corruption where it can damage the integrity of the organization. This is supported by Jin and Kim (2022) where a strong governance procedure not only mitigate unethical behaviour but also enhance overall business performance. When it comes to FMM, poor governance can be seen from the lack of openness when making the decisions and inadequate regulatory compliance. These shortcomings open the door to practices such as contract mismanagement, procurement fraud and

favouritism (Ali et al., 2016). The lack of strong monitoring and reporting systems makes the situation worse due to it hinder organizations from demonstrating their commitment to governance transparency (Shapsugova, 2023). These not only results in financial inefficiencies, but it also degrades the quality of FMM services (Kshaf et al., 2022). Another view from Wang (2020) support this statement where, when biased choices are made during the procurement process, the credibility of competitive bidding is compromised, leading to poor service delivery and loss of trust from stakeholders. Such practices can erode trust among stakeholders and damage the reputation of organizations involved.

RESEARCH METHODOLOGY

This research presents the findings of the preliminary survey, which adopted the qualitative approach through a semi-structured interview. Before semi-structured interview is conducted, ethical approval for this research has been obtained from the Universiti Teknologi MARA Research Ethics Committee (Approval No.: REC/01/2024 (PG/MR/36)). All participants were informed about the objectives and procedures of the study, and written informed consent was obtained prior to participation. The conducted semi-structured interview consists of several questions aimed to explores the key challenges in implementing ESG principles within FMM practices in Malaysia. Purposive sampling was adopted, with potential participants shortlisted based on pre-determined criteria specifically participants directly involved in FMM projects with a minimum of 5 years working experience. A total of 7 key players in FMM practices agreed to participated. These includes five facility managers and two academicians. While purposive sampling allowed the selection of information-rich participants, the small sample size (n=7) limits the generalizability of the findings to the broader FMM industry. Although the number of participants is small, the data analysis achieved data saturation when no new codes or themes emerged from subsequent interviews, indicating adequate coverage of perspectives relevant to the research objective. This aligns with Guest et al. (2020), who found that saturation in qualitative studies can often be reached with as few as six to twelve interviews, provided the participants are homogenous and well-informed about the topic. The interview questions were divided into two sections: Section A captured the demographic information and Section B that comprised open-ended questions aimed at discovering the challenges regarding the implementation of ESG principles within FMM practices. The interview process was conducted over the course of one month. The interview data were analysed using thematic analysis via ATLAS.ti@24 and reported using tabulation format.

FINDINGS

Demographic Background

The demographic data gathered from the Section A were compiled from the participants which consists of their represented organisations, working experience and positions in the organisations. Table 1 presents the summary of the participant's demographic profile.

Table 1: Demographic profile (n=7)

Items	Sub-Items	Frequency (n)	Percentage (%)
Organisations	Facility Managers	5	71.4
	Academician	2	28.6
Years of Experience	10-20 years	3	42.9
	20-30 years	4	57.1

Table 1 presents the demographic background of the participants involved in the paper. The majority were facility managers (71.4%), while only two were academicians (28.6%). Four participants had between 20 to 30 years of experience (57.1%) with the remaining three having 10 to 20 years of experience (42.9%).

Challenges of ESG principles within FMM practices

Table 2 below gathered the findings from the interview that revealed the challenges that are faced by the participants. With the aid of thematic analysis, the research identified four major themes affecting the implementation of the FMM interrelated with the ESG which are contract complexity, financial constraints, limited data sharing and lack of knowledge.

Table 2: Results of the interviews

Themes	Challenges	Pillar	Participants
Limited Data sharing	Data sharing issues	Environmental	R1, R2
	Reliance on outdated historical data		R4, R3, R6
Financial Constraints	Absence of budgetary allocations	Environmental	R3, R4, R7
	Challenges with using obsolete materials		R2, R7
	Cost escalation without corresponding increases in contract value	Social	R3
	Clients' lack of understanding in pricing works		R4
	Budgetary constraints	Governance	R3, R4, R7
Contract complexity	Lack of specific contracts for individual buildings	Social	R1, R4, R5, R6
	Lack of clarity in defining scope of work		R5
	Misleading sources of complaints leading to clean performance records		R3, R6
	Failure to meet contractual obligations		R5, R3

Themes	Challenges	Pillar	Participants
	Government's reluctance to utilize private sector contracts	Governance	R7
	Involvement of multiple contracts		R1
	Failure of reference to FMM2016 standards		R2, R3
	Lack of standardized tender evaluation procedures		R3, R6
	Absence of standard contracts for private sector		R5
	Lack of clear methods for evaluating performance		R7, R5
Lack of knowledge	Concerns regarding the competency of facility managers	Social	R2, R4, R6
	Lack of standardized definitions for FMM		R6, R7

Themes 1: Contract Complexity

The most prominent challenge identified by participants relates to contract complexity, which encompasses the social and governance pillars of ESG. Several respondents (R1, R4, R5, R6) highlighted the absence of specific contracts for individual buildings and the lack of clarity in defining the scope of work. When the responsibilities of service providers are not clearly outlined, it creates confusion among facility managers, contractors, and general workers. This uncertainty often leads to unmet contractual obligations (R3, R5) and, in some cases, workers being required to perform tasks beyond their agreed duties without fair compensation, raising concerns over ethical and fair labour practices (Haron et al., 2020).

Respondents (R3, R6) also pointed out that communication gaps further complicate FMM operations. Misleading complaint channels and the absence of standardized reporting procedures frequently result in unresolved technical issues, leading to discomfort among occupants and reduced operational efficiency (Hauashdh et al., 2022b). From a governance perspective, the involvement of multiple contracts (R1), lack of standardized tender evaluation procedures (R3, R6), and non-standardized contract documentation (R5) were identified as major contributors to role ambiguity and mismanagement (Ali et al., 2016). These inconsistencies weaken transparency and accountability, contradicting ESG's governance principle of ethical and responsible management.

Additionally, respondents (R5, R7) highlighted the lack of clear methods for performance evaluation, while others (R2, R3) mentioned that inconsistent reference to the FMM2016 standards has resulted in fragmented practices and contract misinterpretations. Respondent R7 also emphasized the government's reluctance to utilize private-sector contracts, which limits flexibility and prevents the adoption of more dynamic, ESG-responsive models. Such issues reveal systemic governance gaps and a misalignment between

national sustainability goals and actual implementation practices (Noor et al., 2021). These shows that contract complexity in Malaysia's FMM sector extends beyond administrative inefficiencies, it reflects deeper governance and social shortcomings that hinder ethical labour management, transparency, and accountability. This challenge underscores the need for a standardized contracts and consistent regulatory oversight, aligning with the i-ESG Framework, CITP, and National Construction Policy (NCP 2030) to strengthen sustainable governance in facility management.

Themes 2: Financial Constraint

The second most highlighted themes are the financial constraint. Challenges such as cost escalation without corresponding increase in contract value (R3) pose a major threat to service continuity. As noted by Zainal (personal communication, 2023), increase material cost or unforeseen repair works often lead to budget overruns, without contractual provision for financial revisions, service providers may compromise service quality to stay within budget and results to placing undue pressure on workers (Gajjar et al., 2018). This financial pressure is compounded by the client's limited understanding when pricing the works (R4). When client underestimate the cost of services or fail to appreciate the value of lifecycle costing, it leads to underfunded projects. This lack of financial literacy hinders fair decision-making and create disputes over cost justifications (Ismail et al., 2020; Salleh et al., 2020).

Moreover, budgetary constraints (R3, R4, R7) fall under the governance pillars in this theme. These constraints typically reflect poor financial planning and inconsistent fund allocation (Noor et al., 2021). Without proper funding, critical initiatives like carbon reduction, indoor air quality improvements and asset preservation are jeopardized. Another challenge is the lack of budgetary allocation (R3, R4, R7). for adopting necessary technologies to support environmental sustainability initiatives. Ekins and Zenghelis (2021) highlight that without adequate financial resources, organizations may struggle to implement innovative technologies and practices that can enhance their environmental performance. The absence of budgetary allocations for data cost investment in adopting technologies also hinder the promotion of environmental sustainability in FMM (Hamid, personal communication, 2023). Insufficient planning, limited awareness of sustainable costing and weak policy practice linkages hinder organizations from realizing the importance of ESG goals. Strengthening the financial governance and introducing ESG-aligned funding mechanisms such as green procurement incentives or sustainability-linked budgeting under the ESG framework are important to achieve long-term operational and environmental resilience.

Themes 3: Limited Data Sharing

Limited data sharing among stakeholders disrupts coordination, making it difficult to monitor energy use and resource consumption effectively (Zainal, personal communication, 2023; Alghanmi et al., 2022). At the same time, this issues also contributes to the tender pricing issues where the absence of up-to-date and transparent data makes it hard for service providers to accurately estimate costs. In addition, organizations often rely on outdated data (R4, R3, R6), which skews decision-making and results in the use of obsolete materials (R2, R7). This not only affects environmental performance but also creates financial strain when switching to newer and compliant materials (Majid, personal communication, 2023). The cascading effect of these environmental decisions further impacts contract budgets. Rather than viewing this data gaps as a purely technical concern, these finding shows these as a strategic governance gap that undermine the environmental goals of ESG implementation. Without a centralized data management and digital integration, Malaysia's FMM sector will have a risk in treating sustainability reporting as a formality rather than a performance tool.

Themes 4: Lack of Knowledge

Finally, knowledge limitations, especially regarding the competency of facility managers (R3, R4, R6) and the lack of a standardized definition of FMM (R4, R7). As highlighted by Au-Yong et al. (2023), competent personnel are essential to executing efficient and sustainable maintenance practices. Without a clear understanding of what FMM entails, it becomes difficult to measure performance, define roles or maintain service quality and it reflect the social concerns of the ESG. To bridge this gap, it requires a stronger educational response. Integrating ESG-oriented modules into professional certification programmes and promoting continuous professional development would enhance the technical capacity.

CONCLUSIONS

The increasing implementation of ESG principles within the FMM sector in Malaysia presents both significant opportunities and challenges. This research contributes uniquely to the FMM literature by exploring the integration of ESG principles into Malaysia's FMM practices, an underexplored area. It identifies key areas of concern, particularly within the ESG framework, such as contractual complexities, financial constraints, data sharing issues, and knowledge gaps across the three ESG pillars. The research highlights the importance of collaboration between the public and private sectors to address these challenges, especially in standardizing contracts, improving data sharing, and fostering professional growth within the FMM field. While Malaysia is still transitioning toward fully adopting ESG principles, the growing focus on sustainability and

corporate responsibility, exemplified by initiatives like i-ESG, provides a path forward. A standardized FMM contract document, as recommended in this research, can serve as a critical tool to address recurring challenges. It would not only clarify roles, streamline service expectations, and enhance ESG compliance but also support Malaysia's broader sustainability goals. This research offers a significant contribution to the FMM literature in Malaysia by addressing the gaps in ESG integration, paving the way for more efficient, transparent and responsible facilities management aligned with global sustainability targets and national policy initiatives.

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