Akademika 96(3), October 2026
https://doi.org/10.17576/akad-2026-9603-19

Environmental Disclosures by Malaysian City Councils on Facebook: Evidence from A Legitimacy Perspective

Pelaporan Alam Sekitar oleh Majlis Bandaraya di Malaysia melalui Facebook: Dapatan dari Perspektif Teori Legitimasi

CHE KU HISAM CHE KU KASSIM*, SURAYA AHMAD
& NOOR EMILINA MOHD NASIR

Received: 8-7-2026/Accepted:26-9-2026

ABSTRACT

The discretionary nature of environmental reporting practices of local councils in Malaysia has propelled the use of a myriad of reporting media to report organisations' environmental initiatives and efforts. Of late, there has been an increasing trend in the mobilisation of social media such as Facebook to provide a host of environmental disclosures (EDs). As research focusing on this medium within developing countries appears to be sparse and limited, the intention for this shift of communication channel remains relatively less explored. The aim of this paper is to examine the level and types of EDs provided by fifteen Malaysian city councils on the organisational Facebook. Legitimacy theory was adopted to provide the theoretical lens to elucidate the underlying motive of disclosures. Consistent with the extant studies, a descriptive content analysis was employed to numerically count the level of EDs. A disclosure instrument facilitated the measurement process. The findings indicate that city councils are exploiting the benefits of social media to disseminate environmentally-related information to local constituents. A total of 666 Facebook posts comprising 2,080 sentences related to EDs were identified across seven environmental themes. Differences in the extent and type of disclosures are found signalling the use of an unstandardised format to report information. Although inconclusive, the patterns of EDs are generally consistent with the propositions of legitimacy theory, suggesting that city councils may have mobilised social media platforms, such Facebook to convey legitimacy messages in an attempt to bolster the organisational reputation and status. Moreover, the findings may offer useful insights to relevant authorities in policy amendments to further enhance the quantity and quality of EDs reported by local councils in Malaysia.

Keywords: Environmental disclosures; Environmental reporting; Social media; Local council; Organisational legitimacy

ABSTRAK

Pelaporan alam sekitar secara sukarela dalam kalangan pihak berkuasa tempatan (PBT) di Malaysia telah mendorong penggunaan pelbagai medium komunikasi untuk melaporkan inisiatif dan usaha pemeliharaan alam sekitar yang dilaksanakan oleh organisasi. Mutakhir ini, penggunaan media sosial seperti Facebook semakin mendapat perhatian sebagai platform penyebaran maklumat berkaitan penzahiran tentang alam sekitar. Walau bagaimanapun, kajian yang memfokuskan penggunaan medium ini dalam konteks negara membangun masih terhad, menyebabkan tujuan peralihan saluran komunikasi tersebut kurang dikaji. Sehubungan itu, kajian ini bertujuan untuk meneliti tahap dan jenis penzahiran alam sekitar yang dilaporkan menerusi laman Facebook rasmi oleh 15 majlis bandaraya di Malaysia. Teori legitimasi digunakan untuk menjelaskan motif penzahiran tersebut. Selaras dengan kajian terdahulu, analisis kandungan deskriptif digunakan untuk mengukur tahap penzahiran alam sekitar secara kuantitatif. Penggunaan indikator penzahiran membantu proses pengukuran. Hasil kajian menunjukkan bahawa PBT memanfaatkan kelebihan media sosial untuk menyebarkan maklumat berkaitan alam sekitar kepada masyarakat setempat. Sebanyak 666 hantaran Facebook yang merangkumi 2,080 ayat berkaitan penzahiran alam sekitar telah dikenal pasti dan dikategorikan kepada tujuh tema utama. Perbezaan dari segi tahap dan jenis pendedahan menunjukkan bahawa pelaporan maklumat alam sekitar masih belum menggunakan format yang seragam. Walaupun dapatan kajian tidak memberikan bukti yang konklusif, corak penzahiran yang dikenal pasti secara umumnya selaras dengan teori legitimasi; di mana pihak PBT menggunakan platform media sosial seperti Facebook sebagai medium penyampaian mesej legitimasi untuk memperkukuh reputasi dan kedudukan organisasi. Selain itu, dapatan kajian ini

dapat memberikan input yang bermanfaat kepada pihak berkuasa dalam usaha menambah baik dasar dan garis panduan pelaporan bagi meningkatkan kuantiti serta kualiti penzahiran alam sekitar oleh PBT di Malaysia.

Kata Kunci: Penzahiran alam sekitar; pelaporan alam sekitar; media sosial; pihak berkuasa tempatan; legitimasi organisasi

INTRODUCTION

The demand for EDs in the public sector has proliferated in recent years, in part due to a multitude of stakeholders' increased environmental awareness. This has placed a great deal of pressure on organisations to demonstrate, at the very least, that some environmental concerns have been integrated into their organisational strategies and long-term development (Gaia and Jones 2020; Che Ku Kassim et al., 2021; Pina et al., 2025). Addressing the demands for more environmental responsiveness lends some degree of legitimacy and may draw the attention of ethical investors which will provide higher financial wealth for organisational sustainability (Giacomini et al., 2020). The dissemination of EDs involves an array of reporting media, ranging from integration in annual reports, stand-alone reports and organisational portals (Che Ku Kassim et al., 2020; Giacomini et al., 2021). Disparities in the medium employed are particularly due to the fact that many public sector organisations worldwide still only require voluntary environmental reporting (Mol et al., 2025).

Of late, there has been a noticeable trend in public sector organisations offering EDs on social media (Giacomini et al., 2021). Lodhia et al. (2020) considers this advancement as a progression in environmental and sustainability reporting practices that expands on the capabilities of conventional paper-based reporting. The rapid expansion and wider reach of information and communication technology have propelled the infusion of innovative platforms like social media for effectively and widely sharing information with targeted audiences. According to Giacomini et al. (2020), social media and Web 2.0 have paved the way for people to interact socially in an apparent virtual community, both amongst citizens and institutions as well as among individuals. The Web 2.0 has, to some extent, redefined stakeholders' expectations through social media dialogue as creator of user-generated content, and has opened up opportunities for innovative reporting that increases transparency (Bellucci and Manetti, 2017). Social media has been consistently utilised as a mechanism for engaging stakeholders, which can improve an organisation's relationship with its stakeholders and provides an interactive avenue for fostering transformative action and social change (Bellucci and Manetti, 2017; Lodhia et al., 2020; Giacomini et al., 2021; Giuliani and Pennesi, 2025).

Despite the numerous potential benefits, social media usage as an alternative communication channel for reporting EDs, appears to receive little attention amongst researchers (Bellucci and Manetti, 2017; Lodhia et al., 2020), including in Malaysia (Che Ku Kassim et al., 2020). Consequently, there is a lack of understanding regarding the reasons for public sector to use social media such as Facebook to disseminate EDs. Social media reporting, being one of the fastest growing two-way communication platforms, presents numerous potential research areas to be explored in both the commercial sector (Lodhia et al., 2020) and the public sector (Giacomini et al., 2021). Therefore, the aim of this paper is two-fold. Firstly, it examines the extent of EDs provided by Malaysian city councils via the organisational Facebook account. Secondly, it aims to examine the patterns of EDs in order to investigate the motive of disclosure. Accordingly, the paper seeks to provide answers to the following research questions:

1. What is the extent of EDs reported on city councils' official Facebook accounts?
2. What is the underlying motive of providing EDs on city councils' official Facebook accounts?

City councils are selected for various reasons. Firstly, city councils occupy the top spot in the Malaysian local government hierarchy and are typically larger and have more financial resources than either municipalities or local councils (Che Ku Kassim et al., 2020). Therefore, they are able to participate in various environmental projects and programmes and then share their efforts through numerous reporting channels, such as social media (Nicolo et al., 2020; Che Ku Kassim et al., 2021). Secondly, because they are more politically visible, large public administrative units like city councils are likely to be subject to intense public pressures in relation to any environmental commitments and initiatives that are undertaken or are expected to be performed (Che Ku Kassim et al., 2021). Hence, the organisation's environmental efforts are often supplemented by disclosures intended to notify relevant stakeholders in an attempt to mitigate any unwanted scrutiny.

This paper expands the existing knowledge by presenting empirical evidence on the mobilisation of social media such as Facebook as a cutting-edge reporting platform to furnish EDs. It may provide an indication that social media, with its interactive features and widespread use, might function as an informative tool for the timely and cost-effective dissemination of EDs, capturing a wider audience. Perhaps, the findings can provide persuasive evidence that can encourage other public sector organisations to exploit the benefits that social media has to offer in providing governmental information to local constituents for better informed decision-making processes. Moreover, this paper helps in understanding the plausible motive that the city council is attempting to achieve by mobilising social media to publicise EDs to a wide range of stakeholders. Disclosure of voluntary environmental-related information is often associated with the motive of legitimisation, depending on the nature and type of disclosure made. Therefore, the findings could provide critical insights that may be of interest to regulatory authorities, such as state governments, when considering policy amendments and/or changes to make EDs mandatory for the public sector. Such a move would not only improve the extent of disclosure but also potentially motivate local councils to provide higher quality disclosures.

The paper is structured in the following order. Next section discusses the pertinent literature on EDs made by the public sector. This is then followed by a discussion of a theoretical lens to explain the reason for disclosure. Then, a detailed explanation of the research methods is presented. Finally, the findings are discussed and a conclusion concludes the paper.

LITERATURE REVIEW

According to Cappellieri et al. (2025), ED is a generic term that refers to the reporting of organisational operations that could have an impact on the environment. Organisations have been increasingly pressured to report EDs to support stakeholders in their decision-making processes. The public sector is no exception. The review of the prior literature indicates that research exploring the extent of EDs and sustainability reporting within the public sector environment is indeed growing (Lynch, 2010; Che Ku Kassim et al., 2020, 2021; Gaia and Jones, 2020; Giacomini et al., 2020, 2021; Tommasetti et al., 2023, Mol et al., 2025). These studies garner differences in research results, suggesting that it is impossible to draw broad conclusions about the environmental reporting practices of the public sector across national boundaries. In the public sector,

environmental and sustainability reporting have been largely examined within the local council context (Che Ku Kassim et al., 2020, 2021; Gaia and Jones, 2020; Giacomini et al., 2021; Mol et al., 2025), although evidence from the perspectives of state/municipal-owned enterprises is also being considered (Giacomini et al., 2020; Nicolo et al., 2020).

Despite its voluntary nature, the existing literature provides consistent evidence that there seems to be some efforts made by the public sector to report EDs (Tommasetti et al., 2023). However, disparities exist in both the quantity and quality. Gaia and Jones's (2020) study suggests that the extent of disclosure is very much influenced by the nature of the public sector. The public sector, particularly those with substantial environmental portfolios, typically report higher levels of EDs. On top of that, the public sector is found to be selective in disclosing environmental-related information which consequently affects its quality (Gaia and Jones's, 2020). Che Ku Kassim et al. (2020) attest to this as they found that Malaysian local councils highly prefer to report EDs that are closely related to the local community. Providing such disclosures signifies the commitment of the local councils to respond to the societal needs accountably so that unwarranted criticisms can be mitigated. Another piece of evidence suggests that local councils are less inclined to prepare and publicise EDs if there only appears to be a minimal threat to the perceived organisational legitimacy (Othman et al., 2017). In reporting EDs, the Global Reporting Initiative (GRI) Reporting Guidelines have been adopted although only partial indicators are disclosed (Farneti et al., 2019). According to a recent study, Malaysian local councils are encountering numerous difficulties in the preparation and reporting of EDs, with a shortage of competent and skilled staff being identified as a contributing factor to the limited coverage of EDs (Che Ku Kassim et al., 2020). Similarly, Che Ku Kassim et al. (2021) also indicate that normative pressure in the form of continuous professional development programmes is proven to be a significant institutional predictor to impact Malaysian local councils' environmental reporting practices. These findings suggest that education and training should be adequately provided in ensuring both current and prospective accountants can objectively identify, quantify and present pertinent environmental information in various communication media.

It is evident that non-monetary and declarative type dominate the EDs reported by the public sector. Othman et al. (2017), for example, discover that more than 80% of the total sustainability information disclosed by New Zealand's local councils are in the form of non-monetary EDs. These types of disclosures are favoured simply because they can be easily and inexpensively reproduced in large quantities (Hasseldine et al., 2005). Yet, such disclosures merely contain unauthentic statements that are difficult to objectively verify. Consistent with the premise of legitimacy theory, literature has shown that EDs are very much positive and neutral in nature (Hasseldine et al., 2005; de Villiers and van Staden, 2006; Othman et al., 2017; Che Ku Kassim et al., 2020). Positive disclosure acknowledges the commitment of the public sector in providing transparent environmental and sustainability performance which subsequently boost the organisational image and safeguard its status quo (Che Ku Kassim et al., 2021). Neutral disclosure, in essence, does not specify much about an organisation's commitment and effort on environmental issues rather it merely serves as an indication that the organisation has taken some form of measures to discharge accountability on environmental matters. This type of disclosure is used as a means to cultivate favourable effects on the organisation's credentials and helps portray a better organisational reputation and image. On the contrary, detrimental disclosures are strictly regulated and minimised as an attempt to alleviate any potential risks to the organisation's legitimacy (Che Ku Kassim et al., 2020).

The public sector has been known to mobilise a range of communication media to showcase its EDs such as via annual reports (Lynch, 2010; Hossain et al., 2023), stand-alone environmental and sustainability reports (Farneti et al., 2019), and organisational websites (Che Ku Kassim et al., 2020). These platforms, however, are being criticised for merely permitting one-way communication and enabling little interaction between information providers and users (Lodhia et al., 2020). There is an increasing trend among the public sector to report EDs using social media platforms (Giacomini et al., 2021). Bellucci and Manetti (2017) describe social media as an umbrella term encompassing a myriad of tech-enabled applications such as social networking service (for example, Facebook and Instagram), professional networking sites (for example, LinkedIn and Quora), and blogs/micro-blogs (for example Twitter and Tumblr), to highlight a few. These user-content driven applications help users to create profiles and actively interact in social and professional networking platforms.

Social media has become an indispensable communication tool for public sector organisations to disseminate and share government information with a vast number of constituents simultaneously. One notable feature of social media is its ability to facilitate meaningful and real-time stakeholders engagement at a relatively low cost, a feature that is apparently absent in conventional reporting mechanisms (Bellucci and Manetti, 2017; Lodhia et al., 2020; Giacomini et al., 2021). On top of that, it facilitates active communication with a large group of relevant publics, especially external stakeholders like local communities, non-governmental organisations (NGOs), and public administrative units such as local councils (Bellucci and Manetti, 2017). With an approximately three billion subscribers (Rocca et al., 2021), social media technologies have been widely recognised for fostering greater information transparency and serving as a dominant platform of dialogic communication that is capable of fostering transformative action and social change (Bellucci and Manetti, 2017).

In general, the environmental reporting practices of the public sector are still in the infancy stage, particularly in developing countries such as Malaysia. This, therefore, suggests that there is a limited understanding of the underlying motives for making EDs accessible on online social media platforms. While there is an increasing trend towards the extent of disclosure, the quality of disclosure still remains patchy. The public sector appears to carefully plan on "what" and "how much" to report on EDs, which aligns with the legitimacy theory.

THEORETICAL DISCUSSION: LEGITIMACY THEORY

Studies have consistently acknowledged the importance of disclosure, which is frequently used to safeguard organisational legitimacy (Nicolo et al., 2020; Hossain et al., 2023, Pina et al., 2025). The premise of legitimacy posits that information is only disclosed when there is a need for it or when abrupt corrective arrangements are required due to the emergence of some anxieties that may affect the organisation's survival (Suchman, 1995). An organisation often undertakes an array of communication strategies in protecting its legitimacy status by, although not limited to, routinely disclosing necessary information to the relevant publics. Legitimacy is a crucial resource for an organisation, ensuring that its operations are sustainable for the foreseeable future (Suchman, 1995). In this regard, an organisation has various potential incentives to strategise disclosures, such as altering the types and amount of information, to ensure the preservation of this crucial resource. Suchman (1995) contends that disclosures are mostly intended and directed to a limited number of publics who appear to be influential and the disclosures, in addition, are often driven by specific

events and issues. This solidifies the function of disclosure in capturing the interest of specific users and highlighting only specific events and issues that may benefit the organisation. It is through communication that organisations normally seek to change the norms, values, and beliefs of the relevant publics in an effort to be seen legitimate (Suchman, 1995).

In the context of legitimacy within the public sector's perspective, EDs are driven by the need to support the managerial goals of protecting the organisation's legitimacy. Mol et al. (2025), for instance, suggest that EDs are visibly made available in numerous means of reporting platforms not for the purpose of improving transparency but rather to appear legitimate. Identical findings are also found in Che Ku Kassim et al. (2020), who discover that EDs are voluntarily reported as a form of legitimacy strategy to meet the expectations of society rather than pursuit to promote greater accountability. Since legitimacy is largely a perception-based theory, organisations seeking legitimacy often engage in environmental activities and provide appropriate disclosures that are aimed to inform the relevant publics about their commitment to environmental sustainability. In this sense, EDs represent textual-mediated information that are strategised as an effective legitimacy tool to manage public impressions in portraying an organisation as legitimate in the eyes of the relevant publics.

Any attempt to exercise legitimacy can be discovered by examining the extent and patterns of disclosures (de Villiers and van Staden, 2006; Che Ku Kassim et al., 2021). Legitimacy is an ongoing process and more often than not is considered as a routine exercise. This is particularly due to the fact that the relevant publics' needs and perceptions are not rigidly static but persistently changing. The evolving demands of the public mean that legitimacy practices should also change accordingly. The decisions to increase, maintain or even reduce the scope of EDs and to alter the types of disclosures from specific to general are made when organisational legitimacy is in jeopardy (de Villiers and van Staden, 2006). General, declarative and non-financial EDs are considered to be of lower quality and are perceived as less threatening compared to specific and financial information. They are arguably less likely to attract unnecessary scrutiny (de Villiers and van Staden, 2006). In addition, disclosing low quality of EDs as a symbolic means of cultivating favourable effects to the organisations' credentials is more preferred as they are relatively less costly and can be made in large quantities (Hasseldine et al., 2005). However, this type of EDs often lacks credibility as they contain non-verifiable statements and are quite easy to be replicated (Hasseldine et al., 2005).

RESEARCH METHODS

The purpose of the paper is to examine the level and types of EDs made accessible within the social media of Malaysian city councils. To ensure consistency, only city councils in Peninsular Malaysia are selected. City councils in East Malaysia (Sabah and Sarawak) are excluded as they are administered under different statutory regulations (Che Ku Kassim et al., 2021). The term "city council" denotes an advanced municipality with a population of over 500,000 residents and generates at least RM100 million revenue annually (Che Ku Kassim et al., 2021). As of 2022, there are fifteen city councils located in Peninsular Malaysia, as visualised in Appendix 1.

MEASUREMENT OF EDS

Consistent with prior studies, a descriptive content analysis was employed in measuring the extent and patterns of EDs reported on the city councils' social media (see, for example, Othman et al., 2017; Che Ku Kassim et al., 2020). The method refers to the process of analysing symbols and text through a systematic reading of resources that yields the meaningful information context to the users (Krippendorff, 2018). In disclosure studies, the method of measurement used to quantify the extent of disclosure is a major concern. Although there are a number of quantification techniques available, many prefer to use volume of sentences as it is less subjective as opposed to, for example, volume of words or proportions of a page and paragraphs (Che Ku Kassim et al., 2020). To assist in the measurement of EDs, a disclosure index based on the seven environmental themes developed by Burritt and Welch (1997) was employed. Appendix 2 details the instrument. There are two justifications to support the use of Burritt and Welch's (1997) instrument. Firstly, environmental reporting in the Malaysian public sector is a voluntary practice and is still in its early stages (Che Ku Kassim et al., 2020, 2021). Therefore, it is speculated that the extent of EDs may be low and generic in nature. Secondly, the existing comprehensive disclosures index such as Lynch's (2010) instrument is largely based on GRI reporting guidelines where its application is only fragmentary. As indicated in the literature, the public sector appears to cherry pick which GRI-based environmental indicators to report (Gaia and Jones, 2020). Hence, GRI-based disclosure instrument may not be appropriate to be used in the Malaysian context.

In an effort to lessen the subjectivity element in measuring the EDs, only information disclosed in narrative form was analysed. Non-narrative statements depicted in the forms of graphical pictures, videos and animations were excluded. In measuring the disclosure item, a binary coding approach (1 = an item is disclosed; 0 = an item is not disclosed) was adopted. This approach treats each item to be equally important. It is considered less subjective as compared to the weighted approach and is ubiquitously used in the extant literature (Che Ku Kassim et al., 2020). A disclosure is defined as a passage of textual material on an environmental issue reported on social media. To examine the underlying motive behind the disclosure, the EDs were also analysed based on three different types, namely favourable, neutral, and adverse (Che Ku Kassim et al., 2020). The favourable classification relates to positively impacted ED on the organisational image. The adverse classification, meanwhile, has a negative impact and neutral classification refers to the ED that has neither a positive nor a negative impact on the organisational image.

Although EDs may appear on many social media platforms, this paper only analyses the EDs reported on the city councils' Facebook pages. There are several justifications to support the selection. Firstly, according to a recent survey by the Malaysian Communications and Multimedia Commission (MCMC), Facebook is the most popular social media in Malaysia with 87.5% subscribers among the Internet users (MCMC, 2022). Therefore, the majority of stakeholders are likely to have access to the governmental information reported on the organisational Facebook page. Secondly, recent evidences suggest that Malaysian government agencies and authorities have been uploading organisational information on Facebook on a consistent basis (Hussin et al., 2025). This, therefore, provides proof suggesting that the Malaysian public sector may have mobilised Facebook to report EDs.

CONTENT ANALYSIS PRODECURES

EDs reported on city councils' official Facebook accounts from 1 January to 31 December 2022 were analysed. The official Facebook account was first identified and followed to obtain access to all information reported on the Facebook page. Each of the post was then read and reviewed. Only posts made by the respective city councils were considered for the measurement of EDs. Tagged and shared information were excluded in the analysis as they were considered secondary source and not genuinely made by the city councils. Moreover, to avoid printing problems such as incomplete pages and extraneous materials, for example, oversized images and tagged information, it was decided that each of the city council's Facebook posts need not be printed. Instead, the content analysis procedures were conducted directly from the city councils' Facebook. The EDs were then entered in a spreadsheet software to descriptively count the level and patterns of disclosures. Intercoder reliability is an important issue of concern in content analysis research. To reflect intercoder reliability, at least two coders are needed to crosscheck the coding process (Krippendorff, 2018). In this paper, the content analysis procedures were conducted by two authors who performed repeated cross-checks to ensure consistency. Initially, the two authors independently conducted a content analysis of the EDs reported on the official Facebook accounts of five city councils. Subsequently, the respective findings were compared to ensure consistency in the coding process and the interpretation of the information uploaded on the Facebook accounts. All disputes whenever surfaced, were reviewed and discussed until a mutual consensus was reached.

RESULTS AND DISCUSSION

In general, city councils have been found to regularly update their official Facebook pages for the year 2022. This seems to suggest that the platform is used to highlight their commitments to environmental and sustainability programmes through various disclosures to the local constituents. Though there are variances in the number of reach and engagements, social media platforms remain the preeminent communication channels for authorities and organisations, both public and private, to interact with stakeholders (Bellucci and Manetti, 2017). The content analysis extraction yielded a collection of 666 posts pertaining to EDs on the city councils' Facebook pages. The number of sentences in each post ranged between one to thirteen sentences.

EXTENT OF EDS

Table 1 summarises the results of the content analysis. A visual examination of the table suggests that a total of 2080 sentences on EDs, segmented in seven environmental themes, were reported on the organisational Facebook pages of fifteen Malaysian city councils in the year 2022. The predominant theme is "education and training" with a total of 703 sentences, representing 33.8% of the total disclosure. To preserve its legitimacy, organisations often actively engage in educational programmes and campaigns to meet stakeholders' expectation and to symbolise their eligibility within society (Pan et al., 2023). Among the disclosures related to this theme are information about environmental awareness campaigns and reduction or elimination of plastic usage in daily activities. Although the programme costs might exceed the benefits, these

programmes serve as a response to stakeholders' pressures and queries about the roles played by the city councils. Meanwhile, "clean-up" is the second most popular theme with 550 sentences (26.4%). The high percentage of disclosure is expected, as it is the fundamental responsibility of local authorities (Che Ku Kassim et al., 2020). The majority of clean-up activities result from natural disasters (such as flood and landslides) and human littering activities. Community clean-up and *plogging* (an activity of picking up trash while jogging) are the most common disclosures, with a total of 53 and 37 disclosures, respectively. These activities were conducted in residential areas, cemeteries, rivers and public localities, with the involvement of city council staff, other organisations, and the general public.

These trends of EDs are consistent with those of Che Ku Kassim et al. (2020) who examined the environmental reporting practices of Malaysian local governments on organisational websites. Reporting on "education and training" and "clean-up" themes is considered imperative, as they are closely related to the local community, and efforts made by the city councils could be seen as a tool to portray an image of a responsible organisation in an attempt to avert any potential criticisms. These publicity-motivated postings are supported by Joseph et al. (2019), who argue that environmental and sustainability performance are very much driven by the external stakeholders and institutional pressure to gain recognition and social acceptance. The "environmental policy" is the third popular theme with a total of 445 sentences (21.4%). The majority of the city council publicised their initiatives and policies on environmental issues through various programmes such as re-plantation of shade trees, imposition of penalties on illegal dumping activities, inspections of the business premises, and the enforcement of anti-littering policies, among others. However, as city council are under the exclusive jurisdiction of the state government, the latter has paramount influence in deciding the range of programmes and policies suitable for the city councils (Mathews, 2024).

It is not surprising that disclosure on "recycling" is not the most prevalent environmental theme. According to Mohd Yahya et al. (2022), although the Malaysian government has constantly conducted a variety of programmes to improve citizens' awareness of the importance of recycling, the recycling rate remains low, albeit slightly improved in recent years. Changing attitudes to instil a positive culture towards recycling requires a lot of resources to educate the public. Perhaps this is one of the plausible justifications for "education and training" being the most dominant environmental theme disclosed by the city councils on their organisational Facebook pages. The disclosures on "energy programmes" and "research" activities are among the least popular environmental themes. The former theme mainly focuses on the expert's evaluation and recognition of the energy-based programmes initiated by the city councils, while the latter discusses the city council's active engagement in focus group discussions, research grant offerings, industrial collaborations, interviews and surveys with the respective target groups. This information is not considered to be the primary focus of the public and merely serves as internal-related data for managerial purposes (Che Ku Kassim et al., 2020). It is evident that governments with a larger number of sustainability engagement networks are more likely to disclose more information about the environment than governments with fewer networks (Bonsón et al., 2020). Therefore, disseminating the necessary information is seen as a proactive strategy to inform the community about the city councils' commitments and efforts to support energy policies and research activities in Malaysia.

It is anticipated that the disclosure related to EIA/EIS is minimal. Consistent with the work of Che Ku Kassim et al. (2020), the city councils seem to withhold any possible disclosures pertinent to the EIA/EIS. In Malaysia, the EIA is governed under Article 34 of Environmental

Quality Act 1973 (Hoe et al., 2023). One important aspect of EIA/EIS is the extent of public participation in the decision-making process for commercial and government project developments. The involvement of the public seems crucial as they are directly affected by the adverse environmental and social impacts of project developments. Although the public's opinion may potentially improve the quality and legitimacy of environmental decisions, the EIA/EIS is largely political in nature (Ho et al., 2020). Moreover, the current practice of EIA/EIS still lacks comprehensive guidelines concerning the level of public involvement in the decision-making process and judicial and administrative proceeding, to mention a few examples (Hoe et al., 2023). On top of that, data collection for EIA/EIS can be time-consuming and expensive due to the large number of sources to be consulted. It is also unlikely that city councils will share this information if no practical value is reaped from it. An organisation often follows societal expectations, traditions and norms, and there is little pressure to conform if there are no significant incentives (Lynch, 2010). Perhaps the main reason for the absence of EIA/EIS disclosure could be speculated on the intention of the city council to avoid any possibilities of unwanted scrutiny from the public. Hence, limiting the EIA/EIS disclosure is seen as an approach to protect organisational legitimacy.

TABLE 1. Extent of EDs

Theme	**No. of Sentences**	**Percentage (%)**
Education and training	703	33.8
Clean-up	550	26.4
Environmental policy	445	21.4
Recycling	218	10.5
Energy programme	117	5.6
Research	47	2.3
EIA/EIS	0	0
Total	2080	100

PATTERNS OF EDS

The patterns of EDs are quantified in Table 2. With a total of 2016 sentences, representing almost 97% of total disclosures, the neutral form of disclosure substantially outweighs both favourable and adverse types of EDs. These results support previous findings elsewhere and are in line with the principle of legitimacy theory (Othman et al., 2017; Che Ku Kassim et al., 2020). The neutral form of disclosure garners less attention from the members of the public and is also inexpensive and can be made in large quantities (Hasseldine et al., 2005). In addition, de Villiers and van Staden (2006) argue that in exercising legitimacy, organisations appear to report more general and declarative information to alleviate any possible risk of unnecessary investigation that may tarnish the organisational image. Although this form of disclosure does not offer much information about the extent of the organisation's involvement in environmental protection and commitment, the disclosure is generally aimed at providing an assertion that the organisation highly values the importance of environmental sustainability. In addition, according to the impression management tactic, organisations tend to manipulate the disclosure of their current and future environmental performance by using long sentences, complex structures, legal and technical jargon that may reduce readability. This, in turn, helps them avoid sanctions by stakeholders (Tadros et al., 2020; Pan et al., 2023;).

There are also 53 sentences (2.5%) on EDs that are favourable in nature. Out of this total, 24 sentences are in the sphere of energy programmes, which highlight the various prestigious awards won by the city councils resulting from the organisations' effective energy policy and utilisation. This type of disclosure is also consistent with the foundation of legitimacy theory. Akhter et al. (2023) states that in an attempt to secure legitimacy, reporting strategies are geared towards emphasising specific achievements and recognitions that are beneficial to the organisations' credentials, especially in boosting their status quo. More often than not, the disclosures tend to be self-laudatory (Akhter et al., 2023). Evidence suggests that public sector organisations that are more prone to environmental crises are highly likely to produce higher level of EDs with favourable statements dominating the disclosures (Lynch, 2010). Providing good news not only helps organisations to build a better image but also accords stable legitimacy status (Gaia and Jones, 2020).

As expected and consistent with prior studies, adverse disclosure is the least common type of information disclosed (Othman et al., 2017; Che Ku Kassim et al., 2020). Although 11 sentences of negatively-type of EDs are provided, none of them is related to the misbehaviour of the city councils. Rather, the disclosures are merely concerned with the city councils' expression of disappointment towards public littering habits, dirtiness of the business premises and the high probability of environmental disaster such as flash floods in the urban city. It is self-explanatory that the negatively-impacting EDs need to be kept to a low level in an effort to prevent unwanted threats to legitimacy (de Villiers and van Staden, 2006). Sensitive information is harmful to organisational legitimacy and once legitimacy is in crisis, it requires a reactive strategy to restore it, necessitating substantial efforts and resources on the part of the organisation as previous legitimacy routines and tactics appear to no longer be suitable and effective (Suchman, 1995). Due to the voluntary nature of environmental reporting in the public sector, there is no guarantee that organisations will disclose their actual environmental performance, and research to date has not yet conclusively shown whether the environmental reports are informative or misleading (Tadros et al., 2020). In fact, it is hypothesised that favourable and self-praising disclosures may lead to increasing stakeholders' expectations, while adverse disclosures may raise doubts about the organisation's legitimacy (Pan et al., 2023). Hence, an ambiguous and/or neutral statement appears to reduce the number of expectations and criticisms that a city council may receive.

TABLE 2. Patterns of EDs

	Favourable		**Neutral**		**Adverse**	
Theme	No. of sentences	%	No. of sentences	%	No. of sentences	%
Education and training	2	3.8	699	34.7	2	18.2
Clean-up	12	22.6	535	26.5	3	27.3
Environmental policy	11	20.8	428	21.2	6	54.6
Recycling	4	7.6	214	10.6	0	0
Energy programme	24	45.3	93	4.6	0	0
Research	0	0	47	2.3	0	0
EIA/EIS	0	0	0	0	0	0
Total	53	100	2016	100	11	100

CONCLUSIONS, LIMITATIONS AND FUTURE RESEARCH

In general, city councils in Malaysia have leveraged the ubiquity of social media (in this paper the Facebook platform) to disseminate a range of EDs, although differences in the extent of disclosures are observed. The city councils, also seem to carefully scrutinise the types of EDs uploaded on the medium, and this appears to be consistent with the central tenet of legitimacy theory in relation to disclosure strategies. Nonetheless, it appears that city councils have exploited the unique features of Facebook to portray the environmental efforts and commitments of their organisations to a wide range of constituents, even though environmental reporting within the Malaysian public sector remains a voluntary practice. Due to the high number of Facebook subscribers in Malaysia, city councils have mobilised the social media platform to share updated information quickly and at lower cost, resulting in more effective communication with their constituents. These results indicate that it is high time for both the federal and state governments to embark in policy changes by making EDs compulsory reporting practice for all public sector organisations. Only by making it mandatory, can the quantity and quality of EDs be further improved rather than merely seen as a voluntary instrument embedded with the motive of legitimising. Moreover, regulations may prove useful in setting up the minimum disclosure requirements that could determine the fundamental environmental themes to be reported, representing the core information for decision-making of the stakeholders. As an effort to assist public sector organisations in identifying , measuring and subsequently reporting environmental information, a technique called environmental management accounting (EMA) may be helpful (Burritt et al., 2023). EMA is a comprehensive management accounting practice that is used internally to bring a favourable impact on the quality of EDs by uncovering relevant environmental costs and savings that are often hidden in the overhead accounts (Burritt et al., 2023).

Despite providing pertinent evidence of EDs in a developing country perspective, this paper suffers from some inherent limitations. Firstly, only EDs in the form of narrative statements are examined. The existing literature has documented evidence that EDs can also be portrayed in non-linguistic formats such as through pictures and videos (see, for example, Chong et al., 2023). Therefore, future research should examine EDs in various reporting formats to accurately determine the level and types of disclosures. Secondly, this paper is cross-sectional in nature and fails to capture the progress of disclosure made by the same councils over a period of time to observe the development in EDs. As a result, there is a growing need for longitudinal analysis that can assess and accurately measure the progress and development of EDs made by Malaysian city councils. Thirdly, the EDs reported by city councils on the East Coast of Malaysia are excluded in order to maintain greater institutional and administrative consistency. Consequently, the generalisability of the results is limited. Future research is encouraged to examine all city councils in Malaysia to improve understanding of the contextual factors and permit inter-regional comparisons. Finally, since environmental reporting in local councils in Malaysia is still a voluntary practice, various reporting methods are used by local councils to report EDs. Therefore, to better understand the current state of environmental reporting practices within the public sector in Malaysia, future research may examine EDs in a variety of reporting media such as websites and other social media platforms in addition to the common annual report.

ACKNOWLEDGEMENT

We would like to thank the Faculty of Accounting, Universiti Teknologi MARA Cawangan Terengganu, Kampus Dungun for their continued support in completing this research.

REFERENCES

Akhter, F., Hossain, M. R., Elrehail, H., Rehman, S. U. & Almansour, B. (2023). Environmental disclosures and corporate attributes, from the lens of legitimacy theory: A longitudinal analysis on a developing country. *European Journal of Management and Business Economics*, *32*(3), 342-369. https://doi.org/10.1108/EJMBE-01-2021-0008

Bellucci, M. & Manetti, G. (2017). Facebook as a tool for supporting dialogic accounting? evidence from large philanthropic foundations in the United States. *Accounting, Auditing and Accountability Journal, 30*(4), 874-905. https://doi.org/10.1108/aaaj-07-2015-2122

Bonsón, E., Perea, D. & Bednárová, M. (2020). Environmental disclosure as a tool for public sector legitimacy: A twitter intelligence approach. *International Journal of Public Administration in the Digital Age, 7*(3), 1-31. https://doi.org/10.4018/ijpada.2020070101

Burritt, R. L. & Welch, S. (1997). Annual reports of Australian Commonwealth authorities: An analysis of their environmental disclosures. *Abacus, 33*(1), 69-87. https://doi.org/10.1111/1467-6281.00004

Burritt, R. L., Schaltegger, S. & Christ, K. L. (2023). Environmental management accounting – Developments over the last 20 years from a framework perspective. *Australian Accounting Review, 33*(107), 336-351. https://doi.org/10.1111/auar.12407Digital Object Identifier (DOI)

Cappellieri, F., Lombardi, R., Pizzo, M. & Vinciguerra, R. (2025). Environmental reporting in public sector organizations: A review of literature for the future paths on research. *Financial Accountability and Management*, *41*, 159-199. https://doi.org/10.1111/faam.12411Digital Object Identifier (DOI)

Che Ku Kassim, C. K. H., Ahmad, S., Nasir, N. E. M., Arifin, N. N. M. & Nori, W. M. N. W. M. (2020). Environmental disclosures on local governments' websites: A Malaysian context. *International Journal of Public Sector Management*, *33*(6/7), 663-679. https://doi.org/10.1108/ijpsm-03-2020-0077

Che Ku Kassim, C. K. H., Nasir, N. E. M., Ahmad, S., Nori, W. M. N. W. M. & Arifin, N. N. M. (2021). Institutional isomorphism on environmental reporting practices in Malaysian local governments. *Management and Accounting Review, 20*(2), 1-34. https://doi.org/10.24191/mar.v20i02-01

Chong, S., Momin, M. & Narayan, A. (2023). A research framework to analyse visual persuasion of photographs in sustainability reports. *Meditari Accountancy Research*, *31*(5), 1453-1482. https://doi.org/10.1108/medar-01-2022-1565

De Villiers, C. & Van Staden, C. J. (2006). Can less environmental disclosure have a legitimising effect? Evidence from Africa. *Accounting, Organizations and Society, 31*, 763-781. https://doi.org/10.1016/j.aos.2006.03.001

Farneti, F., Guthrie, J. & Canetto, M. (2019). Social reports of an Italian provincial government: A longitudinal analysis. *Meditari Accountancy Research*, *27*(4), 580-612. https://doi.org/10.1108/medar-11-2018-0397

Gaia, S. & Jones, M. (2020). Biodiversity reporting for governmental organisations: Evidence from English local councils. *Accounting, Auditing and Accountability Journal, 33*(1), 1-31. https://doi.org/10.1108/aaaj-05-2018-3472

Giacomini, D., Rocca, L., Zola, P. & Mazzoleni, M. (2021). Local governments' environmental disclosure via social networks: Organizational legitimacy and stakeholders' interactions. *Journal of Cleaner Production, 317*, 1-11. https://doi.org/10.1016/j.jclepro.2021.128290

Giacomini, D., Zola, P., Paredi, D. & Mazzoleni, M. (2020). Environmental disclosure and stakeholder engagement via social media: State of the art and potential in public utilities. *Corporate Social Responsibility and Environmental Management, 27*(4), 1552-1564. https://doi.org/10.1002/csr.1904

Giuliani, M. & Pennesi, A. (2025). Social media and sustainability reporting: A literature review. *Sustainable Development*, *33*, 7314-7335. https://doi.org/10.1002/sd.3524Digital Object Identifier (DOI)

Hasseldine, J., Salama, A. I. & Toms, J. S. (2005). Quantity versus quality: The impact of environmental disclosures on the reputations of UK Plcs. *The British Accounting Review*, *37*(2), 77-108. https://doi.org/10.1016/j.bar.2004.10.003

Ho, P., Nor-Hisham, M. S. & Zhao, H. (2020). Limits of the environmental impact assessment (EIA) in Malaysia: Dam politics, rent-seeking, and conflict. *Sustainability*, *12*(24), 1-16. https://doi.org/10.3390/su122410467

Hoe, L. I., Kamaruddin, M. K. A., Lian, C. J., Umar, R. & Yii, L. C. (2023). Public participation in environmental impact assessment (EIA) law in Malaysia: A critical analysis. *Planning Malaysia: Journal of the Malaysian Institute of Planners*, *21*(1), 101-115. https://doi.org/10.21837/pm.v21i25.1227

Hossain, M. M., Rana, T., Nahar, S., Rahman. M. J. & Lema, A. C. (2023). Regulatory influence on sustainability reporting: Evidence from Murray-Darling Basin Authority in Australia. *Meditari Accountancy Research*, *31*(5), 1386-1409. https://doi.org/10.1108/medar-07-2020-0943

Hussin, Z. N., Chin, C. C. & Sondoh Jr, S. L. (2025). Engaging citizens on government social media page: The role of content characteristics. *Information Polity*, *30*(4), 302-320. https://doi.org/10.1177/15701255251386165

Joseph, C., Nichol, E. O. & Jonathan, L. (2019). Councils' environment management system: An isomorphism inquiry. *Management of Environmental Quality: An International Journal, 30*(6), 1314-1330. https://doi.org/10.1108/meq-01-2019-0011

Krippendorff, K. (2018). *Content Analysis: An Introduction to Its Methodology (3rd ed.)*, Sage Publications, Thousand Oak, CA.

Lodhia, S., Kaur, A. & Stone, G. (2020). The use of social media as a legitimation tool for sustainability reporting – A study of the top 50 Australian Stock Exchange (ASX) listed companies. *Meditari Accountancy Research, 28*(4), 613-632. https://doi.org/10.1108/medar-09-2019-0566

Lynch, B. (2010). An examination of environmental reporting by Australian state government departments. *Accounting Forum, 34*, 32-45. https://doi.org/10.1016/j.accfor.2009.11.001

Malaysian Communications and Multimedia Commission (2022), Internet users survey 2022, available at https://www.mcmc.gov.my/skmmgovmy/media/General/IUS-2022.pdf (accessed 1 October 2024).

Mathews, K. (2024). Local government in the federation of Malaysia – A comparative context. *Australasian Parliamentary*, *39*(2), 167-183.

Mohd Yahya, A. S., Tengku Hamzah, T. A. A. & Shafie, A. (2022). Knowledge of e-waste recycling among communities in Selangor, Malaysia. *Southeast Asia: A Multidisciplinary Journal*, *22*(1), 5-22. https://doi.org/10.1108/SEAMJ-01-2022-B1002

Mol, A., Schie, V. V. & Budding, T. (2025). Drivers of sustainability reporting by local governments over time: A structured literature review. *Journal of Accountability and Management, 41*, 200-229. https://doi.org/10.1111/faam.12407Digital Object Identifier (DOI)

Nicolo, G., Zanellato, G., Manes-Rossi, F. & Torin-Tudor, A. (2020). Corporate reporting metamorphosis: Empirical findings from state-owned enterprises. *Public Money and Management, 41*(2), 138-147. https://doi.org/10.1080/09540962.2020.1719633

Othman, R., Nath, N. & Laswad, F. (2017). Sustainability reporting by New Zealand's local governments. *Australian Accounting Review, 27*(3), 315-328. https://doi.org/10.1111/auar.12153

Pan, X., Chen, X. & Sinha, P. (2023). Navigating the haze: Environmental performance feedback and CSR report readability. *Journal of Business Research*, *66*, 14116. https://doi.org/10.1016/j.jbusres.2023.114116

Pina, V., Torres, L., Ripoll, L., Garcia-Rayado, J. & Arias, N. (2025). Assessing the suitability of climate disclosure models for local governments. *Public Money and Management*, *45*(8), 888-898. https://doi.org/10.1080/09540962.2025.2543440

Rocca, L., Giacomini, D. & Zola, P. (2021). Environmental disclosure and sentiment analysis: State of the art and opportunities for public sector organisations. *Meditari Accountancy Research*, *29*(3), 617-646. https://doi.org/10.1108/medar-09-2019-0563

Suchman, M.C. (1995). Managing legitimacy: Strategies and institutional approaches. *Academy of Management Review, 20*(3), 571-610. https://doi.org/10.5465/amr.1995.9508080331

Tadros, H., Magnan, M. & Boulianne, E. (2020). Is corporate disclosure of environmental performance indicators reliable or biased information? A look at the underlying drivers. *Journal of Financial Reporting and Accounting, 18*(4), 661-686. https://doi.org/10.1108/jfra-02-2020-0027

Tommasetti, A., Maione, G., Bignardi, A. & Lentini, P. (2023). Environmental accounting in the public sector: A systematic literature review. *International Journal of Business Environment*, *14*(3), 164-182. https://doi.org/10.1504/ijbe.2023.129907

AUTHOR BIODATA

CHE KU HISAM CHE KU KASSIM (Corresponding Author)
Faculty of Accountancy,
Universiti Teknologi MARA Cawangan Terengganu, Kampus Dungun, Malaysia
Email: cheku521@uitm.edu.my

SURAYA AHMAD
Faculty of Accountancy,
Universiti Teknologi MARA Cawangan Terengganu, Kampus Dungun, Malaysia
Email: suray4993@uitm.edu.my

NOOR EMILINA MOHD NASIR
Faculty of Accountancy,
Universiti Teknologi MARA Cawangan Terengganu, Kampus Dungun, Malaysia
Email: nooremilina@uitm.edu.my

APPENDIX 1

LIST OF CITY COUNCILS IN PENINSULAR MALAYSIA

Name of City Council	**Official Facebook Page**	**Year Conferred**
Dewan Bandaraya Kuala Lumpur	https://www.facebook.com/dbkl2u	1972
Majlis Bandaraya Ipoh	https://www.facebook.com/MajlisBandarayaIpoh	1988
Majlis Bandaraya Johor Baharu	https://www.facebook.com/mbjbrasmi	1994
Majlis Bandaraya Shah Alam	https://www.facebook.com/shahalamcitycouncil	2000
Majlis Bandaraya Alor Setar	https://www.facebook.com/PBTMBAS	2003
Majlis Bandaraya Melaka Bersejarah	https://www.facebook.com/MBMB.Official	2003
Majlis Bandaraya Petaling Jaya	https://www.facebook.com/pjcitycouncil	2006
Majlis Bandaraya Kuala Terengganu	https://www.facebook.com/mbktrg	2008
Majlis Bandaraya Pulau Pinang	https://www.facebook.com/majlisbandaraya.pulaupinang	2015
Majlis Bandaraya Iskandar Puteri	https://www.facebook.com/mbipcitycouncil	2017
Majlis Bandaraya Seberang Perai	https://www.facebook.com/mbsp.pg	2019
Majlis Bandaraya Subang Jaya	https://www.facebook.com/MBSubangJaya	2020
Majlis Bandaraya Seremban	https://www.facebook.com/mbseremban	2020
Majlis Bandaraya Pasir Gudang	https://www.facebook.com/majlisbandarayapasirgudang	2020
Majlis Bandaraya Kuantan	https://www.facebook.com/majlisbandarayakuantanofficial	2021

(Source: Compiled by authors)

APPENDIX 2

ENVIRONMENTAL THEMES IN DISCLOSURE INSTRUMENT

1. Education and Training
   Three main information disclosures are considered to fall under this theme:
   - Publication and research reports provided to inform the public
   - Seminar and lectures in a public arena
   - Advice or information provided to a specific individual
2. Environmental Policy
   Any specific statements about the entity's environmental policy and more general comments about the entity's commitment to environmental issues
3. Research
   Disclosures about specific environmental research projects, the funding for these projects, and the administrative arrangement involved
4. Energy Programme
   Disclosures that cover the amount and types of energy used and mechanisms used to provide the efficiency of energy usage
5. EIA/EIS
   Disclosures related to Environmental Impact Assessments and Environmental Impact Statements
6. Recycling
   Disclosures relating to the use of recycled products or efforts to recycle waste
7. Clean-Up
   Disclosures pertaining to the remediation of damage to the environment

(Source: Burritt and Welch, 1997, p. 13)