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Contributing to Indonesia's SDG achievement: disclosures of regional-owned enterprises

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Abstract

Purpose – This paper investigates how Indonesian regional government-owned enterprises disclose what they plan, account for and report their sustainable development goal (SDG) contributions, showcasing their commitment in attaining impactful SDG achievement. In doing so, it aims to highlight how adopting a sustainability accounting and reporting (SAR) framework can enhance SDG disclosures.

Design/methodology/approach – Content analysis, guided by an adapted SAR framework, is employed to examine the SDG disclosures across planning, accounting and reporting in 2019–2020 annual/sustainability reports of the 24 enterprises.

Findings – Most Indonesian regional government-owned enterprises or badan usaha milik daerah (BUMDs) studied adhered primarily to Financial Services Authority Regulation (Otoritas Jasa Keuangan (OJK)) 51/2017, which does not sufficiently enforce SDG disclosures in the planning stage. They disclosed SDG-related activities in the accounting and reporting stages, highlighting programme implementation and budget realisation with little emphasis on strategic planning. This resulted in inadequate evidence in the disclosures of the strategic actions to comprehensively plan, account for and report their SDG achievement, essential information for stakeholders to showcase their meaningful actions to contribute to national and global SDG progress.

Originality/value – Prior SDG disclosure studies highly focus on analysing the linkages of organisations' reported sustainability programmes contributing to national SDG achievements, neglecting the investigation of how organisation should employ SAR to disclose what they plan, account for and report their impactful SDG contribution to stakeholders. This paper addresses this underexplored context, particularly in local government-owned enterprises which have a crucial role in accelerating SDG achievement. Given the global nature of SDGs, this analysis provides valuable lessons for organisations and regulators in Indonesia and other developing countries to utilise SAR to enhance SDG reporting. So that, they can better plan, account for and report tangible actions toward meaningful SDG achievement.

Keywords Sustainable development goals (SDGs), Sustainability accounting and reporting (SAR), Developing countries, Regional-owned enterprises, *Badan usaha milik daerah* (BUMD)

Paper type Research paper

1. Introduction

The 17 sustainable development goals (SDGs), targeted for 2030, offer a pathway for sustainable development (Jayasooria, 2016). However, achieving the goals is challenging, especially for developing countries, which are home to 80% of the world's population (Tilt *et al.*, 2020), particularly in regional areas (Bappenas, 2019; Guarini *et al.*, 2022) due to poverty, hunger, education, equality, climate, water and energy (Qian *et al.*, 2021). Further, the effects of COVID-19 (Qian *et al.*, 2021; Lodhia *et al.*, 2021) have pushed developing countries to prioritise economic growth over sustainability (United Nations Department of

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Economic and Social Affairs, 2019), aggravating existing challenges for SDG achievement. Despite these obstacles, public sector policies play a crucial role in bolstering efforts in developing countries to enhance awareness, knowledge and regulatory support for effective SDG implementation at the organisational level, fostering meaningful progress towards SDG achievement (Lodhia *et al.*, 2021).

Moreover, accounting scholars have been urged to investigate SDG reporting in public sector organisations to inform public sector policy framing for SDG achievement (Lodhia *et al.*, 2021). These organisations play a strategical role for SDG achievement as they develop and execute public policy to generate public values for substantial SDG acceleration (Guthrie and Martin-Sardesai, 2020). Indeed, they should disclose their strategic planning and accounting for impactful SDG achievement to showcase their tangible actions (Bebbington and Unerman, 2020). However, research exploring SDG-related disclosures of how these organisations disclose what have been planned and accounted for, resulting in their reported SDG achievement, is lacking (Fusco and Ricci, 2019; Kaur and Lodhia, 2019).

This paper addresses this gap analysing the integrated disclosures in planning, accounting and reporting of SDG contributions by public sector organisations in a developing country in manifesting their commitment to accelerating SDG achievement. Existing literature on sustainability reporting of these organisations in developing countries (Amran and Haniffa, 2011; Joseph *et al.*, 2016, 2019), notably in Malaysia and China (Fusco and Ricci, 2019; Qian *et al.*, 2021), provides insufficient evidence on the integration of disclosures across three stages (Fusco and Ricci, 2019). Limited attention also has been given to public sector organisations at local-level, despite their critical role in SDG achievement (Guarini *et al.*, 2022). Public sector organisations at local level have more capability to accelerate sustainable development in regional areas in developing countries where critical sustainability issues prevail (Greiling *et al.*, 2015; Lodhia and Sharma, 2019; Bebbington and Unerman, 2020).

Thus, there is a clear need to investigate this topic in other developing countries, such as Indonesia, which has strong commitment concerning sustainability, especially SDGs. Specifically, since 2017 the Indonesian government has enacted *Peraturan Presiden* [1] 59/2017, *Peraturan Bappenas* [2] 07/2018 and Otoritas Jasa Keuangan (OJK) [3] Regulation 51/2017 to advance collaborative efforts amongst organisations for SDG achievement in Indonesia. Several studies have identified a lack of disclosures in response to these regulations (Sukoharsono, 2009; Utama, 2011; Faisal *et al.*, 2016; Laskar and Maji, 2017; Gunawan and Tin, 2019; Gunawan *et al.*, 2020), exploring the corporate social responsibility (CSR) disclosures in contributing to Indonesian SDG achievement (Faisal *et al.*, 2016; Gunawan and Tin, 2019; Gunawan *et al.*, 2020). However, these studies insufficiently examined the SDG disclosures of organisations' concrete activities in comprehensive planning and accounting leading to impactful SDG contributions reported. They also offer less emphasis on exploring SDG disclosure in regional owned enterprises or *badan usaha milik daerah*/(hereafter BUMDs) (Gunawan and Tin, 2019) despite their pivotal roles in accelerating SDGs in regional areas, which are most affected by sustainability issues (Bappenas, 2019).

This paper examines SDG disclosures of Indonesian BUMDs – enterprises owned by local governments with the significant potential to drive SDG progress due to their close ties to local communities (Bello and Maidin, 2018) and their hybrid functions, offering public values in entrepreneurial ways (Datta, 2017). Indeed, stakeholders expect them to prioritise sustainability for regional development (Cormier and Gordon, 2001; Grossi and Steccolini, 2014; Greiling *et al.*, 2015). Thus, BUMDs should optimise their roles to support SDGs and disclose their contribution by demonstrating tangible actions to local sustainable development, thereby bolstering national SDG achievement.

This paper adapts the sustainability accounting and reporting (SAR) framework from Schaltegger and Wagner (2006) to analyse 24 Indonesian BUMDs' SDG disclosures in 2019–2020. The analysis explores the disclosures in these two years as this paper focusses on the initial responses of Indonesian public sector organisations in implementing Indonesian SDG regulations. Lessons learnt at these initial years are deemed more valuable to improve future disclosures. The framework enables comprehensive disclosure analysis of the BUMDs' presentations of integrating SDGs into strategic planning, influencing the use of accounting methods for behavioural changes to advance performance and resulting in reported outputs and impactful outcomes (Schaltegger and Wagner, 2006; Adams, 2017), referred to as the disclosures in the "planning, accounting and reporting stages" of operations in this paper.

The analysis shows a limited number of Indonesian BUMDs disclosing integrated SDG-activities across the three stages. The disclosures inadequately reflect the use of the SDGs as foundational in the planning stage, impacting the use of basic accounting methods insufficiently driving behavioural changes for meaningful SDG achievement. Consequently, SDG disclosures primarily retrofit sustainability/CSR activities to relevant SDGs. Unfortunately, there is no review of these disclosures, indicating that the BUMDs will likely maintain similar approaches in developing future SDG disclosures. Given the global nature of SDGs, the findings offer implications not only for Indonesia, but also other countries seeking for SDG reporting improvement. It also contributes to the literature, offering empirical evidence of the use of the adapted SAR framework for a more comprehensive SDG disclosure development and analysis.

This paper is structured as follows. Section 2 discusses gaps in the existing literature on SDG disclosure analysis in public sector organisations in developing countries, including Indonesia. Section 3 reviews the adapted SAR framework used to analyse the disclosures, influencing the methods in Section 4. Section 5 presents the results, followed by the discussion and conclusion in Section 6.

2. Prior research of sustainability and SDG disclosures in public sector organisations in developing countries and Indonesia

2.1 Prior studies of the SDG disclosures in public sector organisations in developing countries

Existing studies exploring SDG reporting in public sector organisations have found low-quality of SDG disclosures of these organisations (Bellini *et al.*, 2019). This is attributed to non-compliance with the Global Reporting Initiative (GRI) guidelines, lacking external audits (Bellini *et al.*, 2019) and insufficient institutional arrangements (Guthrie and Martin Sardesai, 2020; Lodhia *et al.*, 2021; Lauwo *et al.*, 2022; Sari *et al.*, 2022). Mandating sustainability reporting and providing incentives are necessary to advance the SDG disclosures in these organisations (Bellini *et al.*, 2019). Robust collaboration amongst institutions is also crucial to advance well-designed coordination mechanisms and engagement with key stakeholders to improve the disclosures (Guthrie and Martin-Sardesai, 2020; Lauwo *et al.*, 2022). Thus, strengthening institutional collaborative structures and arrangements is imperative for advancing transparency and accountability in reporting impactful SDG achievement (Lauwo *et al.*, 2022), especially in a country with multi-level governance systems, such as Indonesia (Sari *et al.*, 2022).

These studies provide valuable insights into SDG reporting but lack analysis of the organisational activities. This should be disclosed by public sector organisations to showcase stakeholders their commitment to achieving SDGs through comprehensive planning, accounting and reporting (Bebbington and Unerman, 2018, 2020; Kaur and Lodhia, 2019). Furthermore, prior studies overlook the significance of public sector organisations at local level in developing countries, which is the focus of this study, despite their crucial roles in contributing to SDG achievement at national and global levels (Annesi *et al.*, 2021; Guarini *et al.*, 2022).

2.2 The significance of public sector organisations at local level in SDG achievement in developing countries

With 65% of SDG targets directly linked to local development, public sector organisations at local level play vital roles in accelerating SDG achievement (Annesi *et al.*, 2021; Guarini *et al.*, 2022). Given their close connection with local communities, they have a better understanding of local sustainability needs (Cormier and Gordon, 2001; Bebbington and Unerman, 2020; Guthrie and Martin-Sardesai, 2020). SDG disclosures become essential mediums for these organisations to communicate their impactful SDG achievement, demonstrating their comprehensive planning, accounting and reporting in optimising their roles for impactful SDG achievement (Bebbington and Unerman, 2018, 2020).

In this sense, local level public sector organisations need a SAR framework to guide the development of disclosures, especially those in developing countries where awareness and knowledge of sustainability reporting are limited (Lodhia *et al.*, 2021). Utilising the framework to develop disclosures depicting comprehensive planning, accounting and reporting of impactful achievement is crucial (Laine *et al.*, 2021; Bebbington and Unerman, 2020). SAR can enable them to enhance accountability and transparency in articulating their commitment into actionable results, making the disclosures more comprehensive for stakeholders to understand their contributions beyond mere compliance (Ball, 2005; Bebbington and Unerman, 2020).

However, only a few studies examine the comprehensive SDG disclosures in local level public sector organisations (Joseph *et al.*, 2019, 2021), despite their pivotal roles in SDG achievement (Galli *et al.*, 2018; Abhayawansa *et al.*, 2021; Annesi *et al.*, 2021; Guarini *et al.*, 2022). Prior studies highlight a need to improve their disclosures due to a lack of data on concrete, sustainable actions (Joseph *et al.*, 2019), including insufficient performance measurement tools and lack collaboration with stakeholders in monitoring SDG progress (Joseph *et al.*, 2021). Therefore, accounting scholars are urged to further explore comprehensive SDG disclosures covering planning and accounting (Bebbington and Unerman, 2018; Guthrie and Martin-Sardesai, 2020). This paper responds to this call by investigating SDG disclosures that can demonstrate how organisations plan, account for and report their contributions, aiming to improve the disclosures beyond meeting reporting purposes.

This study specifically focusses on a type of local level public sector organisations which are Indonesian local government owned enterprises, called BUMDs, considering Indonesia's focussed development on local areas most affected by SDG issues (Bappenas, 2019). As explained in the introduction, their proximity to communities, enables them to have deeper insight into local sustainability concerns (Cormier and Gordon, 2001) and their hybrid functions allow them to generate increased public value with an optimum multiplier effect for SDG achievement (Datta, 2017). Given these distinct positions, stakeholders expect comprehensive SDG disclosures (Grossi *et al.*, 2015; Garde-Sanchez *et al.*, 2018; Guthrie and Martin-Sardesai, 2020) including detailing the planning, accounting and reporting processes regarding their SDG performance (Bebbington and Unerman, 2020; Guthrie and Martin-Sardesai, 2020).

2.3 Prior studies of SDG disclosures of public sector organisations in Indonesia's context

Prior studies of SDG disclosures in Indonesia reveal that government regulations, are the primary drivers of SDG disclosures of public sector organisations (Gunawan *et al.*, 2020; Kuswantoro *et al.*, 2023). This finding reflects the government's strong commitment to expedite SDG achievement (Bappenas, 2019). Indeed, the establishment of top regulations in Indonesia, *Peraturan Presiden* 59/2017, including the guidance detailed in the Ministry of National Development Regulation 05/2018, mandates the SDG integration into business operations. They offer guidelines for public sector organisations at national and local levels

to formulate holistic five-year and annual SDG action plans, including the obligation to measure and report their SDG performance in supporting national SDGs. Additionally, OJK Regulation 51/2017 directs Indonesian banks to implement sustainable finance (SF), develop a five-year SF plan, including CSR activities and publish a sustainability report on SF implementation. While emphasising the SF–SDG link, the OJK Regulation 51/2017 provides guidelines for banks, issuers and limited liability companies disclosing SDG-related information, particularly from CSR activities. Unlike *Peraturan Presiden* 59/2017, it does not explicitly require integrated SDG disclosures. Nevertheless, these three regulations exemplify the Indonesian government's commitment to establishing collaborative institutional arrangements for SDG disclosures from organisational to national levels.

Additionally, similar to the prior studies of SDG disclosures in public sector organisations in developing countries, the extant Indonesian studies primarily focus on central government-owned enterprises, particularly state owned enterprises (Gunawan *et al.*, 2020; Kuswantoto *et al.*, 2023), revealing a quest for legitimacy and stricter regulation driving the disclosure alignment to national SDG concerns (Kuswantoro *et al.*, 2023). However, these studies typically explore the consistency of disclosed activities with national SDG concerns, but overlook the integrated disclosures across three stages, particularly at local-government owned enterprises like BUMDs who have crucial roles in accelerating SDG progress. Although rare, a few Indonesian government reports reveal limited integration of SAR into sustainability disclosures by public sector organisations at local level, resulting in low-quality reports (Bappenas, 2019). Only 12 out of 34 provincial governments linked their reports to SDGs (Bappenas, 2019), indicating a need to advance the disclosures.

Based on the discussion of these three subsections, it is evident that studies on SDG disclosures in public sector organisations in developing countries, especially at the local level, are limited and lack comprehensive investigations. Specifically, prior studies focus on linking sustainability programmes to national SDG achievements for regulatory compliance. They insufficiently explore the necessary flow of SAR on the disclosures to demonstrate the planning, accounting and reporting processes to showcase organisations' substantial actions for impactful contributions.

This paper addresses these gaps by investigating the disclosures of Indonesian BUMDs in planning, accounting and reporting. It aims to show how they disclose tangible SDG actions across these three stages to optimise their pivotal roles in driving meaningful SDG progress. This study contributes to the literature by providing evidence that highlights how SDG reporting needs to develop in order to disclose to stakeholders how they are making impactful contributions. The method of analysis further detailed in Section 3 also contribute to the literature as it emphasises an integrated approach that links planning, accounting and reporting, rather than merely aligning activities with national SDGs, a concern frequently highlighted in prior literature.

3. Conceptual framework: integrating the SDGs with SAR

The SDGs, comprising 17 goals, 169 targets and 232 indicators, aim to address global sustainability issues (Sachs, 2012; United Nation, 2015; Jayasooria, 2016). The successful implementation of the SDGs requires strong global commitment and collaboration (Sachs, 2012; Stevens and Kanie, 2016; Monkelbaan, 2019), leading to some nations embedding SDGs into their national plans and establishing institutional arrangements to facilitate SDG integration at the organisational level (Sachs, 2012; Bowen *et al.*, 2017; Xue *et al.*, 2018). As advocated by the former UN Secretary-General Ban Ki-moon, organisations should exhibit the operationalisation of their SDG commitment through concrete practices and transparently communicate these practices in their reports to advance SDG achievement

(Tilt *et al.*, 2020). This statement means that rather than retrospectively linking sustainability activities to SDGs for reporting (Silva, 2021) or treating SDGs as mere add-ons (Gneiting and Mhlanga, 2021), organisations should develop comprehensive SDG reports. This entails disclosing the integration of SDGs into business operations by strategically planning and incorporating them into accounting and reporting processes (Mhlanga *et al.*, 2018). This process underscores the global impact of organisational actions on SDGs.

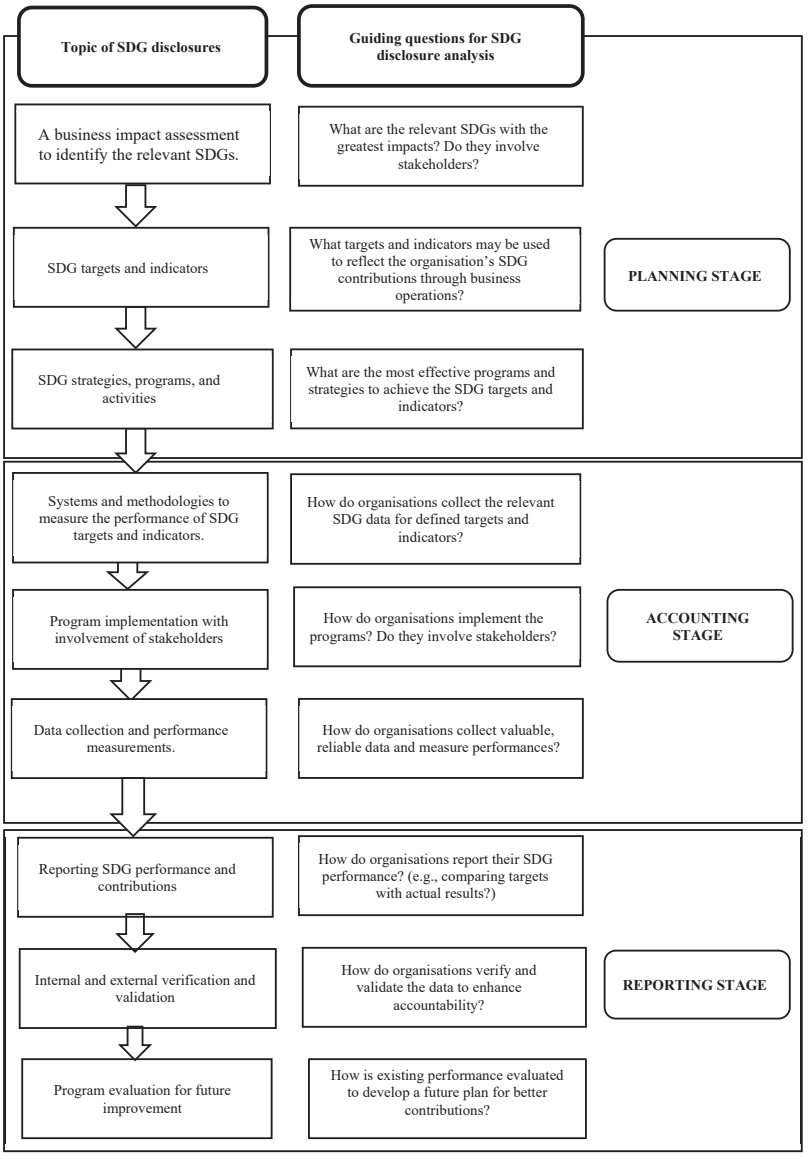
This study adapts Schaltegger and Wagner's (2006), SAR framework for sustainability performance (see Figure 1) as a tool for analysing comprehensive SDG disclosures. In Figure 1, the first column specifies the expected disclosure topics of activities in the three operational stages, and the second column outlines relevant questions guiding the type and extent of disclosures of each activity. Guided by this framework, this paper analyses how organisations demonstrate SDG integration into their business targets, strategies, programmes and outcomes (Ball *et al.*, 2014) by holistically planning, accounting and reporting SDG performance (Bebbington and Larrinaga, 2014).

Figure 1 shows that planning disclosures pertain to integrating environmental, social and economic considerations into a strategic plan (Schaltegger and Wagner, 2017). The disclosures should include a summary of a business impact assessment to identify the relevant SDGs and establish targets and indicators (Busco *et al.*, 2013; Schaltegger and Wagner, 2017). The organisations should demonstrate stakeholder engagement, showcasing efforts to obtain comprehensive insights into the impacts of business operations on SDGs (Schaltegger and Wagner, 2017; Kaur and Lodhia, 2018; Laine *et al.*, 2021).

Such disclosures transparently offer stakeholders a comprehensive understanding of activities involved in developing SDG strategies (Ball, 2005; Maas *et al.*, 2016), justifying chosen SDG targets and indicators to guide organisations in meaningfully contributing to the SDGs (Burritt and Schaltegger, 2010; Mhlanga *et al.*, 2018). Indeed, organisations could utilise external guidance, such as the SDG Compass (Abeysekera, 2022) or the UN SDG targets and indicators to direct their own targets and indicators, shaping their strategies and programmes (Mhlanga *et al.*, 2018; Puroila and Mäkelä, 2019). The indicators should be SMART (specific, measurable, attainable, reliable and time-bound) (Lodhia *et al.*, 2022), integrated into the accounting system and be based on a consideration of resource budgeting, allocation and controls (Laine *et al.*, 2021).

Moreover, accounting disclosures should show the use of a strategic management tool within systems and methodologies used to measure performance (Burritt and Schaltegger, 2010; Zyznarska-Dworczak, 2020), comparing achievements to indicators defined in the planning stage. The disclosures reassure stakeholders about the accountability, reliability and origin of information (Burritt and Schaltegger, 2010; Zyznarska-Dworczak, 2020). The disclosures should also exhibit behavioural changes (Schaltegger and Wagner, 2006) driven by responsible performance assessment, internal controls and reporting, influencing future strategic planning (Zyznarska-Dworczak, 2020; Laine *et al.*, 2021).

Finally, the reporting disclosures should include an SDG report on meeting stakeholder expectations (Schaltegger and Wagner, 2006; Laine *et al.*, 2021), comprehensively demonstrate cohesive links between business impacts, priorities, strategies, policies, practices and SDG performance incorporated from the planning and accounting stages (GRI, 2018). Thus, they should reflect the fulfilment of what was planned and measured (Thijssens *et al.*, 2016; Laine *et al.*, 2021), including highlighting the integral role of organisational strategies and stakeholder engagement (Schaltegger and Wagner, 2006; Maas *et al.*, 2016; Laine *et al.*, 2021). Clearly, reporting is critical for demonstrating the coherence between planning and accounting, articulating the BUMDs' commitment in operationalising organisational SDG responsibilities and targets, aiming for substantial contributions. The disclosures made should also include existing program evaluation, and



Source(s): Adapted from Schaltegger and Wagner (2006)

Figure 1. Sustainability accounting and reporting framework to analyse SDG disclosures in planning, accounting and reporting

be integrated to future SDG plan development for continuous SDG performance improvement (Mhlanga *et al.*, 2018).

This SAR framework underpins the key themes (see Table 1) used to analyse SDG disclosures, reflecting the integration of SDGs in the planning, accounting and reporting stages.

No.	Theme	Practices disclosed
1	About the report	General understanding of the sustainability report and SDG disclosures and how sustainable operations support the Indonesia's SDG achievement Standards or frameworks used to plan, account and report SDG disclosures
2	Disclosure of activities in the planning, accounting and reporting stages	Planning stage - Business impact assessment to prioritise relevant SDGs - SDG target and SMART indicator development - SDG strategies to achieve the targets and indicators and programmes to devise strategies - Links between indicators, strategies and programmes of prioritised SDGs Accounting stage - Establishment of data collection systems and methodologies of the indicators for performance measurement defined in planning - Implementation of programme and performance measurement (collecting and analysing the data from established systems) Reporting stage - SDG contribution disclosure: comparing the targets (defined in the planning stage) against the actual results (measured in the accounting stage), showing the holistic links between three stages - Verification and validation of performances
3	Future plans for the SDG activities	A review of existing SDG activities to plan future SDG-related programmes
4	Stakeholder engagement planning, accounting and reporting SDG activities	Stakeholder engagement in the three stages, including the methods and platforms used to involve stakeholders

Source(s): Table developed by authors

Table 1. Themes applied to analyse the disclosure of SDG-related activities

4. Methods

Content analysis was employed to examine the SDG disclosures in the annual or sustainability reports of BUMDs in 2019 and 2020. Given the availability of reports (Fusco and Ricci, 2019), content analysis is commonly used in prior studies examining sustainability disclosures in public sector organisations (Lodhia *et al.*, 2012; Marquis and Qian, 2014). Moreover, reports serve as a valuable data source when detailed observations and information are not readily available (Yin, 2002). Guided by the adapted SAR framework in Section 3, this study analyses BUMDs' SDG disclosures in their annual or sustainability reports.

4.1 Sample selection

Based on specific criteria related to the research question, a purposive sampling method (Hancock and Algozzine, 2006; Silverman, 2013) was used to select eligible BUMDs from the 847 BUMDs in Indonesia (Statistics Indonesia, 2020), identify the types of reports and information to be reviewed and determine the time of publication.

The first criterion was the publication of annual or sustainability reports on BUMD websites to ensure their availability and transparency of information. Additionally, the publications had to be annual or standalone sustainability/CSR reports. If an enterprise published both an annual report and a sustainability report, only the latter was selected. The publications also had to be written in both Indonesian and English, considering the use

of GRI standards by many BUMDs and meeting the information needs of diverse stakeholders. Finally, selected reports were limited to those published annually from 2019 to 2020, in line with OJK Regulation 51/2017, mandating financial service providers, issuers and limited liability BUMDs to prepare SDG disclosures in 2019 and publicly disclose in 2020 (OJK, 2017). Only 24 BUMDs, which were dominated by limited liability and financial service organisations, met the criteria and were labelled from BUMD 1 to BUMD 24. Their 48 reports from 2019 to 2020 were downloaded for the analysis.

4.2 Content analysis

Content analysis is a systematic method involving the coding and analysis of texts to derive meaningful insights (Krippendoroff, 2004). To ensure the reliability and validity, a coding scheme was developed and tested, enabling the classification, analysis and interpretation of the BUMDs' SDG disclosures in planning, accounting and reporting.

Content analysis begins with the establishment of coding rules to categorise texts (Weber, 1990; Krippendoroff, 2004). In this study, words and sentences formed coding units, capturing the contextual nuances of the disclosed SDG activities in the three stages, enabling a more comprehensive (Zeghal and Ahmed, 1990) and reliable analysis (Milne and Adler, 1999).

The second step comprises developing categories using *a priori* and emerging data approaches (Weber, 1990; Krippendoroff, 2004). *A priori* coding develops categories from existing theories and frameworks, while the emerging data approach identifies categories from the data (Weber, 1990).

This study initially employed the *a priori* approach to develop themes from the adapted SAR framework (Figure 1) for SDG-related disclosed activities in the organisations' planning, accounting, reporting stages, plus their future plans and stakeholder engagement. Additionally, a pilot study of three different BUMD reports was conducted to test these initial themes (Weber, 1990). The pilot study revealed that SDG-related activities were mainly disclosed in sustainability reports, often featuring a broader range of sustainability activities finally linked to the SDGs. Subsequently, a new theme ("About the report") was added to the initial themes to explore the position of SDG disclosures within sustainability reports. An intercoder reliability test following the pilot (Weber, 1990) prompted further adjustments in coding rules. After three iterations, both coders reached an agreement of over 80%, ensuring mutually exclusive and exhaustive theme development and effectively addressing the research objectives (Weber, 1990).

Table 1 presents the final themes/subthemes developed using *a priori* and emerging approaches that were then applied to code the SDG disclosures in the 48 reports.

4.3 Description of developed themes

The "About the report" theme introduces the BUMDs which provide sustainability and SDG disclosures and illustrates the SDG disclosures within sustainability reports. It examines whether BUMDs use specific reporting standards or rely on general sustainability reporting standards. This theme clarifies the position of SDG disclosures within sustainability reporting and indicates whether BUMDs view SDGs as driving their sustainable operations.

The "Disclosures in planning, accounting, and reporting stages" theme comprises three subthemes detailing how BUMDs exhibit their tangible commitment to plan SDG contribution and integrate it into the accounting and reporting processes. It explores planning disclosures, emphasising the assessment of prioritised SDGs, embedded targets and indicators and strategies integrated into programmes and activities. Secondly, accounting disclosures cover the systems and methodologies used to measure implemented programme performance. Finally, reporting disclosures should demonstrate

the integration of planned and actual performance from the planning to the accounting stage, verified and validated to ensure accountability.

The "Future plan" theme considers evidence of existing review activities across three stages, identifying areas for improvement to enhance future contributions incorporated into future budget planning. The "Stakeholder engagement" theme illustrates how BUMDs disclose stakeholder engagement in planning, accounting and reporting SDG programmes. The disclosures ensure stakeholders that the BUMDs optimise their close connection to local communities to accelerate regional development through their hybrid functions.

5. Results

5.1 About the report

As noted above, this theme outlines how the Indonesian BUMDs provide sustainability and SDG disclosures. Table 2 shows the number of Indonesian BUMDs in each industry that disclosed SDG-related activities in 2019–2020.

Table 2 shows that of the 24 BUMDs, only 17 in 2019 and 19 in 2020 disclosed SDG-related activities. Over 70% of these BUMDs were limited liability and banking enterprises, which were mandated by OJK Regulation 51/2017 to plan their sustainability practices in 2019 and report them in 2020. Financial services have a stronger requirement to implement sustainable financial practices from OJK, leading to a higher number of BUMDs in this sector disclosing their SDG-related activities.

Additionally, the findings of this theme briefly highlight the position of SDG disclosures within sustainability reports and their development. The development of SDG disclosure over time follows the guidelines of OJK Regulation 51/2017 and the GRI standards core option, which is not explicitly tailored for SDG disclosures.

Given the adoption of the same guidelines and standards, the enterprises examined exhibited similar reporting patterns. These BUMDs (17 in 2019 and 19 in 2020) began by planning their sustainability agendas (not specifically for SDGs), then implemented related programmes and activities, which were then linked to their contributions to the SDGs. They linked their sustainable business activities, often CSR activities, to SDGs that are typically outlined in the final part of the report. Indeed, they are explicitly required to link their CSR activities to the SDGs (OJK, 2017). Interestingly, these BUMDs utilised the seven ISO 26000

Industry category[a]	No. of BUMDs[b] analysed with sustainability disclosures	No. of BUMDs with SDG-related disclosure	
		2019	2020
Water supply, sewerage and waste management	1	0	0
Construction	2	1	2
Accommodation and food service activities; information and communication	1	1	1
Financial and insurance services	18	14	14
Real estate	2	1	2
Total	24	17	19

Note(s): [a]Based on Statistics Indonesia industry categories
[b]Only 24 of 847 BUMDs met the eligibility criteria (i.e. publication of annual or sustainability reports on their websites)
Source(s): Table developed by authors

Table 2. Reporting of SDG-related activities by Indonesian BUMDs

sustainability topics in developing the link to SDGs. Table 3 provides examples of how these enterprises linked the seven topics to their SDG-related activities and performance.

The following disclosure from one of the BUMDs in the construction industry, illustrates typical links used to exhibit SDG contributions:

> Commitment to the environment: [BUMD 20] supports the realisation of SDG 13 and SDG 15 with the alignment to target: 13.2, 15.1. The activities include environmental monitoring; waste management; intermediate treatment facility development; and community development in the environmental sector.

This statement shows BUMD 20's contribution to SDG 13, aligning with its relevant targets. However, more often, disclosures did not specify SDG targets, merely listing programmes related to supporting SDGs. For instance, BUMD 23, operating in the accommodation industry, disclosed "Infant Nutrition Shop – SDGs No. 3 (Good Health and Well-being); A partnership program for CSR – SDGs No. 17 (Partnership for the Goals)".

Theme 1 findings indicate that the disclosures inadequately align with the adapted SAR framework. The BUMDs mainly referenced the SDGs in their reporting, with little evidence in the disclosures of them being transformed as an agenda in the planning stage to drive BUMDs' sustainable operations. Instead, the focus seems to be on retroactively mapping sustainability activities to specific SDGs, indicating mere compliance with regulatory and reporting standards rather than a robust commitment to meaningful SDG progress. The findings for the following subsections (Themes 2–4) further provide a more comprehensive analysis.

5.2 The disclosures of activities in planning, accounting and reporting stages

Table 4 presents the findings of the disclosures of the activities across three stages in the BUMDs' reports in 2019–2020 to showcase whether these BUMDs holistically planned, accounted for and reported their SDG contributions as suggested by the adapted SAR framework.

No	ISO 26000 sustainability concerns	SDG-related activities and performance	Linked SDGs
1	Organisational governance	Implementing sustainable governance and reporting the Good Governance Index score	SDG 16
2	Human rights	Not employing underage children and respecting employees' and suppliers' rights	SDG 16
3	Labour practices	Training and development programmes for employees Providing fair wages Providing occupation health and safety	SDGs 4 and 8
4	Environment	Environmental monitoring Waste management Community development in the environmental sector Energy efficiency Green building concepts	SDGs 6, 7, 12, 13 and 15
5	Fair operation practices	Supporting equity: fair hiring processes regardless of gender, race or religion	SDGs 5 and 10
6	Consumer issues	Surveys on customer satisfaction and using the Customer Satisfaction Index	SDGs 8 and 12
7	Community development	Social and community development; charity programmes Building public facilities and transportation	SDGs 1, 3, 9 and 11

Source(s): Table developed by authors

Table 3.
ISO 26000 topics linked to the SDGs

Themes/subthemes		No. BUMDs 2019	2020
Planning stage	Business impact assessment to prioritise relevant SDGs	0	3
	SDG target and SMART indicator development	0	1
	SDG strategies to achieve the targets and indicators and programmes to devise strategies	0	1
	Linkage of indicators, strategies and programmes related to the prioritised SDGs	0	1
Accounting stage	Establishment of data collection systems and methodologies to measure SDG performance based on the indicators defined in the planning stage	0	1
	Implementation of programme and performance measurement	15	17
Reporting stage	SDG contribution disclosure: comparing targets and indicators defined in the planning with the actual results measured in the accounting stage	0	1
	Verification and validation of performance measures (conducted internally)	15	17

Source(s): Table developed by authors

Table 4. Disclosure of SDG-related practices in planning, accounting and reporting

Table 4 indicates that none of the BUMDs disclosed the activities in the planning stage in 2019, and only one BUMD in 2020 has done so. Additionally, 15 out of 17 (in 2019) and 17 out of 19 (in 2020) disclosed specific SDG related activities in the accounting and reporting stages.

The planning disclosures reveal that only three BUMDs in 2020 conducted a business impact assessment to identify specific SDGs affected by their operations. However, their disclosures lacked detailed activities, such as providing a summary of business impacts on SDGs and the stakeholders involved, as suggested by the adapted framework. Their disclosures were characterised by general narratives, such as "[BUMD 18] reviewed the economic, social and environmental impacts of the Bank's activities, products and services in the context of regional and national development either directly or indirectly, especially in achieving the Sustainable Development Goals".

Due to their less robust assessment, most BUMDs disclosed non-specific performance-indicators for SDGs. For example, they simply disclosed non-SMART indicators, such as "Reduce paper use in office units" and "Replacing lights with energy-efficient lamps" to contribute to SDG 13, Climate Action. In contrast, one BUMD in the construction industry disclosed specific targets for SDG performance, such as "Potential of 62% reduction in greenhouse gas (GHG) emission in 2020 with a target of 3.7 million passengers" [BUMD 20]. This BUMD, with more specific defined SDG targets, is the sole entity that developed a data collection system for measuring SDG performance and integrated it into reporting. It disclosed programme implementation and detailed SDG contributions using metrics from established systems. For example, it quantifies GHG reduction from increased public transportation passengers, linking this reduction to contributions to SDGs 7 and 15. Despite this, BUMD 20's specific disclosure presentation is limited to its three infrastructure projects, but this BUMD is the only one adequately demonstrating integrated planning, accounting and reporting disclosures.

Moreover, 15 out of 17 BUMDs in 2019 and 17 out of 19 BUMDs in 2020 did not present robust accounting methods in measuring performance. They mainly disclosed activities during programme implementation in the accounting stage and reported SDG contributions using basic accounting methods, such as budget realisation calculations, output comparisons or linking activities to SDGs, as illustrated in the following quotes:

> Development of Outstanding Junior Volleyball Athletes in [BUMD 07] with fund allocation of IDR429,600,000 implementation period: January–December to contribute to [SDG] TPB No 4 - Quality Education.

> All commitments, implementation of policies and parameters for the success of SDI management in [BUMD 02] are in line with the formulation of SDG 8 Economic growth and decent work . . ., opening up the widest possible job opportunities, productive and creating decent work for all.

These typical disclosures presented by most BUMDs show a lack of engagement in utilising comprehensive accounting methods to drive behavioural changes for meaningful SDG achievement as suggested in the adapted framework. They merely listed sustainability/CSR activities associated with ISO 26000 in the disclosures to demonstrate their contributions to the SDGs, not comparing their actual performance with their targets because the latter had not been defined in the planning stage. It is apparent that there was lack of specific targets and indicators due to inadequate SDG integration into strategic planning. Thus, the SDGs appeared to be retrospectively aligned to the organisation's activities in the reporting stage rather than being used to drive the sustainability agenda within business operations. Unfortunately, these disclosures were not reviewed externally, as can be seen in the following disclosure.

> 2020 Sustainability Report of [BUMD 06] has not yet been through an assessment process by an external party or an independent auditor. However, [BUMD 06] ensures the reliability and accuracy of the information disclosed in this report because it has referred to aspects of the GRI Standards and Regulation of OJK 51/POJK.03/2017 on the Implementation of Sustainable Finance for Financial Services Institutions. Reliability of the report is also supported by the verification process by the Board of Commissioners, Board of Directors and internal Compliance Division of [BUMD 06].

The adapted SAR framework underlines that external assurance is essential to independently ensure sufficient and accountable disclosures of SDG contributions provided to stakeholders. The BUMDs analysed performed only internal verification and validation, with emphasis on programme implementation.

Table 5 presents the findings for Themes 3 (Future plans) and 4 (Stakeholder engagement).

5.3 Future plans for SDG-related activities

Table 5 shows that none of the 17 BUMDs in 2019 provided information regarding their future plans for SDG-related activities. However, this lack of disclosure likely results from the fact that most BUMDs were mandatorily required to publish SDG disclosures in 2020.

In 2020, 12 BUMDs provided a list of SDG future activities and associated budgets without disclosing their reflections on existing activities to improve performance embedded in their 2021 SDG plans. Only, four BUMDs reviewed their existing sustainability activities to support SDGs, with two stating that they used these reviews to develop their SDG related activities for 2021. One BUMD disclosed that "Based on the evaluation carried out, [BUMD 07] did not face significant obstacles in realising priority activity programs as stated in the

Theme/Subtheme	No. BUMDs 2019	2020
Future plans for sustainability practices to support the SDGs		
Providing list of future SDG budget and activities	0	12
Reviewing SDG programmes, activities and performance	0	4
Developing a future plan for SDGs: activities and proposed budget	0	2
Stakeholder engagement in managing sustainability practices to support the SDGs		
Defining and identifying stakeholders	8	8
Methods used to engage with stakeholders	3	8

Source(s): Table developed by authors

Table 5. Disclosure of SDG future plans and stakeholder engagement

2020 RAKB [Sustainable Financial Action Plan] . . . directly and indirectly contributed to SDGs . . . [BUMD 07] planned priority activity programs . . ., such as Increasing Lending for Green Infrastructure . . . Efficient use of energy". The second BUMD disclosed that "There are many practices that are to be adopted in 2021 . . . such as the stadium is being built by [BUMD 20] . . . expected to be completed by the end of 2021 . . . it will be equipped with environmentally friendly and sustainable facilities . . . For instance, . . . use energy-efficient LED lights and utilise solar panels as renewable energy". Limited evidence was disclosed specifically demonstrating a review of the activities across three stages to enhance integrated disclosures showcasing meaningful SDG contributions. Thus, it is likely that these typical disclosures will still persist in the future.

5.4 Stakeholder engagement in planning, accounting and reporting SDG activities

Table 5 shows that in 2019 and 2020, only eight BUMDs disclosed key stakeholder identification and three BUMDs included the methods of stakeholder engagement used to gather information about sustainability impacts, but not specifically for SDGs. For example, BUMD 23 engaged stakeholders through meetings, government interactions and public feedback on their websites, focussing on enhancing sustainable business tourism. The collected issues were translated into sustainable business strategies, implemented, measured and selectively reported as SDG contributions. It appears that the disclosed stakeholder engagement practices were not explicitly designed based on SDGs, thus the SDGs were not utilised to drive the engagement. This finding indicates relatively low stakeholder engagement in the planning, accounting and reporting programmes specifically for SDG-related initiatives amongst the BUMDs.

6. Discussion and conclusion

Developing countries face greater challenges in advancing their sustainability agenda (Belal *et al.*, 2010; Qian *et al.*, 2021), including the SDGs (United Nations Department of Economic and Social Affairs, 2019; Tilt *et al.*, 2020). This requires robust collaboration, particularly amongst public sector organisations (Sachs, 2012) at local level as regional areas encounter the most challenging situations in pursuing SDGs (Bappenas, 2019; Guarini *et al.*, 2022).

Public sector organisations at local level, particularly local government owned enterprises, like Indonesian BUMDs, play pivotal roles in advancing SDG achievement in developing nations (Bebbington and Unerman, 2018, 2020; Guthrie and Martin-Sardesai, 2020; Guarini *et al.*, 2022). With their strong ties to local communities and hybridity, BUMDs hold advantageous positions to accelerate regional development (Cormier and Gordon, 2001; Datta, 2017). They must transparently demonstrate SDG commitment in their disclosures showcasing SDG integration into planning, accounting and reporting processes to optimise their roles for meaningful outcomes (Schaltegger and Wagner, 2006; Adams, 2017; Bebbington and Unerman, 2018, 2020). Utilising SAR to develop comprehensive SDG disclosures (Bebbington and Unerman, 2018; Kaur and Lodhia, 2019) has become essential to assure stakeholders the accountability of the reported contributions (WBCSD, 2018; PwC, 2019; Rosati and Faria, 2019; Bebbington and Unerman, 2020; Silva, 2021), especially in developing countries with inadequate sustainability reporting structures (Lodhia *et al.*, 2021). However, a gap exists in current SAR studies analysing SDG disclosures by local-level PSOs in developing countries (Kaur and Lodhia, 2019), particularly in Indonesia despite its strong commitment to SDG attainment (Gunawan *et al.*, 2020, 2022). There is a need to explore this topic to advance SDG disclosures (Bebbington and Unerman, 2018, 2020).

This study identified that amongst 847 Indonesian BUMDs, only 24 disclosed sustainability information, all of which were limited liability and banking enterprises.

Specifically, 17 entities in 2019 and 19 in 2020 explicitly disclosed their SDG-related activities across the three stages. The dominance of limited liability and banking enterprises publishing sustainability reports could be attributed to OJK Regulation 51/2017 enforcement. This regulation mandates the publication of sustainability reports, including SDG disclosures, since 2020, suggesting a clear coercive influence on SDG disclosures (Gunawan *et al.*, 2020; Kuswantoro *et al.*, 2023). Importantly, over 90% of Indonesian BUMDs are not limited liability enterprises, which are only mandated to begin sustainability reporting, including on SDGs, from 2022 to 2024. It is expected that as regulatory requirements come into effect, more BUMDs will disclose their SDG-related activities, showing their commitment to embedding the SDGs into their operations.

The adapted SAR framework underscores the importance of comprehensive disclosures, requiring that SDG-related activities are strategically planned, in turn impacting the use of accounting methods needed for behavioural change, and leading to impactful SDG contributions being reported (Schaltegger and Wagner, 2006; Burritt and Schaltegger, 2010; Laine *et al.*, 2021). However, consistent with the findings of Gneiting and Mhlanga (2021), Mhlanga *et al.* (2018) and Guarini *et al.* (2022) and prior Indonesian studies (Gunawan *et al.*, 2020, 2022; Kuswantoro *et al.*, 2023), the majority of BUMDs studied inadequately planned their SDG contributions to control the activities in accounting and reporting. Specifically, aligned with the findings from Gneiting and Mhlanga (2021), they did not deliberately use the SDGs to drive their sustainability operations by establishing SDG targets and indicators, which are fundamental to measuring SDG outcomes (Guarini *et al.*, 2022; Lodhia *et al.*, 2022). The specific SDG targets and indicators strongly underlined in the adapted SAR framework (Ball, 2005; Schaltegger and Wagner, 2006; Lodhia *et al.*, 2022) are absent, resulting in the utilisation of basic accounting methods that may not effectively drive behavioural changes within organisations for impactful SDG achievement (Schaltegger and Wagner, 2006; Zyznarska-Dworczak, 2020).

Thus, these BUMDs' SDG disclosures are at a basic level. Consistent with Mhlanga *et al.* (2018), the disclosures often treated the SDGs as a *post-hoc* addition to sustainability efforts, rather than demonstrating the holistic integration of the SDGs in the three stages as suggested by the adapted framework (Thijssens *et al.*, 2016; Zyznarska-Dworczak, 2020; Laine *et al.*, 2021). For example, one BUMD simply linked its sustainability activities in a tree planting programme to SDG 13 (climate action), without clearly defining its emissions reduction targets during the planning stage, hindering meaningful SDG contribution assessment through outcome-to-intention comparisons.

The adapted SAR framework also underlines the need to review SDG activities to improve performance embedded in future plans for substantial SDG achievement (Schaltegger and Wagner, 2006; Mhlanga *et al.*, 2018). Unfortunately, little evidence was found that these 24 sample ROEs review their current activities in developing their future SDG plans. The absence of external assurance also raises questions about the significance of SDG contributions disclosed in the reports as was also found by Bellini *et al.* (2019).

Moreover, the findings indicate that none of the disclosures specified SDGs guiding stakeholder engagement. For example, the BUMDs acknowledged stakeholder engagement's significance in identifying sustainability issues but failed to adequately establish the links between the issues and SDG-related concerns during planning. This connection is highlighted as crucial in the adapted SAR framework because issues identified in the planning stage form the basis of indicators, strategies and sustainability programmes (Ball *et al.*, 2014) to achieve the SDGs. Failing to highlight the links between these three stages in reports hinders stakeholders from seeing the effectiveness of SDG contributions (Bebbington and Unerman, 2020). Unfortunately, the analysis revealed that only one BUMD disclosed these holistic practices, and even this was limited to a few specific projects, raising concerns about Indonesia's progress in meeting the SDGs by 2030.

Despite the lack of comprehensive disclosures of integrated activities in the three stages to show impactful SDG contributions in these Indonesian BUMDs, it is premature to conclude that they lack commitment to Indonesia's SDG achievement. Positive steps, like reporting sustainability activities for the SDGs since 2019 (rather than the mandated 2020 by OJK Regulation 51/2017), reflect BUMDs' recognition of the importance of disclosing SDG contributions. While these efforts primarily involved retrofitting SDG-related activities in their reporting process, making it challenging to gauge their overall significance for Indonesia's SDG achievement, they still represent positive steps.

It is apparent that the disclosures observed are likely driven by the adoption of OJK Regulation 51/2017, which mandates a focus on sustainability practices and the mere disclosure of sustainability activities relevant to the SDGs for reporting purposes. Also, rather than utilising SDG-specific guides such as the SDG Compass, the BUMDs utilised the GRI core option, specifically designed for sustainability practices not SDG disclosures. The regulations (Kuswantoro *et al.*, 2023), especially from oversight institutions (Gunawan *et al.*, 2020) and reporting standards, strongly affect SDG disclosures (Bellini *et al.*, 2019) in PSOs. While not necessarily detrimental, the adapted SAR framework highlights that this sustainability-to-SDG approach, not SDG-to-sustainability primarily mandated in the regulations and standards, may not substantially contribute to SDG achievement (Mhalanga *et al.*, 2018). The findings provide insights into a need for more comprehensive regulatory guidelines and enforcement (Belal *et al.*, 2010; Gunawan *et al.*, 2020) and knowledge development (Lodhia *et al.*, 2022), enhancing enterprises' understanding and selection of appropriate disclosure standards to develop comprehensive disclosures.

6.1 Implications

These findings offer valuable lessons for organisations and regulators in Indonesia and globally, especially in local government-owned enterprises in developing countries aiming to improve SDG disclosures to showcase their contributions to SDG achievement at national and global levels. To advance their reporting, organisations must shift their disclosure development concept following the SAR framework; that is, it should present the interrelated links across three stages, demonstrating a strong commitment to meaningful SDG achievement (Schaltegger *et al.*, 2006; Burritt and Schaltegger, 2010; Laine *et al.*, 2021). The shift must start from top management's current understanding of SDG disclosures from merely connecting sustainability/CSR activities to specific SDGs to a holistic approach as suggested by the SAR framework. Additionally, management should empower individuals involved at all stages to enhance their professional capacity and collaboration (Amran and Haniffa, 2011; Kassim *et al.*, 2019) and enforce the adoption of standards tailored for holistic SDG disclosure development (Abeysekera, 2022). Thus, organisations can use the adapted SAR framework as a functional tool (Porter and Kramer, 2011; Bebbington and Unerman, 2020) to develop SDG disclosures effectively. This framework integrates SDGs from the planning stage, guiding sustainable operations and activities in accounting and reporting (Schaltegger *et al.*, 2006; Hansen and Schaltegger, 2014).

Additionally, the findings underscore key lessons for regulators in guiding SDG disclosure development. First, the oversight institutions like OJK, which oversees most BUMDs' activities (Gunawan *et al.*, 2020, 2022) in guiding the disclosure development, need to enhance their regulations and guidance based on the SAR framework. The guidance and regulations should enforce the disclosures that should integrate activities across three stages to demonstrate substantial actions for impactful SDG achievement (Bebbington and Larrinaga, 2014; Burritt *et al.*, 2019; Ike *et al.*, 2019). When the regulations, like OJK 51/2017 which in this case the majority of BUMDs adopt, primarily mandate SDG inclusion only in reporting, it is highly likely that the organisations may not comprehensively plan, account

for and report their SDG contributions to significantly accelerating regional development. Therefore, in terms of policy implications, the regulators who directly oversee the disclosure development, such as OJK, should provide more comprehensive guidance, such as that highlighted in the adapted SAR framework and *Peraturan Presiden* 59/2017 along with strong enforcement. If guidance from the oversight institution is not improved, insufficient disclosure development as found in this analysis will persist. The regulations should also describe collaborative mechanisms (Sari *et al.*, 2022), such as the alignment between OJK 51/2017 with *Peraturan Presiden* 59/2017, which are not currently aligned, as this helps to compel enterprises to produce holistic SDG disclosures as also suggested in the adapted SAR framework.

6.2 Contributions, limitations and future research directions

This paper contributes to the literature that have theoretical and naturalistic generalisations (Parker and Northcott, 2016) that can be transferable to studying SDG disclosures in organisations across Indonesia and other developing countries with similar contexts, that lack knowledge and reporting structures for SDGs (Lodhia *et al.*, 2021). Empirically, it underscores how local government-owned enterprises, such as BUMDs, should disclose their planning, accounting and reporting their SDG contribution to showcase how they optimise their potential roles in accelerating SDG achievement through their business operations. Additionally, the analysis underscores the significant influence of government regulations directly overseeing SDG disclosures of enterprises, suggesting the need for strong regulations, robust guidance and enforcement to advance the SDG disclosures demonstrating impactful SDG outcomes through integrated planning, accounting and reporting. Theoretically, the adaptation of the SAR framework to include the SDGs, provides a novel tool for SDG disclosure development and analysis beyond meeting reporting requirements. Thus, the generalisations empirically and theoretically extend this research context beyond Indonesia context to the broader discourse on SDG disclosure analysis at the international level.

While offering preliminary evidence of the extent of BUMDs' disclosures on articulating commitment to meaningful SDG achievement, this study has limitations, including a small sample size and relying only on content analysis using the SAR framework. Future research should thoroughly analyse the topic with diverse methods like interviews or case studies to explore the development of SDG activities within organisations, considering institutional pressures and challenges encountered. Utilising theories, such as practice theory and institutional theory as lenses may be considered in the investigations for more comprehensive analysis and implications. Additionally, this study solely examines SDG disclosures during 2019–2020. Extending the analysis to encompass a longer period would validate the identified findings.

Notes

1. *Peraturan Presiden* 59/2017, translated "Presidential Regulation" is the regulation, passed by the Indonesia's President regarding the implementation of SDG achievement in Indonesia.
2. *Peraturan Bappenas* 07/2018, translated "Bappenas Regulation" is prescribed by Ministry of National Development (*Bappenas)* who is responsible to monitor the Indonesia's SDG achievement. This regulation further elaborates *Peraturan Presiden* 59/2017 to plan, measure and report the Indonesia's SDGs.
3. *Otoritas Jasa Keuangan*, abbreviated to *OJK*, is an Indonesian Financial Service Authority (FSA) that prescribes OJK 51/2017 framework of implementing sustainable finance for financial institutions, issuers and public companies.

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