Sustainability Accounting and Reporting (SAR) practices

in achieving the Sustainable Development Goals (SDGs)

A case study of Regional-Owned Enterprises (ROEs) in Indonesia

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List of abbreviations and acronyms

AI	Artificial Intelligence
BPS	*Badan Pusat Statistik*
BUMN	*Badan Usaha Milik Negara*
CD	Community Development
CSR	Corporate Social Responsibility
FSA	Financial Service Authority
GRI	Global Reporting Initiative
IDR	Indonesian rupiah
IPAL	*Instalasi Pengolahan Air Limbah*
JIS	Jakarta International Stadium
JIV	Jakarta International Velodrome
KEMENKUHAM	*Kementerian Hukum dan HAM*
KPMG	Klynveld Peat Marwick Goerdeler
LRT	Light Rail Transit
MDGS	Millenium Development Goals
NCSR	National Center for Sustainability Reporting
OJK	*Otoritas Jasa Keuangan*
PAL	*Penataran Angkatan Laut*
PMI	*Palang Merah Indonesia*
PSOs	Public Sector Organisations
PwC	PricewaterhouseCoopers
RAKB	*Rencana Aksi Keuangan Berkelanjutan*
RBB	*Rencana Bisnis Bank*
RJPP	*Rencana Jangka Panjang Perusahaan*
ROE	Regional-Owned Enterprise
SAR	Sustainability Accounting and Reporting
SDGs	Sustainable Development Goals
SETNEG	*Sekretariat Negara Republik Indonesia*
SF	Sustainable Finance
SMEs	Small and Medium-Sized Enterprises
SOEs	State-Owned Enterprises
SR	Sustainability Reporting
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
WBCSD	World Business Council for Sustainable Development

Summary

This thesis explores how Indonesian regional owned enterprises (ROEs) integrate the sustainable development goals (SDGs) into their business operations, focusing on disclosure practices in three stages of operations: planning, accounting and reporting. Given the emphasis on local sustainable development in the majority of SDG targets, ROEs play a pivotal role in national and global SDG achievements. Mandated by Presidential Decree 59/2017 and Bappenas Regulation 07/2018, the Indonesian government requires local public sector organisations, including ROEs, to incorporate the SDGs in a holistic manner to support national SDG goals. ROEs, as local government-owned entities, play a crucial role in this, due to their easier government control and strong ties to local communities. Despite the critical nature of this research, existing literature provides limited insights into how local PSOs, especially in developing countries like Indonesia, articulate their SDG commitments into business operations. This study addresses this gap by investigating *how and why Indonesian Regional-Owned Enterprises (ROEs) develop their sustainability accounting and reporting practices to integrate SDGs into their business operations.*

This study employs an existing sustainability accounting and reporting (SAR) framework adapted for SDG reporting, Practice theory, and Institutional theory to examine how Indonesian ROEs operationalise and disclose their SDG commitments. It comprises content analysis of 48 annual/sustainability reports from 24 ROEs (2019-2020) and case studies of five selected ROEs. Results show limited SDG disclosures, primarily focusing on the accounting and reporting stages rather than the planning stage.

The case studies explore the practice development for SDG integration, including the institutional pressures and challenges encountered. In the planning stage, ROEs perceive SDGs as a strategic opportunity but struggle to articulate them within their business operations. The absence of a comprehensive roadmap and a tendency to focus on easier-to-address SDG topics indicate challenges in full transformation into strategic business functions. In the accounting stage, variations in SDG implementation approaches are observed, with an emphasis on basic performance measurement rather than utilising accounting methods for behavioural changes. As such, the practices reporting stage show that these ROEs merely retrofitted their

sustainability activities to SDGs without detailing substantive changes, and lack systematic management review or external assurance, relying on oversight institutions' monitoring functions, identified as insufficient.

The findings reveal internal and external reasons shaping these practices. Firstly, Practice Theory's elements - practical knowledge, internal regulations, and teleoaffectivity - are inadequately established. Secondly, institutional pressures, primarily coercive, driven by government mandates significantly affect the practice element development, lack comprehensive guidelines and robust enforcement. Additionally, GRI standards and ISO 26000 exert normative pressures, however, these standards advocate sustainability practices, not offering specific guidelines for integrating SDGs into sustainability reports. Furthermore, challenges arise from conflicting expectations that exist between top management and the teams executing SDG-supporting programs, as well as with employees, often due to insufficient knowledge. Conflicting expectations also arise between internal teams and the community's perspectives on SDG programs. These findings highlight a lack of collaboration among interconnected institutions, emphasising the need for effective institutional arrangements to support the implementation of SDG-supported programs.

This study offers practical and policy implications for enhancing SDG practices in Indonesia. It proposes step-by-step guidelines for meaningful contributions, emphasising the necessity of robust institutional pressures via government regulation, guidelines, and effective enforcement. Additionally, it contributes to literature, theory, and methodology by comprehensively investigating the interplay between Practice Theory and Institutional Theory. The study demonstrates a strong link between practice development, institutional pressures, and challenges in SAR practices, underscoring their significance in integrating SDGs into business operations for impactful achievement.

Declaration

I declare that this thesis presents work carried out by myself and does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; to the best of my knowledge, it does not contain any materials previously published or written by another person except where due reference is made in the text; and all substantive contributions by others to the work presented, including jointly authored publications, is clearly acknowledged. this thesis presents work carried out by myself and does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; to the best of my knowledge, it does not contain any materials previously published or written by another person except where due reference is made in the text; and all substantive contributions by others to the work presented, including jointly authored publications, is clearly acknowledged.



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Conference papers

Moni Muskanan, Carol Tilt, Kathy Rao, Rob Whait (2022), 'Contributing to Indonesia's SDG achievement: Disclosures of Regional-Owned Enterprises', accepted for the *Australasian Centre on Social and Environmental Accounting Research Conference*, Victoria University of Wellington, New Zealand, 12-14 December 2022.

Presentations

UniSA Business 3MT Competition, 19/07/2023 "Act locally for global development!" The investigation of the practices of Indonesian local government-owned companies to significantly contribute to the Indonesia's SDG achievement. Awarded Runner-up prize for PhD presentations.

A research project titled 'A holistic flow: Sustainability accounting and reporting for Sustainable Development Goal integration. A case study of Indonesian Regional-Owned Enterprises (ROEs)', presented at the *Australasian Centre on Social and Environmental Accounting Research Conference*, The Queensland University of Technology (QUT), Australia, 7-8 December 2023.

Chapter One: Introduction

1.1 Background

The modern world is marked by prominent social and economic challenges, including climate change, globalisation, political and economic volatility, environmental deterioration, and social inequity (Dempsey et al., 2011; Cutter & Zadeh, 2015; UNDP, 2019). These issues have prompted discussions on sustainable development, leading to the formulation of the 17 Sustainable Development Goals (SDGs) (UNDP, 2019), which, for successful implementation, necessitates robust commitments and collaborative efforts among governments, corporations, and civil society (Biermann et al., 2017; Bebbington & Unerman, 2018; Caiado et al., 2018).

Notwithstanding the inherent commitments of the SDGs, environmental and social incidents continue to escalate. Such cases include Unilever's environmental and sexual harassment controversies, the Brazilian mining disaster, and Toshiba's overstated profits, which have caused increasing employee terminations (Borelli, 2017; Paddison, 2015). These incidents have gained enough attention to compel enterprises to align their business with the SDG agenda and transparently disclose the impacts of their activities on the environment, society, and the economy through their sustainability accounting and reporting (Schaltegger & Burritt, 2006). In this regard, sustainability accounting and reporting (SAR) has become crucial to SDG implementation and assessment (Abeysekera, 2022; Adams, 2017; Bebbington & Unerman, 2020). SDGs should be utilised by organisations in translating sustainability in their business organisations aligned with global development. This involves adapting the SDGs to align with organisational objectives, often requiring the development of strategies and policies specifically for the SDG achievement for impactful contributions where SAR is needed. SAR can effectively assist organisations in incorporating the SDGs into their daily business management strategies and in embracing transparency by disclosing their activities and performance in their sustainability reports (Bebbington & Unerman, 2018, 2020). SAR can also assist organisations in identifying, collecting, analysing and communicating information regarding the organisation's sustainable activities and their impact on stakeholders (Xiao, 2006; Bebbington & Unerman, 2018).

Embedding SDGs into accounting systems has been more often recognised in the private sector than in the public sector (Kaur & Lodhia, 2019). A survey regarding SDG accounting practices

revealed that many private enterprises had employed the SDGs as the main path to establishing their business sustainability agenda. Many private enterprises also utilise SAR to implement and report their SDG-related activities (PwC, 2019). However, considerable criticism still focuses on what these private organisations have contributed to the SDGs and how they present them in their SAR. The criticisms include insufficient investment in corporate social responsibility (CSR) activities, lack of comprehensive SDG disclosures due to inadequate strategic planning and performance measurement, resulting in inconsistencies between the enterprise's SDG activities and their nation's SDG priorities (Avrampou et al., 2019; Ike et al., 2019; Poddar et al., 2019; Gunawan et al., 2020; Vaio & Varriale, 2020).

This study argues that although private sector activities are highly engaged with sustainability issues, focusing only on private-sector enforcement of SDG-related accounting activities to accelerate SDG achievement is insufficient. Unsurprisingly, profit-driven organisations are less likely to put sustainability at the heart of their business strategies due to the negative impact of the high costs of sustainability operations on profits (Gray & Bebbington, 2000; Bebbington & Gray, 2001; Friedman, 2007). In contrast, public sector organisations (PSOs) have a stronger motivation to transform and lead society to a position of sustainability than their private sector counterparts. Through their business processes, PSOs are the primary agents to actualise a nation's development (Ball & Grubnic, 2007). PSOs could become an exemplifier to guide private organisations in appropriate sustainability practices (Lodhia et al., 2012). However, PSOs' sustainability reporting practices are still emerging (Gray & Bebbington, 2000; GRI, 2010; Greiling et al., 2015). Additionally, there has been relatively limited research in SDG accounting and reporting in PSOs, particularly on local-level PSOs (Fusco & Ricci, 2019; Bebbington & Unerman, 2020) and in developing countries (Kaur & Lodhia, 2019). Specifically, the scarce literature provides limited evidence of how PSOs, specifically at the local level, utilise SAR beyond a mere technical tool to manage and report their SDG performance (Fusco & Ricci, 2019).

The above considerations motivate this research. This study focuses on PSOs in Indonesia, an ideal context of a developing nation with a strong commitment to implementing the SDGs. The Indonesian government has enacted SDG regulations to mandate SDG action from central to local PSOs. More specifically, this study focuses on Indonesian Regional-Owned Enterprises (ROEs), a specific type of local-level PSO. This research argues that, as defined by Indonesian

Government Regulation 54/2017 being the closest tier of government to communities, ROEs should have stronger motivation to accomplish the SDGs. This is because they have a deep understanding of local needs (Bello & Maidin, 2018). However, they execute their services in an entrepreneurial way subject to a higher level of scrutiny to legitimise their activities (Greiling et al., 2015). Indeed, they are expected to provide more sustainability disclosures in their sustainability reports to maintain their legitimacy (Cormier & Gordon, 2001). Section 1.2 will further justify the scope of this research on local level PSOs in a developing country, Indonesia.

The primary significance of this research is to examine the use of SAR by ROEs in developing the practices of integrating SDGs into their planning, accounting, and reporting processes. The study underscores these enterprises' commitment to contribute meaningfully to Indonesia's SDG attainment. It delves into the specific practices guided by a SAR framework (Chapter Two) that should be employed during planning, accounting, and reporting.

The investigation further explores how Indonesian ROEs construct their practices by developing the practice elements of practical knowledge, rules and regulations, and teleoaffectivity within the three stages. Additionally, it examines the impact of institutional pressures and challenges on developing the practices across the planning, accounting, and reporting stages for meaningful SDG contributions.

The findings offer a more holistic understanding of the practice development constituting the practices, providing more comprehensive insights for theoretical, practical, and policy recommendations. This research contributes valuable insights, demonstrating how SAR should be utilised to successfully integrate SDGs at the organisational level, especially within local-level PSOs operating in Indonesia and similar developing countries. This study sheds light on the benefits of adopting the SAR framework in planning, accounting and reporting to articulate SDG commitments at the organisational level, addressing a research gap in the current literature (Kaur & Lodhia, 2019; Lodhia & Sharma, 2019).

1.2. Research scope and justification

There has been relatively limited research into social and environmental reporting by PSOs compared to the private sector (Ball & Grubnic, 2007; Ball & Bebbington, 2008; Guthrie & Farneti, 2008; Osborne, 2010), and only a few studies related to f embedding SDGs into PSOs'

SAR practices (Kaur & Lodhia, 2019), particularly in the case of developing countries (Lodhia & Sharma, 2019). More research is called for contributing to a theoretical and practical understanding of the issues and the impediments of SAR practices in PSOs (Fusco & Ricci, 2019) as they could become a role model to guide private organisations in relevant sustainability matters (Lodhia et al., 2012). PSOs play a crucial role in accelerating SDG achievement due to their strategic position in executing programs designed to create public value through their functions (Guthrie & Martin-Sardesai, 2020).

This study addresses the research gap identified by Kaur & Lodhia (2019) concerning the utilisation of SAR by local-level PSOs in developing countries. Focusing on ROEs, the research investigates the implementation of SAR in planning, accounting, and reporting practices for integrating SDGs into business operations. The research aligns with the Indonesian government's directive, Presidential Decree 59/2017 that has been updated to Presidential Decree 111/2022[1], to incorporate national SDGs in organisational practices, spanning strategic planning, implementation, performance measurement, and reporting of contributions to SDGs.

Furthermore, SAR research has been primarily studied from a developed countries perspective, compared to the context of developing nations (Belal, 2008; Lodhia et al., 2012; Lodhia & Sharma, 2019). This study argues that due to the significant number of CSR issues in developing countries, it is also critically important to consider SAR research in this region (Belal, 2008). Given the widespread social and environmental issues in developing nations, SAR research can contribute to developing countries' sustainability improvements (Qian et al., 2021). The research findings can promote transparency and accountability in the organisations' sustainability practices (Belal, 2008).

This research was conducted in Indonesia, a developing country committed to addressing the SDGs. Indonesia is one of the largest economies in Southeast Asia that is highly likely to accelerate global sustainable development (Worldbank, 2020). Since 2017, the Indonesian

[1] While I acknowledge the updated regulation (form Presidential Decree 59/2017 to Presidential Decree 111/2022), the changes are minor. This research retains the previous version for clarity but noted the update. Indeed, this research used the 2019-2020 Annual/Sustainability Reports (guided by Presidential Decree 59/2017) for disclosure analysis and conducted interviews in 2021-2022 before the latest regulation was established. Thus, I believe it is more relevant to keep the Presidential Decree 59/2017 version.

government has committed to integrating SDGs into its national development agenda by establishing rules and regulations and subsequently developing national SDG action plans. The government has institutionalised and integrated the action plans into national and subnational annual planning. These rules and regulations further stipulate several main requirements for the implementation of planning, including mandating Indonesian public and private organisations to integrate the national SDGs into their sustainable business operations. They are compelled to report their activities in their annual sustainability reports that show their participation in the national collaboration for sustainable development (Bappenas, 2018).

Moreover, with their strategic function, PSOs use public funds to provide goods and services for the betterment of citizens' lives, not for profit-making motives. As the primary responsibility of these organisations is to serve the community, PSOs are compelled to maintain their legitimacy by promoting sustainability in their business cycles (Burritt & Welch, 1997; Ball & Grubnic, 2007; GRI, 2010; Greiling et al., 2015; Joseph et al., 2019). Ball & Grubnic (2007) argued that PSOs should lead sustainable development implementation; they are the primary agents for developing a sustainable society compared to their for-profit counterparts. PSOs contribute, in total, 40% of all global economic activities and consume higher amounts of resources, and are significant service providers; thus, PSOs' sustainable actions have a significant impact on improving sustainable development practices (Ball & Grubnic, 2007; GRI, 2010; Kaur & Lodhia, 2019). However, despite these arguments, the literature suggests that sustainability reporting practices within PSOs are still emerging and patchy (GRI, 2010; Greiling et al., 2015), particularly regarding SDG planning, accounting and reporting (Bebbington & Unerman, 2018). Nevertheless, the research in this area will allow PSOs to advance and refocus their business process to achieve more impactful SDG achievement (Bebbington & Unerman, 2018; Guthrie and Martin-Sardesai, 2020). In fact, most PSOs' sustainability reports report on SDG indicators that they prefer to disclose (Vaio & Varriale, 2020) rather than their overall sustainability impacts (Guthrie & Farneti, 2008).

Two primary forms of PSOs are public service organisations and public-owned enterprises (POEs). Public service organisations are entities established and operated by the government to solely provide essential services to the public (Guthrie & Martin-Sardesai, 2020). POEs, on the other hand are entities that are wholly or partially owned by government that operate with

hybrid functions, creating public value while acting in an entrepreneurial way (Greiling et al., 2015).

This research focuses on specific POEs with local government ownership or ROEs. They are responsible for serving the collective needs of society (state logic), and at the same time, they need to attain economic efficiency (market logic) (Grossi et al., 2015). This hybridity allows them to leverage commercial strategies and resources while still being influenced by public sector objectives and regulations. As a result, they may have more flexibility and resources to invest in sustainable development initiatives, holding more potential to contribute to SDG achievement compared (Datta, 2017). Due to this hybridity, they are also expected to provide more social and environmental disclosures in maintaining legitimacy of serving the community and the environment (Cormier & Gordon, 2001; Deegan, 2002).

Research investigating local-level PSOs is chosen because they play a crucial role in the public sector structure to implement government SDG strategies successfully (ElMassaha & Mohieldin, 2020; Gherardi et al., 2021). Despite being placed at the lowest level of the public sector administration structure, local-level PSOs are the closest tier for implementing policies and laws for executing sustainable development programs and activities (Bello & Maidin, 2018). They have local knowledge and understanding of urgent local needs in sustainable development (Worldbank, 1992; Sciulli, 2009; Bello & Maidin, 2018). Therefore, local-level PSOs are more strategically effective in SDG planning to respond to local issues, effectively tailoring sustainable local development strategies and implementation for significant SDG achievement (Bello & Maidin, 2018; ElMassaha & Mohieldin, 2020; Sciulli, 2009). They also have a more substantial constitutional, political and economic voice to gain support from the community to implement strategies for meaningful SDG achievement (Ball & Grubnic, 2007; Bello & Maidin, 2018; Cardillo & Longo, 2020).

1.3 Research problem

Figure 1.1 illustrates the research problems, which will be comprehensively discussed in Chapter Two, discussing the previous research gaps the current study addresses.

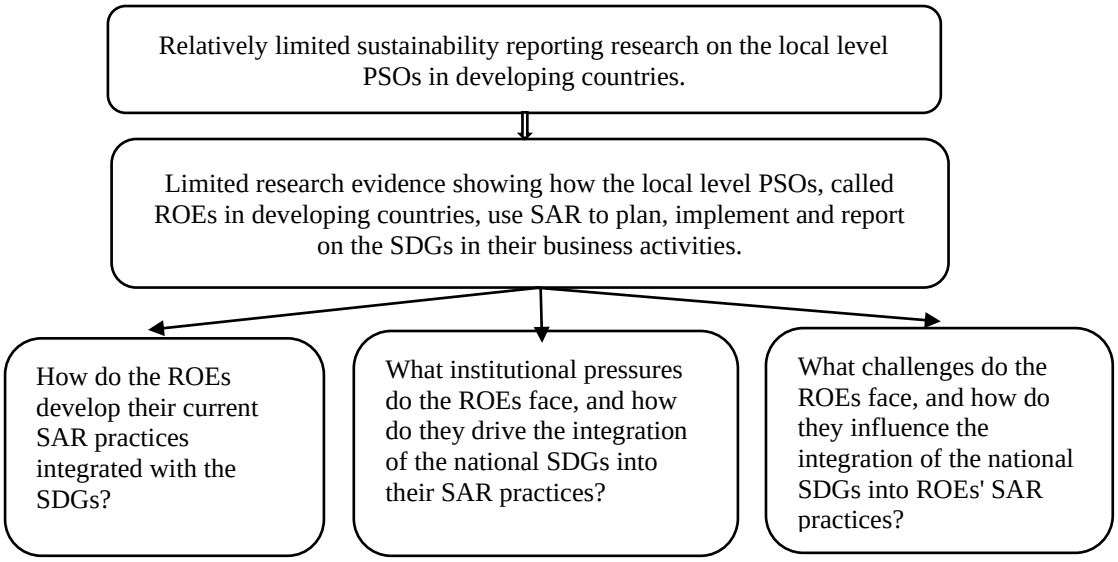


Figure 1.1 The research problems

Section 1.2 highlights the crucial roles of local-level PSOs, represented as ROEs in this research, in advancing SDG achievement. They can use SAR as a strategic framework for planning, accounting, and reporting SDGs to optimise their roles. However, there is limited research on how ROEs utilise SAR to integrate SDGs into their operations through planning, accounting and reporting, especially in developing countries. Therefore, this research comprehensively focuses on exploring how ROEs use SAR to plan, account for, and report SDG achievements, addressing the institutional pressures and challenges encountered to provide holistic implications to optimise their roles for impactful contributions.

ROEs, provided with significant constitutional, political, and economic influence, possess the potential to accelerate SDG implementation through sustainable operations (Bello & Maidin, 2018; Cardillo & Longo, 2020). Given the prevalent sustainability issues in developing nations (Qian et al., 2021), particularly in regional areas (Cardillo & Longo, 2020), it is critical to investigate the integration of SDGs into ROEs' business operations. This research is needed to enhance transparency and accountability in the sustainability reporting of ROEs, thereby addressing substantial sustainability challenges in local-level PSOs in developing countries. Specifically, this study focuses on ROEs in Indonesia, a developing country that has mandated SDG implementation across central and local-level PSOs.

Furthermore, the literature shows limited evidence of how local-level PSOs in developing countries implement their sustainable activities to participate in their nations' sustainable

development by utilising SAR (Bebbington & Unerman, 2018; Kaur & Lodhia, 2019; Cardillo & Longo, 2020). More research is needed to contribute to a practical understanding, integrating the knowledge into regulations and organisational arrangements of how local-level PSOs embed the sustainability agenda into their business process. An investigation is needed to examine SAR beyond a mere reporting tool to show compliance on SDG related disclosure regulations (Lodhia et al., 2012; Fusco & Ricci, 2019; Cardillo & Longo, 2020). This research perceives that the investigation should holistically explore the process of SAR practice development for SDG integration, including managing the human activities in establishing that constitute practices and the external pressures and challenges affecting the practices. This research addresses this context that investigates how the ROEs develop their SAR practices at planning, accounting and reporting stages for SDG integration into business operations by developing their practical understanding, the teleoaffectivity, systems and process and any relevant arrangements. It also examines what and how institutional pressures and challenges affect the practices. Section 1.4 will explain how the research questions address these three specific contexts.

1.4 Research questions

1.4.1 The central research question

How and why do Indonesian Regional-Owned Enterprises (ROEs) develop sustainability accounting and reporting practices to integrate SDGs into their business operations?

This research explores the development of practices in planning, accounting, and reporting within ROEs, specifically investigating the utilisation of SAR to integrate SDGs into their business operations. It aims to understand the rationale behind ROEs' choices of relevant SDGs, prioritising issues, the establishment of SDG targets, alignment with organisational strategy, measuring performance against set targets, and communicating this performance to stakeholders. The study will also explore how ROEs compile and manage high-quality information in their sustainability reports to effectively demonstrate their contributions to sustainable development for internal and external stakeholders.

1.4.2 Specific research questions

The following interrelated sub-questions are developed to address the central research question:

How do the ROEs develop their current SAR practices integrated with the SDGs?

This study initially investigates SAR practices in the planning, accounting, and reporting stages of business operations within ROEs. Specifically, it examines how ROEs go beyond viewing SAR as a technical tool, exploring their understanding of the use of SAR to holistically plan, account and report on SDGs by establishing organisational knowledge, rules and regulations, and instructed systems/teloaffectivity to constitute practices in the three stages.

What institutional pressures do the ROEs face, and how do they drive the integration of the national SDGs into their SAR practices?

This sub-question explores institutional drivers influencing ROEs in developing the practices in SAR to integrate SDGs into business operations. It investigates the nature and impact of the pressures on ROEs' SAR practices aimed at holistic SDG integration.

What challenges do the ROEs face, and how do they affect the practice development?

Finally, this sub-question examines challenges faced by ROEs in embedding SDGs into their SAR practices and investigates how these challenges are addressed to achieve meaningful SDG contributions effectively.

1.5 Theoretical framework

Previous sections highlight the need to investigate SAR practices in ROEs' planning, accounting and reporting in integrating SDGs into their business operations. This section outlines the theoretical framework guiding the research, incorporating the SAR framework adapted from Schaltegger & Wagner (2006), Practice Theory (Schatzki, 2001), and Institutional Theory (Meyer & Rowan, 1977; DiMaggio & Powell, 1983).

The research commences by exploring existing practices in ROEs across the planning, accounting, and reporting stages, utilising the SAR framework to provide guidelines to analyse the practices. It further explores practice development, including the institutional pressures and challenges encountered, acknowledging that practices evolve through the development of practice elements influenced by institutional pressures and challenges. Therefore, Practice Theory and Institutional Theory are essential lenses utilised for investigating practice development across the three stages. Practice Theory provides insights into how organisations

construct daily practices, driven by three key elements: practical knowledge, rules, regulations, and teleoaffectivity. Establishing these elements requires arrangements through orders to connect their development (Schatzki, 2001). Institutional Theory, on the other hand, elucidates how the orders influencing the arrangements for practice element development, constituting practices in each stage, are influenced by institutional pressures and challenges (Schatzki, 2001; Meyer & Rowan, 1977; DiMaggio & Powell, 1983). In essence, the SAR framework and the theories provide a conceptual roadmap for comprehensively exploring the development of SAR practices in ROEs, studying both drivers and challenges in the three stages of integrating SDGs into business operations. Figure 1.2 briefly illustrates how these theories function as lenses within the framework for this comprehensive research investigation.

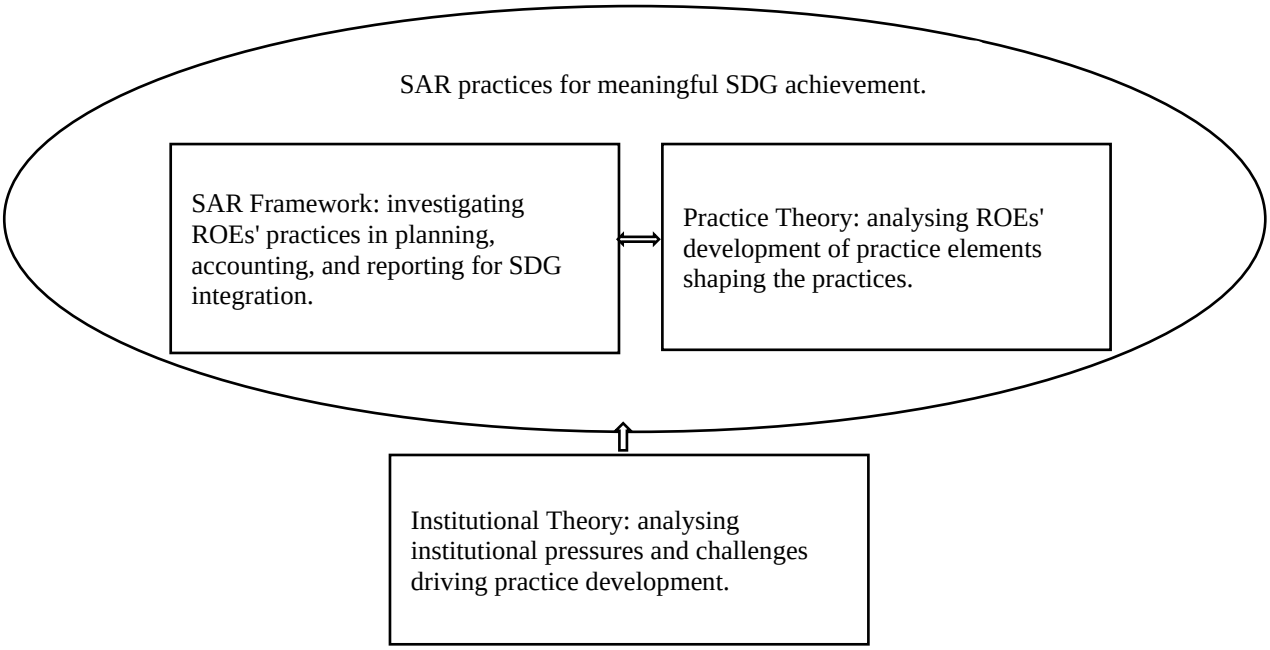


Figure 1.2 Integration of SAR Framework, Practice Theory, and Institutional Theory

This study utilises an integrated SAR framework adapted from Schaltegger & Wagner (2006; 2017) that provides comprehensive guidance in analysing the SDG integration practices across the three stages, including the pressures and challenges encountered which are the main focus of this study detailed in the Section 1.3. The framework separates SAR development into three critical interrelated phases: planning, accounting, and reporting (Kaur & Lodhia, 2019; Schaltegger & Wagner, 2006). This framework provides a comprehensive understanding of

how organisations can use SAR to integrate the sustainability agenda, specifically referring to SDGs in this research, into their business operations and sustainability reports. It enables organisations to demonstrate their sustainability contributions to society by articulating their commitment to practices to achieve SDG performance and presenting it in their reports (Schleger, 2017).

Practice Theory elucidates human-related activities within the practices of planning, accounting, and reporting. This theoretical lens comprehensively explains how organisations shape practices at each stage by developing practical understandings, rules, and the teleoaffectivity of interconnected human activities (Schatzki, 2006). Utilising this theory is crucial for providing a thorough analysis of how practices are constituted beyond merely meeting regulatory reporting requirements. Practical understandings contribute to the knowledge development of SAR, rules involve the formulation of regulations to enforce practice readiness, and teleoaffectivity governs the acceptability of actions and emotions among organisational members. Organisations must establish appropriate arrangements through orders to connect the development of these three elements, a process that is strongly influenced by institutional pressures (Schatzki, 2001). Practice Theory is vital for examining how ROEs develop understanding, rules, teleoaffectivity, and appropriate arrangements to manage various human activities within their strategies for integrating SDGs into planning, accounting, and reporting.

Additionally, this study utilises Institutional Theory to extend the analysis as the practice development is influenced by institutional pressures and challenges (Schatzki, 2001). The Theory explains how the institutional pressures (DiMaggio & Powell, 1983) and challenges (Meyer & Rowan, 1977) impact patterns of practices in SAR practice development (Adams & Larrinaga, 2007; Bebbington et al., 2009; Ball & Craig, 2010) and influencing practice element development (Schatzki, 2001). Institutional Theory is employed to comprehensively investigate drivers and challenges in embedding SDGs into an organisation's SAR development practices.

Integrating the SAR framework (see Chapter Two), Practice Theory, and Institutional Theory (see Chapter Three) is critical for this research. Together, these components elucidate the SAR development process, drivers, challenges, and the underlying reasons for these occurrences in SAR practices.

1.6 Methodology

This study employs a case study approach (Yin, 2018) with two primary stages. In Stage 1, 847 Indonesian ROEs (BPS, 2020) were initially identified. The selection criteria focused on ROEs publishing annual/sustainability reports with sustainability and SDG disclosures on their websites during 2019-2020, compliance with relevant standards, and the indication of applying a holistic SDG integration in planning, accounting and reporting. 24 ROEs meeting specified criteria were chosen for content analysis. Stage 1 analysis informed the SDG disclosure practices in the Indonesian ROEs and the selection of five ROEs with contextually rich cases for in-depth analysis in Stage 2. Stage 1 analysis, including the five selected ROEs, was validated through interviews with the Ministry of National Planning (*Bappenas*), the government authority monitoring Indonesian SDG implementation, and the National Centre for Sustainability Reporting (NCSR), which assists ROEs in developing their SDG disclosure practices. Stage 1 aimed to gain insights into SDG disclosures among Indonesian ROEs and to select the ROEs for the case study.

Stage 2 involved conducting case studies of five contextually rich ROEs, identified in this study as ROE A, ROE B, ROE C, ROE D and ROE E. This stage involved the collection of primary and secondary data. The primary data were collected through semi-structured interviews. The interviewees were with those who are involved in developing programs for SDG contributions. They are the key decision-makers and operational staff in planning, accounting, and reporting. 12 Interviewees were interviewed. This research applied a snowball technique to arrange access to the prospective interviewees.

Secondary data for triangulating the interviews encompassed publicly available information, including documents from the ROEs, such as annual/sustainability reports, and regulations from authorities directly overseeing the five ROEs' business operations. Integrating primary and secondary data facilitates a comprehensive investigation to address the research questions.

This research employed content analysis in the second stage, utilising a coding method (Given, 2008) to identify patterns and themes. The process involved assigning codes to represent core topics within the main themes of SAR practices at the planning, accounting, and reporting stages, including practice element development, drivers, and challenges encountered.

Specifically, open coding, axial coding, and selective coding techniques were used to analyse data, employing fine-tuning strategies to continuously summarise each coding process.

1.7 Contributions of the study

This study makes significant empirical and theoretical contributions to the discourse of Sustainability Accounting and Reporting (SAR) in the context of effectively implementing the Sustainable Development Goals (SDGs), particularly focusing on public sector organisations (PSOs) in developing country. Notably, it is the inaugural investigation into Indonesian ROEs, explicitly examining their SDG commitment through developing strategic planning, accounting, and reporting practices for substantial contributions. Numerous authors have called to research this topic, SDGs accounting and reporting (Bebbington & Unerman, 2018, 2020) into PSOs in developing countries (Kaur & Lodhia, 2019; Lodhia & Sharma, 2019), particularly of local level PSOs through engagement with the organisations in planning, accounting and reporting substantial contributions (Adams & Larrinaga, 2007; Adams & Larrinaga, 2019; Fusco & Ricci, 2019; Bebbington & Unerman, 2020). Although this context is essential in SDGs acceleration, only a few prior studies have focused on this specific context (Lodhia & Sharma, 2019), limited evidence offering how an organisation embeds SDGs into its business stages using SAR (Fusco & Ricci, 2019; Kaur & Lodhia, 2019). This research addresses literature gaps by detailing how SAR practices are employed at the organisational level to enhance accountability and transparency in organisations' disclosure of SDG contributions to offer theoretical and naturalistic generalisations for both academia and practice (Parker & Northcott, 2016).

Theoretical generalisations extend beyond the study's scope, offering contextual insights into organisational social structures and behaviours of how theoretical concepts are applied in practice (Parker & Northcott, 2016). Empirically, this study establishes foundational knowledge of how SDGs should be integrated into SAR and examines the actual SDG integration practices within five Regional-Owned Enterprises (ROEs) across diverse industries. Through a thorough analysis, the research compares these practices with recommended frameworks for SAR in SDG implementation. This empirical investigation provides valuable insights into the current state of SDG integration at the organisational level to support national SDGs, highlighting areas of strength and areas requiring improvement for meaningful SDG achievement. By offering contextualised insights into the specific challenges and opportunities

faced by local PSOs in Indonesia, the study fills a significant gap in the literature and contributes to a better understanding of the practical aspects of SDG implementation in PSOs in developing countries.

This study's naturalistic generalisations make the findings applicable in practical and policy contexts and transferable to local-level PSOs in other developing nations with similar societal and institutional contexts (Parker & Northcott, 2016). Theoretically, the study introduces a novel conceptual framework for understanding the integration of SDGs into SAR at the organisational level. By combining institutional and practice theories as analytical lenses, the research elucidates how institutional pressures, particularly coercive pressures from Indonesian regulations, shape the development of SAR practices within ROEs. This theoretical framework not only provides a deeper understanding of the motivations driving organisational practices but also offers insights into the mechanisms through which SDGs are incorporated, arranged, and disclosed within organisations. By bridging theoretical concepts with empirical observations, the study advances the generalisations beyond its original boundaries and contributes to the broader discourse on the relationship between institutional pressures and organisational practices in the context of SDG implementation that have implications for practical and policy to advance SDG implementation at organisational level.

Overall, this study contributes empirically and theoretically to both academia and practice by offering insights that enhance understanding and practical implications that guide SDG implementation efforts in PSOs, particularly in developing countries like Indonesia. Its findings also have implications for policy adjustments to enhance existing practices and support effective SDG implementation at both the organisational level to significantly contribute to SDG achievement at national and global levels.

1.8 Thesis outline

Chapter One introduces the research background, including the scope justification for the research problems and questions. Emphasising the significance of SAR practices in planning, accounting, and reporting to integrate SDGs in business operations in Indonesian ROEs, this chapter outlines the theoretical and methodological perspectives guiding the research in addressing the central research question and objectives. The chapter also highlights practical and policy implications, including contributions to literature, Theory and methodology.

Chapter Two outlines how SAR facilitates the integration of SDGs into the planning, accounting, and reporting stages. It introduces the SAR framework adapted from Schaltegger & Wagner (2006) to guide the holistic analysis of SDG integration at the organisational level. The chapter covers the current state of SAR practices, detailing the nature of disclosures, drivers, and challenges, particularly in PSOs in developing countries, including Indonesia. It reviews existing literature, emphasising gaps, especially the need for more research on SAR development practices for integrating SDGs into business operations in Indonesia.

Chapter Three reviews the theoretical framework, utilising Practice Theory and Institutional Theory as lenses to analyse existing SAR practices. These theories provide essential guidelines for analysing the actual circumstances in the case studies, framing institutional pressures and challenges affecting practice element development in holistic SDG integration planning, accounting, and reporting.

Chapter Four comprehensively explains the research methodology, encompassing two primary stages: content analysis in 48 reports and a case study in five Indonesian ROEs. It details research strategies for addressing the central research question in these stages, outlining methods, data sources, and data analysis. The subsequent four chapters present the research findings.

Chapter Five presents the analysis of the extent of SDG disclosures in the annual/sustainability reports of Indonesian ROEs for 2019-2020. It delves into content analysis findings, incorporating insights from interviews with two organisations actively engaged in SDG reporting practices in Indonesia. Additionally, it outlines the selection process for the five ROEs, including the contextual background of selected ROEs to conduct the case study explored in Chapters Seven and Eight.

Chapters Seven and Eight present case study findings for ROEs A-E. Chapter Seven details existing practices in planning, accounting, and reporting. Chapter Eight, utilising Practice Theory and Institutional Theory, explores practice element development and the impact of institutional pressures and challenges on shaping the practices described in Chapter Seven.

Chapter Nine outlines the main conclusions addressing the central research question. It delineates the implications and contributions of this research and acknowledges its limitations while suggesting avenues for further research.

Chapter Two: Sustainability Accounting and Reporting Based on the SDGs

2.1 Introduction

This chapter explores how SAR serves as a functional tool to integrate SDGs into planning, accounting, and reporting. Section 2.2 outlines the significance of utilising the SAR framework to guide practices in the planning, accounting, and reporting stages for integrating SDGs into organisational business operations. Section 2.3 delves into prior studies in SAR, starting with a general overview and trends, specifically reviewing studies in PSOs in developing countries, including Indonesia. The aim is to identify literature gaps and justify the significance of this study, addressing SAR development practices for SDG integration in local-level PSOs in developing countries, referred to in this research as ROEs in Indonesia.

It is important to note that, in the literature reviewed in this chapter, various terms are used interchangeably for sustainability reporting practices, including corporate social responsibility (CSR) reporting, social and environmental accounting (SEA), environmental reporting (ER), and sustainability reporting (SR). In this thesis, sustainability reporting is used.

2.2 The SDGs and SAR

This section provides a brief overview of the establishment of SDGs, including the challenges in the implementation at the organisational level, highlighting the significance of SAR for effective SDG implementation.

2.2.1 The SDGs

The SDGs, recognised as an essential tool for steering global sustainable development (Jayasooria, 2016), were formulated to be accomplished between 2015 and 2030. Comprising 17 goals, 169 targets, and 232 indicators, they provide a comprehensive framework for international progress in global development (UNDP, 2019). Table 2.1 briefly outlines the goals.

Table 2.1 The SDGs

The Goals	Brief Information
Goal 1	End poverty in all its forms everywhere
Goal 2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
Goal 3	Ensure healthy lives and promote well-being for all at all ages
Goal 4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Goal 5	Achieve gender equality and empower all women and girls
Goal 6	Ensure availability and sustainable management of water and sanitation for all
Goal 7	Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Goal 9	Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation
Goal 10	Reduce inequality within and among countries
Goal 11	Make cities and human settlements inclusive, safe, resilient and sustainable.
Goal 12	Ensure sustainable consumption and production patterns
Goal 13	Take urgent action to combat climate change and its impacts*
Goal 14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
Goal 15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Goal 16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Goal 17	Strengthen the means of implementation and revitalise the global partnership for sustainable development

Source: UNDP, 2019

The inspiration and content of the SDGs are rooted in extensive diplomatic discussions driven by two main factors (Sachs, 2012): growing global sustainability challenges demanding collaborative efforts and political focus and lessons gleaned from both the successes and shortcomings of the Millennium Development Goals (MDGs) implemented from 2000 to 2015. While the MDGs achieved successes such as global poverty reduction, increased female school enrolment, and advancements in environmental protection (UN, 2015), disparities across regions and countries underscored significant gaps and inequalities (UN, 2015). Consequently, the SDGs were established to extend MDGs with a 15-year program, prioritising sustainable development by integrating economic, social, and environmental dimensions (Jayasooria, 2016; Sachs, 2012; UN, 2015). The SDGs have shifted the perspectives of national leaders

beyond poverty reduction, emphasising a comprehensive approach to economic, environmental, and social issues (Jayasooria, 2016; UN, 2015). Achieving this collective focus necessitates global, organisational, and individual collaboration (Monkelbaan, 2019).

However, achieving collaborative implementation across diverse actors and levels presents challenges, necessitating the establishment of effective collaborative governance globally, nationally, and organisationally to optimise sustainability policy implementation (Sachs, 2012; Stevens & Kanie, 2016; Stafford-Smith et al., 2017; Monkelbaan, 2019).

To foster effective collaboration, some nations have incorporated global objectives into their 15-year national development plans, integrating policies and desired outcomes into the entire government process (Bowen et al., 2017; Sachs, 2012; Xue et al., 2018). This approach encompasses institutional arrangements, including formal structures for policy integration, sectorial integrative planning, and guidelines and regulations facilitating the incorporation of national SDGs at organisational levels, thereby strengthening links between and within organisations (Bowen et al., 2017). Additionally, participants, including organisations, develop their SDG implementation plans in alignment with global and national guidelines, embedding SDG objectives into their local business operations to contribute to global achievements (Bowen et al., 2017). This process underscores the significance of SDG implementation and achievement at the organisational level to contribute meaningfully to national and global SDG attainment. Organisations should ensure that their actions are significant by embedding SDGs into business operations, necessitating holistic planning, accounting, and reporting of contributions to support SDG achievement nationally and globally.

2.2.2 The importance of SAR in SDG implementation

Integrating SDGs into business operations poses challenges for organisations despite global recognition of its critical importance for substantial SDG achievement (Abeysekera, 2022). Current SDG reporting trends lag this global need (Pucker, 2021), highlighting the need for a framework to assist organisations in articulating this integration into practices (Guthrie et al., 2020). SDG target 12.6 particularly mandates sustainable management practices and the translation of SDGs into business practices incorporating into reporting processes that should be disclosed in sustainability reports (UN, 2019). The target underscores the need for

comprehensive planning, accounting, and reporting of integrating SDGs into sustainable business practices.

This research views SAR framework can effectively facilitate SDG integration into business operations as it holistically encompasses the holistic organisational process for strategic planning, measuring, and communicating sustainability performance. It involves instruments to integrate an organisation's sustainability policy, strategy, activity outputs, outcomes, and impacts (Ball et al., 2014) to produce reliable sustainability information for their stakeholders (Rinaldi et al., 2014). The SAR framework facilitates the integration to output levels and extends to outcomes and impacts crucial for meaningful SDG implementation. Existing studies indicate that due to challenges in articulating SDG integration into business practices, organisations often do not report the outcomes and impacts, limiting the SDG contributions to reporting activities and outputs (Erin et al., 2021; Beyne et al., 2021; Gneiting & Mhlanga, 2021).

A few guidelines have been established to embed SDGs into business operations and report performance in a sustainability report, such as the SDG compass, collaboratively released by the Global Reporting Initiative (GRI), United Nations Global Compact and the World Business Council for Sustainable Development (WBCSD), the practical guide for SDG integration released by GRI, and the SDGs, Integrated Thinking, and the Integrated Report, and SDG Disclosures from the International Integrated Reporting Council (IIRC). However, the literature critiques these guidelines, emphasising the lack of coverage of practice development for SDG integration into business processes, and emphasising reporting purposes (Guthrie et al., 2020; van der Waal & Thijssens, 2021). They inadequately guide corporations in fulfilling SDGs through a robust alignment framework with sufficient approaches, resulting in a lack of meaningful integration. Consequently, corporations' disclosures often serve reporting purposes only, without holistically revealing their SDG integration into business operations across the different stages of their operations. While they establish principles like accountability, materiality, and reporting boundaries to enhance report quality (GRI, 2020; Laine et al., 2021), more than practical guidance is required. Enterprises need clear direction in translating these principles into integrated practices across planning, accounting, and reporting stages to produce more accountable and transparent information regarding impactful SDG achievement for stakeholders.

This suggests that organisations need a robust framework to incorporate SDGs into their planning, accounting, and reporting, making meaningful contributions to their business operations. The SAR for SDG integration framework developed for this study, adapted from Schaltegger & Wagner (2006), offers a step-by-step guide for integrating SDGs into planning, accounting, and reporting at the organisational level. However, effective implementation across all three stages is essential to enhance organisational accountability and transparency in achieving SDG contribution (Bebbington & Unerman, 2020). Similar to how conventional management and financial accounting tools assist in planning, controlling, and reporting performance, this SAR framework also provides a potential tool for organisations to plan sustainability performance, including SDG contributions, and report performance to stakeholders (Bebbington & Unerman, 2018; 2020; Cardillo & Longo, 2020). Thus, this research adapts the SAR framework from Schaltegger & Wagner (2006) and then uses it to analyse the existing practices of how Indonesian ROEs embed SDGs into their business process through their planning, accounting and reporting to contribute meaningfully to Indonesia's SDG achievement.

Schaltegger & Wagner (2006) outline the SAR framework with three interconnected stages: sustainability planning, accounting, and reporting. This framework is premised on the basis that organisations can make meaningful contributions to SDGs by holistically integrating them into practices in their strategic planning, their accounting activities, and subsequent reporting involving both the organisation and stakeholders. This argument highlights two critical points considering holistic SDG integration practices and stakeholder involvement. Thus, the effective implementation of this framework is beyond a pragmatic perspective—more than a tool to address social and environmental issues within traditional accounting (Adams, 2017) or merely as a reporting tool (Lodhia, 2015).

The development of holistic SDG integration practices requires organisations to recognise the crucial linkages among the planning, accounting and reporting stages for significant SDG achievements, positioning SAR as a functional element in an organisation's development and implementation strategy (Porter & Kramer, 2011). The interrelated functions among the three stages emphasise a holistic view that sustainability accounting information contributes positively to SDG impacts only when effectively communicated in the reporting process (Schaltegger & Wagner, 2006). Conversely, the quality of sustainability reporting may suffer

without a foundation in effective sustainability planning and accounting processes (Schaltegger et al., 2006; Cardillo & Longo, 2020).

Additionally, involving stakeholders in the practices in the three stages aims to showcase an organisation's SDG commitment to participating in a sustainable society, mitigating potential business challenges (Adams & Larrinaga, 2019). Stakeholder involvement in SAR practices illustrates organisations viewing society as an integral part of business operations. When an organisation solely focuses on internal sustainability performance, neglecting its broader community connections, concerns arise about its sustainability and legitimacy (Adams & Larrinaga, 2019; Deegan, 2002; Burritt & Schaltegger, 2010).

In summary, recognising SAR as a functional tool and aligning it with the organisation's planning, accounting, and reporting stages is crucial for this research. This perspective guides the examination of how organisations utilise SAR for comprehensive planning, measurement, and reporting of their SDG performance. The research focuses on analysing case organisations' SDG planning, accounting and reporting practices, identifying how SDGs are integrated into strategic planning, implemented in actions, captured in the accounting system, and reported to stakeholders to demonstrate the organisations' contributions to global and national SDG efforts.

2.2.3 Sustainability accounting and reporting framework for the SDGs

This subsection outlines the adapted SAR framework from Schaltegger & Wagner (2006) to analyse SAR practices for the SDGs in Indonesian regional-owned enterprises (ROEs). Figure 2.1 illustrates the adapted SAR framework for SDGs within the sustainability planning, accounting, and reporting stages, aligning with the context of this research. This alignment is why the framework was utilised instead of others, such as the SDG Compass to analyse practices across these three stages.

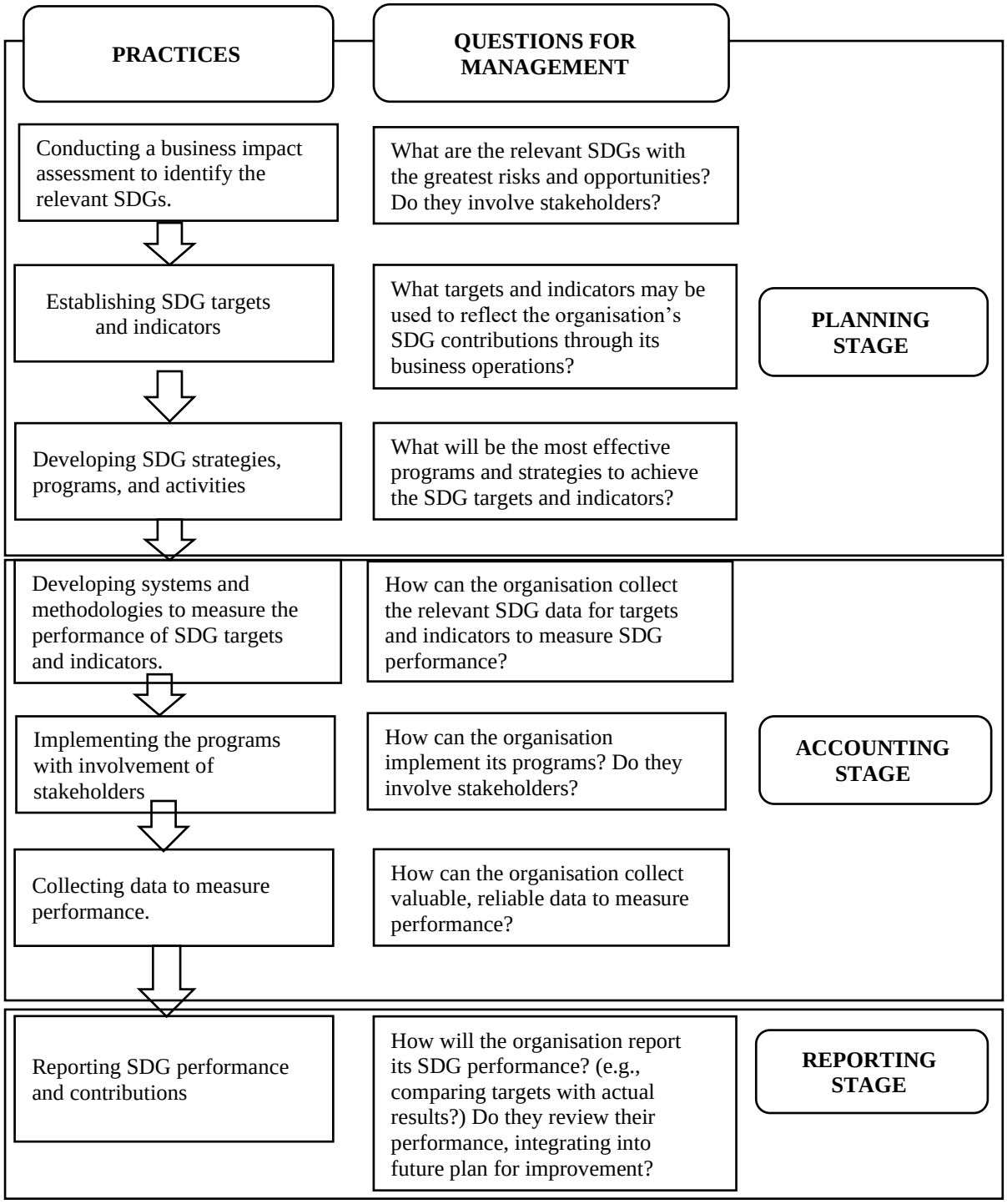


Figure 2.1 An adapted SAR Framework for SDG integration.

Source: Adapted from Schaltegger & Wagner (2006)

Schaltegger & Wagner (2006) identify two approaches organisations adopt for managing sustainability activities and performance: the 'outside-in perspective' and the 'inside-out perspective'. The outside-in perspective involves developing the SAR process based on media, public debate, and reporting agendas to communicate contributions to contested sustainability issues (Schaltegger & Wagner, 2006). Conversely, the inside-out perspective starts from strategic planning, where organisations identify sustainability risks and impacts from their core operations, linking goals, targets, indicators, and budget allocation for performance actualisation. The process then moves to accounting to capture data and measure performance, concluding with sustainability reporting that communicates achievements related to sustainable development and the SDGs. This approach focuses on aligning actual performance with targets set during strategic planning (Schaltegger & Wagner, 2006).

This research utilises the inside-out approach, rather than outside-in approach for the case-study ROEs, aligning with the nature of the sustainability reporting process of Indonesian ROEs guided by their adopted reporting standards. Most Indonesian enterprises follow the approach guided by GRI standards to strengthen their reputation for sustainability in society and the marketplace (Gunawan et al., 2022). The standards guide the organisations to initiate their sustainability reporting process by identifying sustainability impacts related to their core operations, leading to the identification of sustainability concerns integrated into their sustainability planning, accounting, and reporting (GRI, 2018). Conceptually, ROEs should substantively integrate their SDG concerns into their planning, accounting, and reporting following the guidance for impactful contributions. The subsequent subsections will delve into this approach more detail within the three stages outlined in Figure 2.1.

2.2.3.1 Sustainability planning

Sustainability planning is the fundamental process that integrates environmental, social and economic aspects into an organisation's strategic planning to design the sustainability accounting system to produce the sustainability report (Schaltegger & Wagner, 2017). Thus, sustainability planning is a critical part of the SAR framework for SDGs, providing the foundation for organisations to set up targets and indicators for their SDG contributions to be linked to the sustainability accounting and reporting stages (Schaltegger & Wagner, 2006; Gherardi et al., 2021; Cardillo & Longo, 2020).

Figure 2.1 shows that the practices in the planning stage require organisations to identify the relevant exposures of their business processes impacted by SDG concerns as well as sustainably affecting their business goals. Having identified the relevant SDG issues, they need to also develop the targets and performance indicators of the SDGs for the relevant business strategies. These practices toward integrating the SDGs into organisations' planning systems are not straightforward. Indeed, the process requires organisations to collaborate with their stakeholders and experts on sustainability issues (Busco et al., 2013; Schaltegger & Wagner, 2017). Organisations are encouraged to have stakeholder engagement as a strategic role in defining the most material issues to establish their prioritised SDGs (Adams, 2017). The engagement process is a starting point for organisations to identify and gauge holistic views of the risks and impacts from financial, customer, process, learning and development perspectives as well as non-market perspectives (Schaltegger & Wagner, 2017). The following discussion explores the processes of sustainability planning.

Figure 2.1 shows that the first step in planning is conducting a business impact assessment to identify and analyse the sustainability issues related to SDGs most affected by organisations' business operations (Gherardi et al., 2021; Schaltegger & Wagner, 2017). The issues vary based on core operations and activities (Laine et al., 2021). During this stage, organisations involving key stakeholders explicitly assess risks and opportunities related to their activities for SDG achievement (Maas et al., 2016; Adams, 2017). Additionally, organisations analyse the long-term impacts on sustainable business operations (Schaltegger & Wagner, 2017). The assessment establishes the most prioritised SDGs relevant to the organisation's core operations (Adams, 2017). The causal chain, depicting interrelated linkages between material issues impacting SDGs and the organisation's sustainable business goals, can be visually presented in a strategy map (Schaltegger & Wagner, 2017). This map offers a clear cause-and-effect relationship, ensuring the prioritised SDGs are attained while sustaining the business. In some literature (GRI, 2018; GRI, 2021; Laine et al., 2021), this process is often referred to as defining materiality issues. However, this research utilises the SAR framework, and henceforth, the term "business impact assessment" will be used.

Setting the indicators for an organisation, unit, or individual is challenging as achieving SDGs is complex with social, economic, and environmental interconnections. Organisations can leverage UN SDG targets and indicators to inform their own shaping strategies and programs

(Mhlanga et al., 2018; Puroila & Mäkelä, 2019). Regardless of the chosen approach, the procedures for defining and implementing indicators require careful planning, considering various aspects.

Firstly, organisations should determine the level of analysis and boundaries for their SDG performance indicators, whether at the individual, unit, organisation, or industry level (Laine et al., 2021). Secondly, collaborative dialogue between decision-makers and stakeholders is essential in establishing indicators, involving selecting material issues and prioritising SDGs for organisational focus (Puroila & Mäkelä, 2019; Adams, 2017). This engagement helps organisations understand the external context and societal views, aligning with the expectations of internal and external stakeholders. Thirdly, metrics for measuring indicators should be chosen based on their appropriateness to showcase an organisation's actual achievement against targeted indicators. Considerations include qualitative vs. quantitative information, relative vs. absolute numbers, and monetary vs. physical information (Herzig et al., 2006; Laine et al., 2021; Ordonez-Ponce & Kare, 2021). Organisations also need to address the timeframe for defining indicators, emphasising forward-looking indicators in the sustainability context, unlike historical events focused on financial accounting (Laine et al., 2021). This forward-looking approach considers various sustainability elements for a comprehensive outlook of organisations.

Once targets and indicators are formulated, organisations create an SDG business strategic plan, incorporating it into the SDG accounting system to align with business activities. This plan should outline the implementation of targets, indicators and strategies in programs and activities, including budgeting, resource allocation, administrative controls, and procedures such as organisational structures and policies (Laine et al., 2021). Given the significance of targets and indicators as primary tools for formulating business strategies (Ball, 2005), organisations should follow these planning practices so that the outputs of the process will be integrated into the SDG accounting system to guide sustainable performance goals (Burritt & Schaltegger, 2010).

2.2.3.2 Sustainability accounting

Sustainability accounting (SA) comprises tools and methods aiding organisations in collecting and generating information for decision-making on sustainable development (Burritt &

Schaltegger, 2010; Schaltegger & Burritt, 2006). Users, including management and external parties interested in the organisation's sustainability performance, benefit from this information (Zyznarska-Dworczak, 2020).

Some organisations view sustainable accounting as a pragmatic imperative, a task focused on preparing information for sustainability reports (Zyznarska-Dworczak, 2020). In contrast, this research contends that SDGs accounting should be seen beyond a reporting tool. It emphasises sustainability accounting as an integrated system encompassing tools, practices, and methodologies for measuring organisations' sustainability performance (Schaltegger & Wagner, 2006; Maas et al., 2016). Sustainability accounting serves as both a measurement system and a strategic management tool, assessing economic, social, and environmental activities and performance and facilitating communication of achievements to key stakeholders (Zyznarska-Dworczak, 2020, p.10).

Based on these definitions, this research contends that sustainability accounting in SDG integration functions as a system to transform data into information aligned with targets and indicators from the sustainability planning stage. This information facilitates management and stakeholders in assessing organisations' implementation of their SDGs business strategic plan, guiding performance evaluation, internal control, reporting and future strategic planning (Schaltegger & Wagner, 2006; Maas et al., 2016; Zyznarska-Dworczak, 2020; Laine et al., 2021).

Figure 2.1 depicts sustainability accounting as a crucial link connecting sustainability planning and reporting. This system is constructed upon defined targets and indicators that guide the business strategic plan formulated during the sustainability planning process. Therefore, the system empowers organisations to shift from procedural tasks to fostering behavioural change, a transformative process enhancing performance (Schaltegger & Wagner, 2006; Maas et al., 2016; Zyznarska-Dworczak, 2020). The measurement results, indicating the extent of the organisation's SDGs plan implementation, serve internal and external stakeholders for purposes like performance measurement, future strategic planning, internal control evaluation, and sustainability reporting. Figure 2.2 illustrates this system.

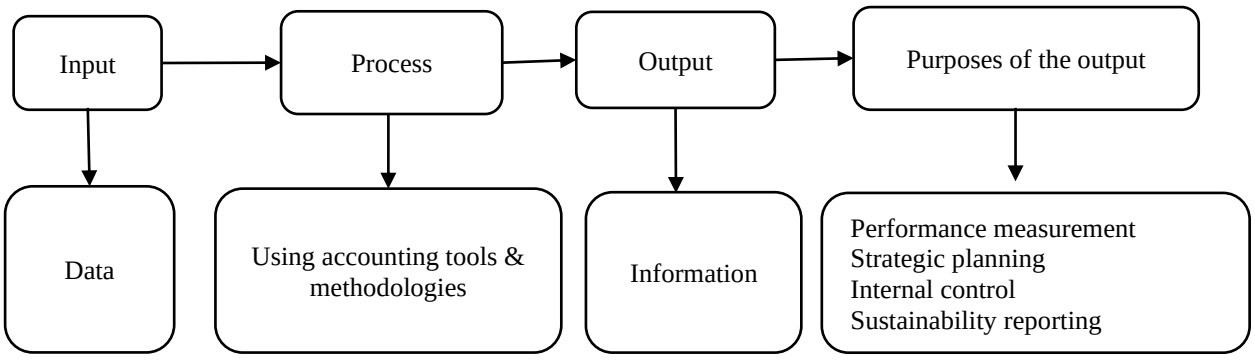


Figure 2.2 The sustainability accounting system

Sources: Developed from Zyznarska-Dworzack (2020); Maas et al. (2016); Schaltegger and Wagner (2006).

Figure 2.2 indicates that input data in the sustainability accounting system serves as the initial step in generating pertinent information for decision-making. Thus, the decision relies on the input data's quality concerning the various goals incorporated in the targets and indicators (Schaltegger & Burritt, 2006; Burritt & Schaltegger, 2010), requiring reliable, valid, understandable, and comparable input data to generate useful information for decision-making (Zyznarska-Dworczak, 2020; Burritt & Schaltegger, 2010). Organisations must establish a reliable database as a valid data source for measuring defined SDG performance indicators.

The tools and methodologies enable organisations to process data into quality and valuable information. Organisations can choose from various tools and methodologies to incorporate complex sustainability factors based on their circumstances and specific decision-making needs (Burritt & Schaltegger, 2010; Maas et al., 2016), including strategic planning, performance measurement and reporting (Laine et al., 2021). All accounting tools and methodologies, however, should ultimately aim to improve behaviour and impact performance enhancement (Schaltegger & Burritt, 2006).

This research argues that to effectively utilise sustainability accounting for fundamental behavioural change within organisations toward meaningful SDG achievement, an organisation needs to define SMART performance indicators and robust control procedures starting from the sustainability planning stage. The effective planning process will positively

impact the design and implementation of a sustainability accounting system, resulting in meaningful interpretation and appropriate use of indicators and information produced (Schaltegger & Burritt, 2006; Burritt & Schaltegger, 2010).

Understanding the concept of sustainability accounting enables this research to assess the organisation's readiness to develop sustainability accounting practices that integrate SDG planning and reporting within an integrated SAR framework. This concept provides insights into how the ROEs examined can set up practices of utilising accounting tools and methods, guided by performance indicators defined in the planning stage, to drive behavioural changes and make meaningful contributions to SDG achievement. The practices developed should depict that the use of accounting tools is not solely for the reporting process but can also function to generate information for improving performance and inform future strategic planning. Establishing these practices demonstrates the organisation’s strong commitment to impactful SDG contributions expected by internal and external stakeholders.

2.2.3.3 Sustainability reporting

Sustainability reporting is an array of reporting mechanisms that communicate an organisation's sustainability information to its stakeholders (Schaltegger et al., 2006; Laine et al., 2021). The reported information includes strategies, priorities, policies, practices, performance, and business operation impacts concerning sustainability issues (GRI, 2020).

Many organisations view sustainability reporting as a process solely focused on publishing external reports, whether in print or electronic formats. However, the development of sustainability reporting encompasses various stages involving organisations and stakeholders. It starts with setting sustainability goals in the strategic plan, followed by data collection, measurement, and analysis in the accounting stage, leading to communicating sustainability outcomes and information in the final reporting stage (Schaltegger et al., 2006). Therefore, sustainability reporting extends beyond external reporting.

Figure 2.1 illustrates that Sustainable Reporting is an integrated process involving open communication among organisations and stakeholders, achieving a balanced view of sustainability expectations from the planning and accounting stages (Schaltegger et al., 2006). However, incorporating stakeholders' diverse needs into core business management processes through an integrated reporting approach poses challenges (Schaltegger & Wagner, 2006).

Organisations should transparently present balanced information in their SDG report, detailing actions taken in response to risks and opportunities related to their environmental resource dependencies (Laine et al., 2021). The disclosed information should convey that performance results from planned and measured sustainability responsibilities in the planning and accounting stages (Schaltegger & Wagner, 2006; Burritt & Schaltegger, 2010; Laine et al., 2021). Moreover, the presented information must be accountable, reflecting organisations' actions concerning sustainability duties. Critical characteristics for developing a valuable sustainability report, including accuracy, balance, clarity, comparability, reliability, stakeholder inclusiveness, and timeliness, are outlined in Table 2.2 (Laine et al., 2021; GRI, 2020).

Table 2.2 Key characteristics of sustainability reporting

Concept	Description	Points to consider
Accuracy	Information in a report should be sufficiently accurate and detailed to allow readers to assess an organisation's performance.	Organisations are at times vague when accurate and detailed to allow readers to present negative information.
Balance	A report should include both positive and negative aspects so that users can assess the overall performance of the organisation	Organisations often emphasise positive information. Frameworks and assurance practices hope to help in getting more balanced reports
Clarity	Information in a report should be presented in a clear, understandable and accessible form	User groups vary in their knowledge and ability to understand information. What is complex to some can be self-evident and simplistic to others
Comparability	Information should be selected, compiled and reported consistently. It should allow an analysis of changes both over time and concern to other organisations where possible	Reporting frameworks can help by providing standard practices. Does the organisation provide information from previous years to allow readers to easily see trends and developments?
Reliability	Reported information should be derived from reliable processes, which could also be subject to independent evaluation	Implies that in addition to the reported information, it is also relevant to discuss how the information has been collected and compiled
Stakeholder inclusiveness	An organisation should identify and engage stakeholders and discuss how it has responded to their expectations and interests	Stakeholder groups can have very different expectations. Different forms of reporting have different audiences, which can have varying expectations
Timeliness	Reports should be published on a regular schedule and promptly so that it allows the report users to make informed decisions	Web-based reporting can often be more timely, but an annual and regular reporting cycle can have other advantages. Timeliness is not just about speed but also regularity.

Source: Laine et al. (2021, p.91)

Figure 2.1 shows that sustainability reporting is the final stage of the integrated SAR framework, intending to communicate an organisation's sustainability performance to relevant

stakeholders (Schaltegger & Wagner, 2006). Some organisations strategically view sustainability reporting as an economic tool, akin to a profit report, focusing on maximising shareholder value. Within this category, organisations primarily provide economic information about their sustainability performance to influence economically influential stakeholders (Laine et al., 2021).

Thus, when applying the SAR framework to SDG reporting, information should be communicated holistically, presenting information to stakeholders affected by the organisation's actions as defined in the planning stage (Thijssens et al., 2016). The report should convey the organisation's active engagement with stakeholders through dialogue and collaboration, identifying and prioritising material issues, responsibilities, and accountabilities (Schaltegger & Wagner, 2006; Laine et al., 2021). It should describe integrated activities involving various stakeholders in strategic planning and sustainability practices (Maas et al., 2016). As part of this holistic approach, organisations should report their SDG contributions and demonstrate a commitment to reviewing performance for future improvement, integrated into future planning. The planning, accounting, and reporting cycles within the SAR framework for SDGs should remain continuously interconnected. Thus, ROEs should articulate the rationale behind their communication approach, as reflected in the contents of their sustainability report, showcasing their holistic views, actions, and roles in advancing society toward sustainability.

In summary, this discussion on the integrated SAR framework for the SDGs elucidates the interconnected relationship among sustainability planning, accounting, and reporting in developing SAR for the SDGs. Understanding the strategic planning stage provides insights into how and why organisations align relevant SDGs into their strategies, goals, targets, performance indicators, budget allocation, resources, and procedures. Exploring the sustainability accounting stage extends the perspective on how ROEs use accounting tools and methodologies for behavioural change to improve SDG performance, rather than just measuring actual performance against targeted indicators. Finally, analysing the sustainability reporting stage provides essential information on how ROEs develop reporting practices with a holistic view, not only disclosing SDG activities and outputs for reporting purposes but also communicating commitments, translating into organisational values, objectives, and SDGs

targets and performance produced as part of the sustainability planning and accounting processes with continuous improvement for impactful contributions.

2.3 Prior studies of SAR for the SDGs in PSOs

This section starts with a general overview of SAR studies focusing on SDG accounting and reporting practices. It initially reviews SAR studies in PSOs and in developing countries, particularly elaborating on the importance of SAR studies for the SDGs employing a holistic approach in PSOs in developing countries. Finally, this section discusses the practices of SAR in Indonesian PSOs, especially local-level PSOs (or ROEs), to highlight the main focus of this research.

2.3.1 SAR studies focusing on the SDGs

This subsection reviews trends in SAR studies, specifically focusing on planning, accounting, and reporting SDGs. Existing studies focus more on SDG reporting, emphasising disclosure analysis through report analysis rather than employing holistic case study approaches looking at practices in planning, accounting and reporting at the organisational level. Additionally, they provide more evidence on organisational and institutional factors influencing SDG reporting. The subsequent paragraphs outline the findings of the extant literature, emphasising the identified research gap.

Research is needed to investigate the utilisation of SAR practice development in supporting transparency and accountability in implementing the SDGs at the organisational level (Bebbington & Unerman, 2018). Given that implementing the SDGs at this level is deemed crucial for broader success at national and global scales (Bebbington & Unerman, 2018), exploring how organisations integrate their sustainability agenda aligned with national SDGs into their SAR practices becomes imperative (Mhlanga et al., 2018; Gneiting & Mhlanga, 2021). The findings of SAR studies in this SDG context are expected to enhance comprehension of SDG implementation at the organisational level, enabling the evaluation and advancement of SDG-related accounting policies (Adams, 2017; Bebbington & Unerman, 2018). However, existing literature provides limited evidence on the practices of SAR for SDG implementation at the organisational level, encompassing human-related activities in planning sustainability goals, measuring sustainability performance, and developing sustainability

reporting (Bebbington & Unerman, 2020; Zyznarska-Dworczak, 2020; Curtó-Pagès et al., 2021; Awuah et al., 2023).

The extant literature focuses on how organisations disclose the SDGs in their sustainability report (Haywood et al., 2020; van der Waal & Thijssen, 2020; Emma & Jenifer, 2021; Silva, 2021; Lodhia et al., 2022), particularly in responding to their national SDGs (Gunawan et al., 2020; Ike et al., 2021) and explore motivating and challenging factors in the broader context of reporting practices (Rosati & Faria, 2019; Elalfy et al., 2020; Subramaniam et al., 2023). However, these findings provide essential evidence for decision-makers seeking to improve sustainability reporting practices through integration with planning and accounting. This motivates the research to investigate SDG integration at the organisational level, utilising SAR across organisations' planning, accounting, and reporting stages.

For example, the existing literature indicates how the SDG disclosures in multinational enterprises' reports tend to be symbolic, offering limited insight into their prioritisation of SDGs and how these priorities influence corporate contributions to SDGs through fundamental changes in business operations (van der Waal & Thijssen, 2020; Silva, 2021; Lodhia et al., 2022). Notably, these enterprises often disclose their SDG-related activities without a clearly defined business case in strategic planning, potentially resulting in insignificant contributions and slow progress towards SDG realisation (Haywood et al., 2020; Emma & Jenifer, 2021).

Similarly, some studies highlight shortcomings in SDG reporting by top listed companies, whereby they establish the link between their SDG-related activities and national SDGs in their sustainability or annual reports but without providing a rationale for selecting specific SDG issues and omitting details on actual SDG actions and performance measurements (Avrampou et al., 2019; Poddar et al., 2019). This narrative approach, coupled with insufficient disclosure of concrete actions, results in a lack of focus and inadequate information for stakeholders in assessing companies' meaningful contributions to national SDGs (Avrampou et al., 2019; van der Waal & Thijssen, 2020). This poses a challenge for stakeholders, including institutional investors, who cannot rely on sustainability reports for decision-making (van der Waal & Thijssen, 2020).

Some companies perceive the SDGs as strategic opportunities but need help fully integrating them into their business functions. Many have included the SDGs in executive agendas due to

external pressures and internal strategic considerations. Despite applying reporting guidelines, transformation remains challenging for companies (WBCSD, 2018; PwC, 2019; KPMG, 2020). Over 70% of surveyed companies mention SDGs in reports, but only 14% specify targets, and less than 10% of that subset provide quantitative measurements (PwC, 2019;). Companies gradually integrate SDGs into their business strategies using SAR for planning, performance measurement, and reporting (KPMG, 2020). However, the integration into the SAR framework lacks sufficient establishment, resulting in an inconsistent link between SDGs and corporate goals, with a focus on positive contributions, presenting an unbalanced view in sustainability reports (KPMG, 2020).

For instance, a case study on seven major Italian airport infrastructure companies highlights their inability to achieve SDG goals 11 and 17. Ineffective implementation of specific initiatives at planning and operational levels posed challenges, including insufficient staff knowledge in utilising sustainability accounting tools for improved planning (Vaiao & Varriale, 2019).

Similarly, Gneiting & Mhlanga (2021) and Mhlanga et al. (2018) found that SDG integration practices in 76 global companies' business operations are insufficient for meaningful SDG achievement. Instead of guiding agenda setting, SDGs are often repackaged, cherry-picked, and decoupled by companies to gain reputational benefits without substantial commitment. Repackaging involves framing existing sustainability programs as SDG contributions, cherry-picking focuses on engaging in profitable or easy-to-address SDG topics, and decoupling is facilitated by the lack of robust internal and external evaluative mechanisms, allowing voluntary reporting to control information flow and focus on discrete contributions without accountability for core business impacts (Gneiting & Mhlanga, 2021). Consequently, SDGs have not substantially influenced these companies' sustainability approaches, as they are not integrated into strategic planning and reporting practices (Gneiting & Mhlanga, 2021; Mhlanga et al., 2018). Nevertheless, using SDGs as a framework for fundamental change toward sustainable operations is crucial. Internally, top-level advocacy is essential to drive change within organisations and sets the tone for transformative practices (Lodhia et al., 2022).

These extant studies offer insights for organisations, regulatory bodies, and policymakers, emphasising the need for ongoing SDG progress through SAR utilisation at the organisational level, regulations, and mandates. They suggest further exploration of the factors affecting SDG

reporting processes and practices, including a review of government policies to compel companies to integrate national SDGs into their business operations holistically (Avrampou et al., 2019; Poddar et al., 2019; Gneiting & Mhlanga, 2021; Emma & Jenifer, 2021). For instance, many studies call for research to explore sustainability accounting for SDGs and how adequate accounting tools for performance measurement are established as part of SDG disclosure practices to promote behavioural change and meaningful SDG achievement (van der Waal & Thijssen, 2020; Zyznarska-Dworzack, 2020). A robust SDG measurement and reporting framework is needed, considering the demand for information on corporate impacts on sustainable development (Subramaniam et al., 2023).

Indeed, some empirical studies highlight various organisational and institutional factors influencing the reporting practices, such as GRI compliance, sustainability report assurance, CEO duality, organisational size, female directors, and a separate sustainability committee, which often correlate with higher-quality SDG reporting (Subramaniam et al., 2023). For instance, larger publicly listed firms, particularly in the industries with higher sustainability impacts, and the international standard adapters, such as the GRI member organisations, are more likely to integrate the SDGs into their reporting (Elalfy et al., 2021).

Additionally, a specific country or region may have a particular influence on the reporting practices. Organisations in countries with higher climate change exposure, CSR enforcement, and tertiary education funding are likely to report SDGs. Similarly, organisations in countries with more indulgent, egalitarian, short-term-oriented, and individualistic cultures and lower market coordination and employment protection levels are more willing to disclose their SDG performance (Rosati & Faria, 2019). In specific regions, such as the Pacific, managers perceive that normative and regulatory pressures significantly influence their enterprises' sustainability reporting practices, anticipating future economic benefits from meeting these pressures (Qian et al., 2020).

Nevertheless, enterprises also encounter challenges in SDG integration, such as inadequate human resources at the organisational level (Sobkowiak et al., 2020). In the broader context of sustainability reporting practices, in Pacific regions like Sri Lanka, Indonesia, Bangladesh, Vietnam, and the Philippines, barriers such as lack of awareness, insufficient education and training, higher costs, time constraints, and limited government support hinder sustainability reporting practices (Dissanayake et al., 2020). Therefore, specific interventions are needed

based on contextual factors (Tilt, 2016). For instance, Dissanayake et al. (2020) found that advanced reporting countries like Sri Lanka, Indonesia, and Bangladesh need more support and resources, necessitating reinforcement of internal institutional practices to establish sustainability reporting as an institutional norm.

These findings highlight the diverse impact of organisational and institutional factors on SAR practices for holistic SDG reporting across countries and organisations. The findings support the need for research to investigate planning, accounting, and reporting practices in SDG integration, delving into internal organisational practice development, including human capacity, internal rule enforcement, and instructed systems. Additionally, exploring the significant influence of institutional pressures and challenges is crucial, as these empirical studies emphasise their substantial impact on organisational practices.

Previous studies primarily emphasise reporting practices, noting enterprises' intentions to use SAR for SDG integration into business processes. However, the outputs in reports show inconsistent and unbalanced information, indicating insufficient articulation of SDG integration. This motivates a holistic case study investigating how organisations develop SAR practices in planning, accounting, and reporting for SDG integration at the organisational level. The investigation goes beyond evaluating sustainability reports or pragmatically assessing each SAR framework stage, exploring integrated SAR for SDGs, including human-related activities and considering internal factors and institutional pressures influencing these practices.

This research argues that a holistic exploration of integrated processes is crucial for developing SAR practices to integrate SDGs into business processes for meaningful achievement. Existing SAR research has overlooked these integrated processes, often failing to connect sustainability accounting and reporting (Schaltegger & Wagner, 2006; Zyznarska-Dworczak, 2020). Despite explicitly recognising sustainability reporting as an independent aspect, sustainability accounting's role in the SDG reporting process is underemphasised (Zyznarska-Dworczak, 2020). Consequently, there is limited evidence in current knowledge regarding SAR for SDG implementation, incorporating sustainability accounting tools and methods for planning, performance measurement, and sustainability reporting (Bebbington & Unerman, 2020; van der Waal & Thijssen, 2020; Zyznarska-Dworczak, 2020; Subramaniam et al., 2023). The current study addresses this gap by employing an integrated SAR for SDGs framework and practice and institutional theories for a comprehensive investigation. This approach enables the

investigation of how practices are driven by internal practice development and institutional factors affecting the human-related activities and arrangements to understand, transform, implement, and report SDGs within an integrated SAR framework, interlinking planning, accounting, and reporting activities.

2.3.2 SAR studies for SDG implementation in PSOs

The review in Section 2.3.1 underscores a gap in current studies, as was also observed in structured literature reviews like those conducted by Garde-Sanchez et al. (2018) and Awuah et al. (2023), that they predominantly focus on SAR exploration within SDG reporting among private sector entities. However, focusing on the private sector's activities to achieve the sustainability agenda has been questioned by some authors (Gray & Bebbington, 2000; Bebbington & Gray, 2001; Friedman, 2007) because the private sector, as profit-oriented businesses, are less likely to genuinely address sustainability in their business operations due to potential impacts on profit margins.

In contrast, PSOs are identified as pivotal contributors to the sustainable development agenda (Bebbington & Unerman, 2018; 2020). PSOs are government-owned and controlled entities that serve a vital role in a nation's economic activity by providing public values of essential utilities and services for society (Broadbent & Guthrie, 1992; Guthrie & Martin-Sardesai, 2020). They encompass various organisations such as national government ministries, regional and local government authorities, healthcare providers, emergency services, trading funds, research and educational institutions, foundations, and public enterprises[2] (Ball & Grubnic, 2007). With their core function of delivering public values to society, PSOs are crucial actors in advancing SDG achievement. To effectively communicate their contributions, PSOs require SAR, serving as a tool to articulate their public values through SDG implementation, encompassing planning, realisation, measurement, and reporting processes (Guthrie & Martin-Sardesai, 2020). Accounting scholars should further investigate how SAR can support PSOs in

[2] Public enterprises include state-owned enterprises (SOEs), controlled and owned by the central government, and Regional-Owned Enterprises (ROEs), controlled and owned by local government or municipal government (Grossi et al., 2015).

fulfilling their sustainability role for SDG achievement (Guthrie & Martin-Sardesai, 2020; Ball & Grubnic, 2007).

Only a few studies have demonstrated the critical function of SAR in enabling PSOs to manage sustainability operations, identify challenges, and enhance performance. For instance, a UK local government council case study showcased how environmental accounting tools were utilised to identify sustainable environmental management challenges and improve environmental service delivery, thereby enhancing performance (Ball, 2005). Additionally, PSOs across various regions perceive sustainability reporting as more than just a communication tool; their accounting practices influence organisational change by managing reliable data in measuring sustainability performance to be disclosed in their reports for stakeholders (Domingues et al., 2017). Effective managerial leadership is crucial for integrating sustainability into planning, accounting, and reporting processes to achieve impactful outcomes (Ball, 2005; Ball et al., 2014; Lodhia et al., 2022).

Furthermore, institutional pressures significantly impact disclosure practices in PSOs. Studies have demonstrated how the pressures affect PSOs, including SOEs, a type of PSO. Coercive pressures from the European directive 2014/95/EU had limited influence on SOEs, with normative and mimetic pressures driving sustainability reporting more than regulatory compliance (Nicolo et al., 2020). Spanish SOEs prioritise symbolic legitimacy, shaping a positive image without disclosing material sustainability issues selection processes (Ruiz-Lozano et al., 2022). While institutional pressures shape practices, robust regulation enforcement is crucial for improving transparency and accountability in reporting (Annesi et al., 2021). Additionally, incorporating government representatives on boards can supervise the integration of sustainability agendas into PSOs' business processes, fostering the creation of public values (Argento et al., 2019).

Moreover, some studies underline SAR in SDG implementation by PSOs. They highlight how collaboration and extensive infrastructure within and among institutions play a crucial role in SDG accounting. This was exemplified by the UK government's application of a collaborative approach, coupled with the necessary infrastructure among institutions, to provide accurate biodiversity performance measurement reporting on SDG 15 (Sobkowiak et al., 2020). However, extensive stakeholder collaboration poses challenges, especially with conflicting expectations (Kaur & Lodhia, 2018). PSOs may adopt overlapping guidelines (Goswami &

Lodhia, 2014) to address diverse multi-stakeholder information expectations, particularly in the context of hybrid enterprises (Argento et al., 2019). Hybrid enterprises, such as SOEs and ROEs, relying on a mix of revenues and government budgets, face challenges balancing stakeholder interests (Grossi & Thomasson, 2015). These enterprises, with diverse stakeholders, encounter conflicting objectives, engage in various sustainability agendas (Grossi et al., 2015; Maine et al., 2020), address multiple sustainability issues in reporting practices that might be irrelevant and have overlapping issues, resulting in a limited contribution to a sustainable society (Goswami & Lodhia, 2014; Lodhia et al., 2020). Another challenge lies in the accountability of SDG-related programs and activities, given the complexity of addressing 17 goals, 169 targets, and 232 indicators in reports on PSOs' contributions to creating public value through SDG implementation (Guthrie & Martin-Sardesai, 2020).

These prior studies highlight how SAR is a functional tool assisting PSOs in implementing their sustainability agenda, including pressures and challenges encountered. However, SAR studies exploring how PSOs, particularly at local levels, integrate SDG into their business operations have been overlooked (Ball & Grubnic, 2007; Dumay et al., 2010; Fusco & Ricci, 2019; Bebbington & Unerman, 2018;2020; Lodhia et al., 2020), given the significance of SAR to assist PSOs in creating public values through SDG implementation and achievement (Guthrie & Sardesai,2020). Notably, there is a specific call for research investigating how PSOs, particularly at the local level, utilise SAR to integrate SDGs into their business operations (Kaur & Lodhia, 2019; Fusco & Ricci, 2019; Bebbington & Unerman, 2018, 2020), given that 65% of SDG targets focus on local sustainable development within the operational domain of local PSOs (Guarini et al., 2022).

Several studies have examined the implementation of the sustainability agenda by local-level PSOs. Indeed, despite their autonomy in selecting SDGs aligned with local issues, local PSOs are influenced by institutional pressures in identifying the sustainability agenda, particularly from coercive pressures, such as through citizen engagement. For instance, Annesi et al. (2021) found that youth involvement in climate change enforcement policy strongly influenced climate change-related SDG integration at a local PSO in Italy, leading to institutional shifts and the formalisation of sustainability strategies within municipal decision-making practices. The significance of stakeholder collaboration in implementing a sustainability agenda through SAR practices was also emphasised in Australian local councils (Kaur & Lodhia, 2018). This

collaboration facilitated the effective articulation of sustainability information, met stakeholder expectations, and disclosed public value creation. These findings emphasise that coercive pressures, primarily through local stakeholder involvement, notably influence SAR practices in planning, accounting and reporting, facilitating effective sustainability agenda implementation. Local stakeholders have closer proximity to local-level PSOs, exerting effective control over their functions in addressing local sustainability issues.

However, extensive stakeholder collaboration poses challenges, especially with conflicting expectations (Kaur & Lodhia, 2018). This research asserts that employing SAR to integrate SDGs into business processes provides organisations with a focused vision (Hajer et al., 2015) to encounter these challenges. SAR offers diverse accounting tools, enabling local-level PSOs to prioritise SDG issues in addressing multiple stakeholders' expectations accountably. For example, the challenge was demonstrated in the Emilia-Romagna Region case in Italy in embedding financial and non-financial targets to meet various stakeholder expectations in its operations for public value creation through SDG implementation (Gherardi et al., 2021). Nevertheless, the region applied a hybrid approach combining SDGs and integrated reporting in their SAR framework, involving integrated reporting of financial and non-financial information, alignment of actions with SDGs, and stakeholder involvement through participation and engagement processes. This hybrid SAR approach enabled this local-level PSO to identify relevant SDGs, specify targets and actions, develop an accountability strategy, test the reporting strategy, and disseminate a report of the SDG contribution through specific communication actions. Indeed, given the complexities of SAR practices in diverse organisational contexts globally, accounting scholars are encouraged to investigate how SAR can function in various PSOs in different organisational settings to identify and integrate relevant SDGs into their business processes to meet both national and global public demands (Fusco & Ricci, 2019).

This prior evidence underscores that while local-level PSOs play pivotal roles in accelerating SDG achievement at national and global levels, challenges persist in developing SAR practices to integrate sustainability agendas into their business operations. Several studies underscore internal and institutional improvement to enhance SAR practices for achieving sustainability goals. Internally, the managerial capacity of local-level PSO decision-makers is crucial for aligning SDGs with stakeholder expectations and fostering theoretical frameworks and

practices for embedding SDGs into public management decision-making (Ball et al., 2014; Guarini et al., 2022; Lodhia et al., 2022). Institutionally, enforced collaboration among institutions is essential for impactful SDG implementation at the organisational level, necessitating sufficient institutional arrangements through regulations, guidelines, and infrastructures (Bowen et al., 2017). The consistent aims of regulations, guidelines and arrangements among institutions for practice development within organisations are crucial to minimise the challenges, as SDGs require collective actions at organisational, national, and global levels for planning, implementing, monitoring, and reporting on the sustainability agenda (Stafford-Smith et al., 2017).

This research specifically examines ROEs, a subset of public enterprises in Indonesia, with structures and activities similar to SOEs but distinct local or municipal government ownership (Grossi et al., 2015). ROEs have hybrid objectives—serving social welfare, providing public services, and aiming for profitability (Garde-Sanchez et al., 2018; Guthrie & Martin-Sardesai, 2020). ROEs, as part of local-level PSOs, are pivotal for SDG implementation, reflecting the decentralised nature of SDGs, with a stronger focus on local development (Guarini et al., 2022; Annesi et al., 2021). Additionally, due to their hybridity, enforcing them to engage with diverse stakeholders with conflicting goals places high expectations on ROEs to extensively disclose SDG achievement in their sustainability reports (Guthrie & Martin-Sardesai, 2020; Garde-Sanchez et al., 2018; Grossi et al., 2015). Thus, this study focuses on ROEs in a developing country context, which is particularly relevant in response to Bebbington & Unerman's (2020) observation of limited SDG accounting-related studies in the public sector at the local government level, which plays a pivotal role in SDG implementation.

In summary, previous studies mainly focus on what and how PSOs report their sustainability issues (Fusco & Ricci, 2019). However, there is a gap in understanding why insufficient disclosures occur, how practices develop, resulting in inadequate disclosures, and how institutional pressures and challenges affect this development (Argento et al., 2019; Fusco & Ricci, 2019). Existing studies highlight the link between institutional pressures and sustainability reporting, underlining that PSOs develop their reporting based on organisational perspectives shaped by the most dominant institutional pressures, including coercive, normative, and mimetic influences (Ball, 2005; Domingues et al., 2017; Lodhia et al., 2020). Nevertheless, they lack a comprehensive exploration of the linkages between the institutional

pressures influencing practice development and shaping the disclosures (Garde-Sanchez et al., 2018; Awuah et al., 2023). This research aims to fill this gap by exploring institutional pressures and practice development within ROEs for meaningful SDG contributions that are then disclosed in their reports (Argento et al., 2019). By doing so, the study seeks to understand the interlinkages between the pressures and organisational processes in holistic sustainability reporting, covering the three stages of sustainability planning, accounting, and reporting, including how ROEs define material issues, integrate them into activities, and communicate them to stakeholders.

Moreover, existing research predominantly concentrates on developed countries, offering limited attention to SAR for SDGs in PSOs in developing nations, despite increasing calls for research in this domain (Garde-Sanchez et al., 2018; Fusco & Ricci, 2019; Kaur & Lodhia, 2019; Bebbington & Unerman, 2018, 2020; Awuah et al., 2023). Additionally, there is limited evidence exploring SAR practices in planning, accounting and reporting SDG implementation by local-level PSOs in developing countries. This is notwithstanding the fact that PSOs play vital roles in SDG implementation and achievement due to the nature of SDGs, which focus on local development to accelerate substantial achievement at national and global levels. Despite the relative infancy of SAR practices in local-level PSOs, a few studies indicate effective mechanisms driving the development of sustainability reporting practices in these organisations. Although some still perceive sustainability reporting as primarily a communication tool, existing literature highlights instances of extensive stakeholder involvement in sustainability planning, accounting, and reporting.

The following subsection explores how exploring SDG accounting and reporting in developing countries is crucial for accelerating SDG achievement globally.

2.3.3 SAR studies of PSOs in developing countries

This subsection reviews existing literature on SAR studies and practices in PSOs in developing countries, specifically emphasising public enterprises and local government contexts. It highlights limited studies examining the holistic incorporation of SDGs into the SAR in PSOs in developing nations.

Developing countries encounter more significant challenges in achieving the 2030 SDGs than developed countries (UNDP, 2019). Developing countries, housing 80% of the global

population (Tilt et al., 2020), confront intensified sustainability issues, including climate change, water pollution, biodiversity loss, and poverty (Qian et al., 2021), the critical issues prioritised in the SDGs for resolution by 2030 (UN, 2019). The Covid-19 pandemic exacerbated these challenges, creating additional sustainability concerns (Qian et al., 2021). These circumstances prompt populations in the developing world to prioritise economic growth over sustainable development (UN, 2019). The previous subsection elaborated on this perspective more broadly, focusing on private companies in developed nations.

Investigating contextual factors that might motivate or undermine SAR practices in PSOs in developing countries that differ from developed nations is essential. Numerous factors contribute to SAR implementation in SOEs in developing nations, including inadequate training and guidance, lack of awareness, insufficient law enforcement, and high pressures from stakeholders, the market, and society (Tauringana, 2020). Other contextual challenges concerning enterprises' social and environmental accounting (SEA) practices include lack of regulation implementation and enforcement, political tensions and forces, cultural and religious influences, the tension between boosting economic growth and sustainable development, pressures from international stakeholders and a low level of stakeholder empowerment (Qian et al., 2021). These findings provide the foundations for this research to conduct a further evidence-based study to understand comprehensively how these contextual challenges influence SAR development. The studies recommend a prioritised policy to improve SAR practices in developing countries (Tauringana, 2020). This type of study is under-represented in prior literature, particularly related to SAR for the SDGs (Fusco & Ricci, 2019; Bebbington & Unerman, 2020; Qian et al., 2021).

Accounting scholars are urged to contribute to PSOs in developing countries through research on SDG accounting and reporting (Fusco & Ricci, 2019; Kaur & Lodhia, 2019; Bebbington & Unerman, 2020; Qian et al., 2021). Given the weak sustainability reporting infrastructure in many developing countries, accounting scholars must focus on initiating changes in holistic reporting practices to produce accountable sustainability reports in these regions (UNCTAD, 2023). Their findings can aid PSOs in developing countries in utilising SAR to enhance the accountability of incorporating SDGs into operations, enhancing the sustainable development position of the developing world (Lauwo et al., 2022). Nevertheless, this context remains

underexplored in prior SAR studies, particularly regarding local-level government (Bebbington & Unerman, 2020).

Further, SAR studies on developing country PSOs, focusing on local governments and public-owned enterprises, have been predominantly conducted in Malaysia and China (Fusco & Ricci, 2019). These studies, employing institutional and legitimacy theories, examine reporting practices and determinants using secondary data like annual and sustainability reports. Notably, these studies do not specifically address SDG accounting and reporting. The studies show the institutional and organisational factors driving the reporting practices. Said et al. (2009) found that coercive pressures through Malaysian government interventions are crucial in driving sustainability disclosures. As a shareholder, the government enforces corporate governance mechanisms to ensure compliance with accounting standards and legal requirements, aiming to produce reliable CSR reports for stakeholders.

Likewise, imposing substantial penalties for non-compliance compels Malaysian SOEs in the plantation industry to enhance their sustainability reporting disclosure (Amran & Haniffa, 2011). Notably, enterprises with legally binding contracts with the government tend to provide more disclosures, using sustainability reporting as a means to persuade their key stakeholder, the government, of their socially responsible and legitimate standing (Amran & Haniffa, 2011). Furthermore, coercive pressures, particularly regulation enforcement, drive Malaysian local councils to disclose sustainability content on their websites (Joseph et al., 2014). Guided by the comprehensive government guidelines of the Malaysian sustainability agenda, these councils are effectively directed in developing their sustainability information on their websites. Nevertheless, Belal (2008) investigated companies in Bangladesh, including publicly owned enterprises, focusing on their environmental and climate change disclosures. The study found that despite the existence of an environmental policy in Bangladesh, the enforcement is weak. As a result, there is a low level of environmental and climate change disclosures among enterprises in the country.

Furthermore, in addition to coercive pressures, public sector sustainability reporting awards, functioning as a normative driver, notably influence reporting disclosure levels (Joseph et al., 2014). Similarly, in China, managers recognise a mix of coercive, normative, and mimetic pressures impacting reporting practices, with peer institutions and government being deemed the most significant (Zhao & Paten, 2016).

Additionally, existing studies indicate that social and environmental reporting is seen as a tool to enhance the public image of PSOs. Despite insufficient environmental disclosures, Malaysian local governments perceive the primary motive for providing such disclosures as maintaining and improving legitimacy (Kassim et al., 2019). Nevertheless, inadequate staff capacity hampers comprehensive information development, as staff lack the knowledge and training to translate stakeholder expectations into tangible actions and utilise appropriate accounting tools for planning and measuring environmental aspects required by stakeholders.

Sustainability disclosures can also be extensively politically driven. Marquis & Qian (2014) reveal that Chinese government-owned companies are more likely to produce CSR reports driven extensively by political factors, including serving political councils, political legacy and financial support. Nevertheless, these companies applied a decoupling strategy in responding to government enforcement. They conducted substantive CSR reporting practices only when they were likely to be monitored by the government.

In a broader context, a recent study in Tanzania explores a shift from government to governance to meta-governance at the national level to enhance the accountability of SDG implementation (Lauwo et al., 2022). The analysis reveals challenges in adopting an integrated governance approach due to political and regulatory constraints on non-state actors in Tanzania. The study suggests that the Tanzanian government should go beyond adopting SDG-friendly policies and take practical steps, including specific SDG strategies for financial resources, stakeholder engagement, governance, and accountability for each SDG. Additionally, strengthening institutional structures and related governance arrangements is crucial for realising the SDG framework. Lauwo et al. (2022) emphasise the need for more theoretical and empirical evidence on integrated disclosure practices of governments and their agencies, including the role of performance measurement technologies like accounting, budgeting, and auditing in supporting SDG realisation.

Several studies highlight institutional and organisational factors as drivers of sustainability reporting in PSOs. Coercive pressures from government interventions are mainly identified as primary drivers of sustainability reporting implementation. Many developing countries have established regulations and policies mandating social and environmental accounting practices since the 2000s (Qian et al., 2021), but the effectiveness varies due to inconsistent enforcement. Human resource capacity is crucial for effectively integrating SDGs into strategic planning,

selecting appropriate accounting tools, and providing accurate information in reports to enhance accountability. The literature also reveals how institutional pressures influence PSO managers' perceptions, impacting disclosure practices. Organisational motivations, such as building a positive public image or political considerations for budget allocation, serve as additional drivers. Insights from the literature emphasise the importance of strong institutional pressures and arrangements for collaborative efforts among institutions and organisations in facilitating SDG implementation.

However, existing literature primarily investigates public enterprises and local governments, particularly the various determinants affecting sustainability disclosure practices. While they provide preliminary insights, further investigation is needed on how local-level PSOs, playing a pivotal role in SDG acceleration, undertake a holistic approach to developing sustainability reports, encompassing planning, implementation, and reporting (Fusco & Ricci, 2019). Furthermore, there is a gap in understanding how institutional pressures influence the comprehensive development practices that ensure accountability in providing qualified and reliable information to meet stakeholder expectations in this context. This study contends that examining SAR practices holistically will offer valuable insights into the developmental processes, including identifying institutional pressures and challenges and how PSOs navigate them in practice for effective SDG implementation.

More specifically, the current research emphasises this important topic of SAR for SDGs in PSOs in developing countries, highlighting a need for further development in this context (Bebbington & Unerman, 2020; Qian et al., 2021). It has been mentioned earlier that developing countries are exposed to multifaceted sustainability issues with challenging institutional factors in addition to the unprecedented COVID-19 crisis, making them more challenging to attain the SDGs, requiring effective SDG implementation across organisations, including public enterprises, especially at the local level (Bebbington & Unerman, 2020; Qian et al., 2021).

Therefore, research on SAR for SDGs should be expanded to encompass a broader scope with a balanced focus on both social and environmental issues (Qian et al., 2021). While prior studies have primarily focused on China and Malaysia (Fusco & Ricci, 2019), it is essential to diversify geographical coverage. Moreover, the research topics have focused on social accounting challenges, neglecting environmental accounting concerns, particularly in countries

like Indonesia, which are highly vulnerable to climate change, water pollution, and biodiversity loss (KPMG, 2020; Qian et al., 2021).

Given the contextual challenges, developing countries prioritise different SDGs than developed nations, leading to distinct sustainability policies, strategies, indicators, programs, and activities. Therefore, accounting scholars should investigate this specific context in SDG implementation by exploring how SAR is used to integrate national SDGs at the organisational level, addressing the most prioritised issues in developing nations (Tilt, 2016; Qian et al., 2021).

This study addresses these gaps in the current literature by examining the SDG accounting and reporting practices of the Indonesian ROEs, a type of local-level PSO, studies of which are reviewed next.

2.3.4 The implementation of SAR in Indonesian PSOs

Due to limited studies on Indonesian PSOs published in peer-reviewed journals, this subsection consolidates information from various sources, including regulations, government reports, and peer-reviewed papers regarding SAR practices in Indonesian PSOs in general. The review provides insights into the existing SAR practices, including the institutional arrangements to support the practices.

2.3.4.1 SAR studies and practices in Indonesian PSOs

This subsection outlines key Indonesian regulations since 2001, serving as crucial milestones in national sustainability governance to enhance SAR practices at the organisational level. It emphasises research findings on SAR practices, often termed CSR, in Indonesian studies. It also reviews prior, under-researched SAR studies on SDG accounting and reporting in public-owned enterprises and local government.

Since the early 2000s, the Indonesian government has actively promoted sustainable development by enacting legislation mandating CSR engagement for public and private enterprises. Law Number 22 in 2001 compelled oil and gas companies to address environmental concerns arising from their operations (Setneg, 2001). The Ministry of State-Owned Entities Regulation Number 5/2007 specifically governs SOE CSR activities (BUMN, 2007). In 2009, the government enacted Law Number 32 on environmental protection and

management (Kemenkumham, 2009), followed by Indonesian Regulation Number 47 in 2012, which focused on CSR in Limited Companies (Kemenkumham, 2012).

Since July 2017, the Indonesian government has enacted several regulations to establish institutional arrangements for SDG implementation. Presidential Decree No. 59/2017, as the top-level regulation prescribed by the Indonesian President, mandates institutions and organisations in Indonesia to integrate SDGs into their business operations in alignment with the national plan integrated with SDGs (Kemenkumham, 2017b). This regulation is further detailed in the Ministry of National Development Regulation 05/2018, providing guidelines for national and local PSOs to develop their SDG action plans (Bappenas, 2018). The guidelines advocate a holistic approach, requiring PSOs to formulate a 5-year action plan and annual plan and measure and report their SDG performance to contribute to national SDG objectives.

In response to Presidential Decree No. 59/2017, the Indonesian Financial Authority enacted regulation No. 51/2017, directing Indonesian banks to implement sustainable finance (SF) (IFSA D1, 2017). This regulation mandates banks to formulate a 5-year SF plan, including CSR activities, and produce a sustainability report disclosing their SF implementation. The regulation underscores the link between SF and SDGs, outlining guidelines for banks to disclose SDG-related information. It also mandates issuers and limited liability companies to disclose CSR activities in relation to SDGs. However, this regulation does not explicitly require embedding SDGs into business operations, as stipulated in Presidential Decree No. 59/2017. Similarly, the Ministry of State-Owned Enterprises (SOEs) issued Regulation 05/2021 (BUMN, 2021), instructing SOEs to plan, implement, and report CSR activities to support Indonesian SDG achievement without explicitly enforcing SDG integration into their business operations, as per Presidential Decree No. 59/2017.

These regulations illustrate the Indonesian government's commitment to establishing institutional arrangements for collaborative SDG implementation. However, it is evident that middle-level regulations, such as those by IFSA and the Ministry of SOEs, do not fully translate the Presidential Decree's mandate for comprehensive SDG integration into business processes. This raises questions about the enforcement mechanisms, including rewards and punishments, for middle-level institutions that have either partially or fully failed to implement the Presidential Decree's mandate.

Since 2001, numerous accounting studies have assessed CSR implementation by analysing annual and CSR reports. The findings of these studies that focus on CSR disclosure practices in Indonesian enterprises, including SOEs, serve as a foundation for this research into SDG accounting and reporting.

Prior studies assessing enterprises' CSR reports indicate weak regulatory enforcement, leading to limited commitment of the enterprises in disclosing CSR contributions to sustainability (Faisal et al., 2016; Gunawan, 2013; Sukoharsono, 2009; Utama, 2011). Faisal et al. (2016) observed a prevalent use of narrative approaches without key performance indicators, hindering stakeholder assessment of CSR impact. Gunawan (2013) and Faisal et al. (2016) noted observed that CSR and sustainability reports are often descriptive and positive, primarily aimed at enhancing corporate image, reflecting compliance using a symbolic approach rather than making substantive contributions. Utama (2011) highlighted significant variation in report styles and indicators, complicating board evaluations. Laskar and Maji (2017) reported inconsistent CSR disclosure among Indonesian public and private companies, with low levels of disclosure and insignificant associations between CSR and firm performance.

Moreover, Gunawan et al. (2022) examined the sustainability reports of Indonesian enterprises, including SOEs, from 2006 to 2019, identifying a consistent upward trend. Prioritised disclosures focus on economic and social issues in both sensitive and non-sensitive industries. Sensitive industries emphasise community engagement, while non-sensitive industries highlight information related to new employees and employee turnover. Notably, both sectors exhibit low disclosures in human rights.

These studies indicate that CSR and sustainability reporting practices among Indonesian companies, including SOEs, are in their early stages, without specific emphasis on SDG disclosures. Additionally, while SOEs were also included in the analyses, the studies primarily focus on the private sector and lack specific insights into SDG accounting and reporting in PSOs (Gunawan & Tin, 2019).

Some recent studies have explored SDG reporting in Indonesian enterprises, including Indonesian public-owned companies. For instance, Sutopo et al. (2018) reveal that enterprises, including SOEs, recognised as winners of the Indonesian Sustainability Reporting Award (SRA) – an assessment of SDG reporting in public and private companies – experience positive

impacts on financial performance. Nevertheless, Gunawan et al. (2020) reviewed 453 annual and 44 sustainability reports of Indonesian listed companies, including SOEs, from 2014 to 2016. They found that while companies engage in CSR activities, the information disclosed in sustainability reports does not align with national SDG priorities. However, Kuswantoro et al. (2023) found that although private companies demonstrated leadership in SDG disclosures, SOEs outperformed their private counterparts. This superior performance was attributed to a pursuit of legitimacy and potential coercive isomorphism. Government ownership of listed SOEs compelled them to adopt specific internal structures and procedures for SDG disclosures driven by government policies and regulations.

Tjahjadi et al. (2021) examined the impact of good corporate governance (GCG) on corporate sustainability performance by analysing financial statements, annual reports, and sustainability reports of non-financial companies, including SOEs listed on the Indonesian Stock Exchange, from 2013 to 2017. Their findings indicate that GCG is crucial in enhancing corporate sustainability to achieve SDGs. GCG's effectiveness is influenced by the size and capacity of the board of commissioners and top management teams governing the companies. The authors recommend that the Indonesian capital market regulator (Financial Service Authority) consider these factors when formulating policies related to the roles of GCG teams in each element of corporate sustainability for SDG attainment.

Government reports highlight deficiencies in SAR practices for SDG implementation in Indonesia, particularly by local-level PSOs or ROEs. Only a limited number of ROEs and public service agencies at the local government level integrate SAR as a mandated administrative process, producing low-quality sustainability reports (Bappenas, 2019). Among 34 provincial governments, only 12 provided SAR with links to the SDGs, while the others included SAR in their annual reports without explaining the connection to the SDGs (Bappenas, 2019). Additionally, the report disclosures by local authorities lacked data illustrating their concrete, sustainable actions related to the national agenda of combating corruption (Joseph et al., 2019).

The recent study by Sari et al. (2022) underscores the necessity for governance system improvements to enhance the effective implementation of SDGs in Indonesia. The key emphasis is addressing incoherent policies through adjustments aligning with Indonesia's existing governance structure. The study advocates considering the hierarchical and multi-level

governance system outlined in the constitution when implementing Presidential Decree 59/2017 to improve synergy among stakeholders. Furthermore, it recommends incorporating existing audit mechanisms into Bappenas' monitoring function to bolster the accountability of the assessment of SDG achievement.

Prior studies highlight the early stage of SAR practices in Indonesian PSOs, especially in integrating SDGs into business operations. In addition to public-owned enterprises being motivated to develop sustainability disclosures for legitimacy maintenance, coercive pressures from government regulations significantly impact their disclosures. Consistent with earlier subsections, these findings emphasise the strong influence of institutional pressures on the development of sustainability reporting practices. Nevertheless, Sari et al. (2022) underline the necessity of coherent institutional arrangements and pressures for positive effects on organisational practices, especially in the context of the multi-level governance system in Indonesia. They also advocate for enforcement through audit mechanisms to ensure the accountability of data provided by PSOs for their SDG contributions.

However, previous studies, primarily utilising quantitative or descriptive qualitative methods and relying on secondary data from financial and annual reports, underscore a lack of in-depth analysis of SAR practices. Consequently, they offer insufficient explanations regarding aligning CSR practices with national SDGs and incorporating government SDGs agenda into CSR initiatives. This study is motivated to fill these gaps, addressing Lodhia and Sharma's (2019) call for increased research on current SAR practices. It aims to explore drivers and impediments in embedding SDGs into SAR at the organisational level, particularly in developing countries like Indonesia. The focus is on public sector organisations at the local level, an area with limited existing research, particularly in the Indonesian context (Gunawan & Tin, 2019).

2.3.4.2 A brief introduction to Indonesian ROEs

In the Indonesian context, PSOs are classified into central and local governments. The central government comprises ministries, departments, executive agencies, and state-owned companies. Local or regional governments encompass provincial and district administrations and regional-owned enterprises (Kemenkumham, 2017a).

Indonesian Government Regulation 54/2017 outlines the aim, function, and nature of business activities for ROEs. This regulation defines an ROE as an enterprise where the regional government holds a full, majority, or significant minority ownership of at least 51%. ROEs, characterised by a distinct legal form, engage in commercial affairs to provide products or services to the community in an entrepreneurial manner. The primary function of Indonesian ROEs is to generate economic benefits for regional development, offering goods and services with a profit motive. The regulation further mandates the allocation of a CSR fund, derived from a percentage of annual earnings, to support local small and medium enterprises, thereby enhancing the regional economy and fostering economic growth.

Government Regulation 54/2017 mandates that ROEs develop their principal business activities based on a diverse range to address the most significant local needs. The assessment of these needs should align with priorities in the regional government development plan derived from the national plan embedded with the SDGs. The emphasis on SDGs is underscored by Presidential Decree 59/2017, requiring private and public enterprises and public service agencies to implement SAR for SDG achievement (Kemenkumham, 2017b). These entities must implement and report their programs based on the national development indicators cascaded from the SDGs (Bappenas, 2018).

Aligned with Guarini et al. (2022), ROEs, operating as local PSOs, play a crucial role in accelerating national SDG achievement. Notably, given the Indonesian government's emphasis on sustainable development in local areas facing numerous SDG issues, effective SDG implementation in ROEs can substantially contribute to Indonesia's SDG achievement (Bappenas, 2019). Indeed, due to their close ties with local communities, ROEs possess an in-depth understanding of local sustainability issues (Bello & Maidin, 2018). Also, the hybrid nature of ROEs, balancing public service and profit orientation, is instrumental in achieving local sustainable development, serving as a model where their core business aligns with SDGs.

Nevertheless, with diverse stakeholder interests encompassing governments, citizens, and markets with varying sustainability expectations, ROEs must effectively manage their performance to address these diverse needs (Grossi et al., 2015). They require SAR for planning, accounting, and reporting SDG performance, contributing meaningfully to Indonesia's SDG achievements. Therefore, accounting scholars should explore how ROEs integrate SDGs into strategic planning, accounting, and reporting using SAR to enhance

accountability and transparency to meet stakeholder expectations (Garde-Sanchez et al., 2018). This study addresses this need.

2.4 Summary

This chapter explores how SAR can expedite SDG achievement by holistically integrating planning, accounting, and reporting. It emphasises using the holistic SAR framework for strategic planning, aligning SDGs with core operations, embedding targets and indicators into strategies, and translating them into programs and activities. This approach asserts that developing disclosures is not an independent process but an integral part of planning and accounting, providing accountable information crucial for stakeholders to ensure meaningful SDG achievement.

This chapter also outlines gaps in existing literature on SAR practices in PSOs in developing countries, particularly Indonesia. Current research primarily focuses on sustainability disclosures and institutional pressures, overlooking the holistic SAR practices needed to facilitate the integration of SDGs into local-level PSOs' business processes. However, the literature highlights how local-level PSOs, referred to as ROEs in this research, play a crucial role in accelerating SDG achievement at national and global levels by directly addressing local sustainability issues through their business operations. Additionally, the literature emphasises the importance of robust institutional pressures, organisational motivations, and collaborative efforts, including coherent institutional arrangements and infrastructure, to facilitate SDG implementation at the organisational level. The review also underlines the need for a balanced exploration of contextual issues in social and environmental aspects in developing countries, advocating for geographical diversification beyond the predominant focus on China and Malaysia.

This research aims to fill these gaps by providing comprehensive insights into how Indonesian ROEs develop planning, accounting, and reporting practices using SAR to integrate SDGs into their business operations. This study considers overarching organisational and institutional factors that strongly influence practice development to offer more comprehensive insights into the future implications of SDG implementation in similar public enterprises across developing countries.

To meet these aims, a case study approach is employed to enable a rich, in-depth understanding of practice development. The study utilises Practice Theory to examine development practices and Institutional Theory to investigate motivating and challenging factors in SAR development, discussed next in Chapter Three.

Chapter Three: Theoretical perspectives

3.1 Introduction

Chapter 2 underscores the need for a case study to investigate SAR practices in Indonesian ROEs, integrating SDGs into planning, accounting, and reporting, including analysing overarching organisational and institutional factors that strongly influence practice development. This chapter focuses on the theoretical framework utilised to analyse the practice development. Firstly, it elaborates on Practice Theory as a lens for examining the development SAR practices in integrating SDGs into planning, accounting and reporting. Secondly, it discusses Institutional Theory to frame the institutional pressures and challenges strongly affecting practice development.

Section 3.2 explores Practice Theory, framing the analysis of development of practice elements and supported arrangements that shape practices for integrating SDGs into business operations. The section also reviews previous accounting studies utilising Practice Theory to scrutinise accounting practices at the organisational level. Section 3.3 explores Institutional Theory, highlighting the relevance of Institutional Theory in examining drivers and challenges in SAR practice development for SDG integration at the organisational level. It reviews coercive, normative, and mimetic institutional pressures and challenges affecting SAR development. It also reviews prior accounting studies in developing countries, particularly in Indonesia, applying Institutional Theory to investigate external pressures and challenges in SAR practices. Furthermore, Section 3.4 establishes the connection between Practice Theory and Institutional Theory, underscoring their relevance to achieving this research objectives.

3.2 Practice Theory

This section comprises three main parts. Firstly, it explores the development of practice elements and supported arrangements to constitute practices. Secondly, it reviews prior accounting studies that have utilised Practice Theory to investigate accounting practices. Finally, it demonstrates the application of this theory in the research context, analysing the development of SAR practices for SDG integration into planning, accounting and reporting.

3.2.1 A review of Practice Theory

Schatzki (2001) defines practice as a group of interrelated human activities aimed at achieving organisational goals. It involves actions and structures within an organisation, encompassing various interrelated practices and arrangements (Schatzki, 2002). Constructing practices requires organisations to develop three main elements: practical understandings, rules, and teleoaffective activities. Arrangements, established through orders, bring together individuals, artifacts, organisms, and things that support the development of these three elements. Therefore, practice elements and arrangements are closely interrelated by which they are connected through orders (Schatzki, 2001; Schatzki, 2016).

Practice Theory can explain the development of practices as "structures of intentionality" or site ontology, emphasising that "human co-existence being inherently tied to the kind of context it transpires" (Schatzki, 2016). Practices as site ontology direct attention to institutional and societal structures, considering human agency that merges individual and social perspectives (Schatzki, 2002; Whittington, 2006; Watson, 2016). These perspectives are manifested in the conditions reflected in individual actions, providing a specific context for organised activities within a site as an expression of a distinct organisational notion of social phenomena (Schatzki, 2001; 2002; Lodhia, 2015). Thus, site ontology is marked by the specific context given through orders to arrange practice element development, fostering particular interrelated actions to implement organisational notions related to specific social issues. The subsequent discussion will elaborate on these practice elements and arrangements more detailed.

Practical understanding involves a multitude of know-how regarding various actions to develop practice (Schatzki, 2016). In the context of this research, employees involved in SAR processes need shared practical knowledge to integrate SDGs into planning, accounting, and reporting stages. The development of this element is led by a general understanding from upper management (Lodhia, 2015; Lodhia et al., 2022), fostering shared knowledge among organisational members through learning, sharing and maintaining (Schmidt, 2017) regarding the construction of SDG-related practices across three stages. Thus, the general understanding from the organisational actors (management or top-level) matters in order to guide the practical knowledge development that is manifested in technical skills, attitudes, bodily experiences, surface presentations and physical structures of organisational members (Schatzki, 2017; Schmidt, 2017). Schatzki (2016) acknowledges that the learning process for these

understandings can begin with specific participant groups, followed by knowledge transfer to other individuals in the organisation. Notably, it is not imperative for all participants to possess this knowledge initially. Two crucial aspects are involved in developing a practical understanding of practice structure. First, key groups or instructors can manifest and transmit knowledge to other organisational members, ensuring each member has clear knowledge of organising the interrelated practice reflected in shared skills and actions (Schatzki, 2001). Second, individuals in the organisation can uphold shared knowledge as practice in actions and interactions, including communicative actions (Schatzki, 2001).

This explanation underlines the significance of general understanding in shaping learning, transforming, and maintaining actions in developing shared practical understanding to construct practice within organisations (Schmidt, 2017). Thus, the analysis on this element development starts with top managers' general understanding of SDG integration, followed by training and workshops to enhance knowledge development through learning, sharing and maintaining processes to constitute the practices.

The second element of practice development is the tenacity of rules. Schatzki (2001) emphasises that this element necessitates an organisation to implement rule-following actions that each individual comprehends. In the context of this research, the Indonesian government establishes rules mandating the integration of SDGs into PSOs' business activities as a mandatory aspect of the Indonesian SDGs accounting and reporting practice. These rules serve as instructions embedded in internal regulations within the organisation, compelling PSOs' compliance during SDG planning, accounting, and reporting. Rules must consistently be present in the practice structure and thus, they must be secured through various actions such as formulating, affirming, admonishing, and sanctioning (Schatzki, 2016). The existence of rules aims to ensure continuous compliance through a combination of linguistic and non-linguistic actions and thoughts among organisational members, enforcing their readiness to adopt such practice (Schatzki, 2001).

Teleoaffectivity, the third element, involves an instructed system of teleological orders linking ends, projects, and actions, with a crucial role played by the system and behaviour (Schatzki, 2016). The system, differentially distributed among organisational members based on their functions in practice, manages complex actions, thoughts, and readiness. In teleoaffectivity, the system compels individuals to follow acceptable actions or directed orderings through

manifestation in their practical understandings and rules in thoughts, emotions, discussions, and negotiations.

This explanation provides insights that the practice elements are interrelated and aggregated by the actions of individuals in organisations. Comprehensive knowledge of practical understanding guides the interpretation of rules, systems, and processes to ensure acceptable actions, thoughts, and emotions that constitute practice. Additionally, arrangements, emphasised by Schatzki (2016), enable interrelated actions within and among practice elements. Orders, transforming into arrangements, are crucial to link the consistent context of practice element development (Schatzki, 2001). Thus, arrangements are needed to develop practice elements and connect their context by which they are established through orders. Thus, orders are crucial for the development of practice elements.

Indeed, orders guide interrelated actions to suitable arrangements of people, artifacts, and things, necessitating human interventions by management in organisations. According to Schatzki (2001; 2002), how practice is conceived and implemented is determined by orders formulated by management or managerial actors. These actors shape the organisation's perspectives, influencing the meaning and interrelated establishments of actions and arrangements constituting practice as site ontology (Watson, 2016). Schatzki (2002) underscores that orders are not solely possessions of particular actors developed up to their states of mind; institutional pressures significantly influence the actors in creating orders to solve existing social phenomena. This rationale illustrates how Practice Theory combines individualism and socialism perspectives (Whittington, 2006). Institutional pressures affecting practices will be further elaborated in the Section 3.3. The connection among orders, arrangements, and the development of practice elements in constituting practices is summarised in Figure 3.1.

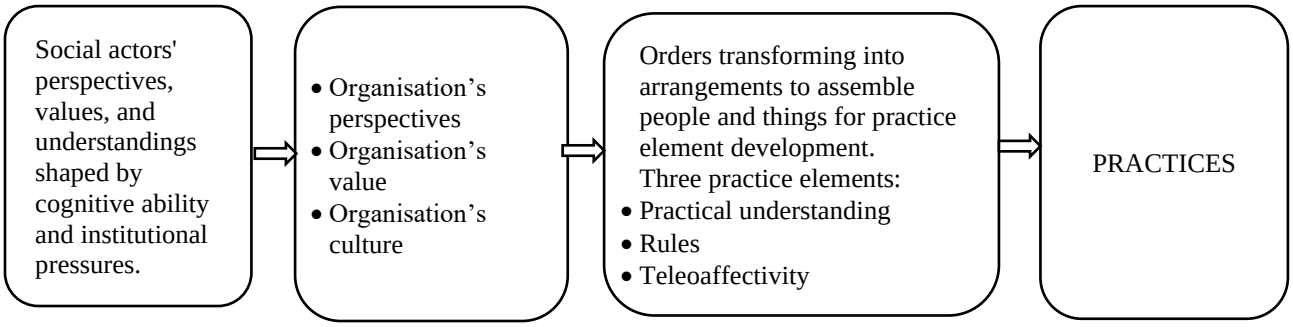


Figure 3.1 Summary of the discussion on practice development

Figure 3.1 illustrates that practice development is significantly influenced by actors' perspectives, values, and understanding of social phenomena. These are not only subjectively developed through cognitive capacities to form organisational notions for social issues but are also shaped by institutional pressures (Schatzki, 2001). Their understandings are embodied in orders, shaping shared understanding, values, and perspectives among organisational members. Orders aim to arrange people, artifacts and things, influencing and supporting actions, providing context to shared skills and activities. This process demonstrates how organisational actors significantly shape practice development (Schatzki, 2001; 2002). The following example illustrates teaching practice, further describing the interrelated relationship between practice elements and arrangements.

A teacher possesses practical understanding of teaching activities, encompassing knowledge of specific subjects, curriculum, educational rules, regulations, and procedures governing teaching at school. The teacher's actions adhere to the school's rules, such as integrating the national curriculum into subject syllabi. Teleoaffectivity in teaching involves aligning learning processes with standards, managing behaviour to achieve learning outcomes. Arrangements include organising people, artifacts, and resources to support teaching, like setting up classrooms. These activities and arrangements are centrally organised through orders from school management, shaping shared practical understanding and interpreting rules and teleoaffectivity, resulting in a teaching practice reflecting institutional and societal structures and human agency as site ontology.

Overall, constituting practices involves three main elements: practical understandings, rules, and teleoaffective activities. Practical understandings involve knowledge guiding actions, rules

enact concrete formulations to regulate activities, and teleoaffectivity manages actions, influencing acceptable emotions and actions. Arrangements, established by orders, include people, artifacts, organisms, and things supporting practice element development. Orders connect elements and arrangements, giving contextual meaning, establishing practice as site ontology for organisational members (Schatzki, 2016). The subsequent subsection highlights prior accounting studies employing Practice Theory to investigate practice development at the organisational level.

3.2.2 Prior accounting studies applying Practice Theory

Practice Theory, as applied in studies on management accounting practice (Ahrens & Chapman, 2007) and integrated reporting and carbon management practice (Lodhia 2015; 2017), elucidates the construction of organisational practices through the interactions of managers and structural arrangements. The following discussion outlines the main findings from these prior studies.

Ahrens & Chapman (2007) examined management control practices in a prominent UK full-service chain restaurant, referred to as the "Restaurant Division". Ahrens & Chapman (2007) found variations in management control practices influencing how branch managers use accounting information in their site operations. The practice involved members' understanding of restaurant procedures, rules, and necessary arrangements for achieving objectives. For instance, some managers did not prioritise the strategy of "Italianising" the menu, focusing on branch profitability. These managers considered accounting information a practical tool, separate from the restaurant strategy, used mainly for daily tasks to achieve profit targets. In contrast, some managers recognised the importance of integrating the restaurant strategy into their activities. These managers emphasised that adding more Italian flavour to the menu contributes to the restaurant's unique character. They are willing to invest in an expensive chef as long as the chef can successfully "Italianise" the menu. For these managers, profit generation goes beyond financial gains; it involves aligning activities with the restaurant strategy. They prioritise enhancing the representational faithfulness of accounting information to align with the restaurant's strategy. Accounting information is not solely used to assess profit but also to understand how menu costs should consider expenses related to "Italianising" the food (Ahrens & Chapman, 2007).

Importantly, Ahrens & Chapman (2007) highlighted that the group of managers in their study, influenced by their perspectives and understandings, interpreted the company's objectives differently. These individual interpretations impact how they organise various activities to form practices within their branches. The managers, identified as organisational actors, are crucial in defining objectives, establishing managerial orders, activities, and arrangements, playing a pivotal role in constituting control practices. The actors' perspectives and understandings shaped management control practices, influencing the development of procedures, regulations, and teleoaffective structures.

Lodhia (2015, 2017) utilised Practice Theory to explore integrated reporting and carbon management practices in Australian enterprises. This approach facilitated an understanding of how companies developed their practices in these areas. In a study of an Australian customer-owned bank, referred to as "Good bank", Lodhia (2015) identified effective integrated reporting practices The bank's customer-owned business context, with specific organisational values, fosters innovative approaches in reporting practices. The bank successfully implements practice elements, incorporating understanding, rules, and teleoaffectivity. Aligned with organisational values, structures, procedures, and arrangements, these understandings influenced the bank's strategic planning and business activities. The study underscores that effective integrated reporting practices necessitate explicit knowledge of principles, processes, and strong ethical values emphasising the importance of integrated thinking across economic, social, and environmental issues in business operations. Top management's pivotal role in embedding values into the business strategy and operations shaping practice development is highlighted. Combining these understandings and values with rules and guidelines facilitates the development of procedures, structures, and arrangements to guide teleoaffective activities aligned with strategic goals. In essence, the practice elements function cohesively in fostering integrated thinking and shared actions among organisational members.

Similarly, Lodhia (2017) demonstrated that Practice Theory facilitates exploration of how companies comprehend carbon management, related rules, and regulations, and integrate them into their teleoaffective structure. The research findings indicate effective application of practice elements. Companies in the study exhibit clear understanding of carbon pricing management and relevant rules, embedding these insights into their organisational values for sustainable business operations. Combined with organisational culture and employee attitudes

toward climate change, these understandings and values foster effective teleoaffective structures, encompassing various activities within organisational structure and processes. The cohesive functions of these elements empower organisations to cultivate a strategic and long-term perspective on carbon management practices.

The findings of these studies (Ahrens & Chapman, 2007; Lodhia 2015; 2017) indicate that effective practice implementation involves the elements of practical understanding, rules, and teleoaffectivity. Organisations must possess a positive perspective, value, and attitude towards interpreting enterprise strategy to develop these practice elements and supportive arrangements. The organisation's perspective, value, and attitude are shaped by actors, such as managers (Ahrens & Chapman, 2007) and top management (Lodhia, 2015; 2017), who play crucial roles in aligning organisational perspectives, values, and culture with business strategy, structure, and operations. These actors' perspectives and values, influenced by both subjective development and institutional pressures, impact the understanding of organisational members in interpreting objectives, particularly in implementing teleoaffective structures and required processes, procedures, and emotions in daily activities. However, these prior studies did not further explore which institutional factors may drive organisational actors' understanding in shaping the arrangements that constitute the practices. As mentioned earlier, institutional factors strongly affect the development of practice elements (Schatzki, 2001).

Overall, Practice Theory enables this research to further explore various activities within the targeted ROEs, focusing on developing SAR practices in the planning, accounting and reporting for SDG integration into business operations. Specifically, the study employs Practice Theory to investigate the interconnected human actions in organisational framework driven by the organisational actors' understanding to develop practical knowledge, rules, teleoaffectivity, and supported arrangements in the SAR for SDGs framework to constitute practices.

In addition to Practice Theory, this research employs Institutional Theory. Exploring the institutional pressures and challenges influencing actors and organisational perspectives in developing practices is essential. Prior research did not combine these two theories (Argento et al., 2019; Awuah et al., 2023), which is crucial for providing a comprehensive understanding and more holistic implications. This distinctive approach significantly will contribute to the literature. Figure 1.2 underscores the necessity of applying this theory for a comprehensive

investigation into the factors impacting the practices through institutional and societal structures. The following section discusses Institutional Theory in more detail.

3.2.3 Applying Practice Theory to the current study

Practice Theory, depicted in Figure 1.2, enables a more comprehensive investigation of the SAR for SDGs framework (Figure 2.1). This theory, underlining the development of practical knowledge, rules, teleoaffectivity explains the complexity and dynamics of organisational arrangement of SAR development in planning, accounting and reporting for SDG integration at the organisational level.

The role of Practice Theory in this research is to assist the investigation of how knowledge development is established shaping planning practices by linking sustainable issues with operational strategies, KPIs, and budget allocations. It also allows this research into assessing knowledge development in accounting and reporting stages on how the ROEs assess sustainability performance based on key indicators, aiding in the development of SDG disclosures. Additionally, in-depth knowledge of the rules dimension provides insights into how organisations prescribe and continuously maintain their internal regulations adapted from the national SDG regulation for managing SAR for SDGs practices. This understanding enables an analysis of how organisations implement and enforce their rules, regulations, or guidelines to plan, account and report their SDG integration for meaningful achievement. In this context they should adapt relevant regulations or guidelines in establishing their internal rules and regulations, including Presidential Decree No. 59/2017, The Financial Services Authority No. 51/2017, and Global Reporting Initiatives (GRI) practical guides for SDG integration that provide practical guidelines for integrating SDGs into SAR practices.

Moreover, understanding teleoaffectivity explains how various means and ends are developed in the system and process to manage acceptable behaviour in practices to meaningfully contribute to SDGs. This element assists in examining how the ROEs' system and process of SAR practices in planning, accounting and reporting enforce individuals in organisations to act within acceptable projects, things, and emotions to achieve SDGs. This research explores the development of structures and methods in the ROEs' SAR system by considering the transformation of organisational values, rules, and guidelines into strategies and operations. For example, it explores how organisations develop a system aligning organisational members'

behaviour with acceptable acts and emotions to reduce paper in office administrations, thereby contributing to relevant SDGs through their business operations.

In summary, Practice Theory offers valuable insights for examining the construction of SAR practices in the planning, accounting and reporting for SDG integration in Indonesian ROEs' business operations. Specifically, it is used to frame the analysis in this study (see the elaboration in Section 7.2), which enables this research to thoroughly investigate the development of practice elements in ROEs, including practical knowledge, internal rules and regulations, and teleoaffectivity to constitute the practices in the planning, accounting and reporting SDG contributions.

3.3 Institutional Theory

This research utilises Institutional Theory to delve deeper into the insights derived from the Practice Theory analysis. It specifically examines how institutional pressures and challenges impact organisational structures and arrangements in the development of SAR practices for integrating SDGs into business operations. The application of this theory enables an exploration of how these pressures influence the understanding and perspectives of organisational actors and management, shaping the intended orders and arrangements for the development of practice elements (Schatzki, 2002).

This section reviews Institutional Theory, encompassing coercive, normative, and mimetic pressures, and examines their varied impacts on organisations, including the challenges arising from conflicting expectations among pressures, or organisational intentions with the pressures, potentially resulting in decoupling strategies during the development of SAR practices. Additionally, the Subsection highlights the application of Institutional Theory in SAR studies within PSOs in developing countries. Lastly, the relevance of this theory to the research context is then discussed, emphasising its role in investigating motivating and challenging factors in practice development.

3.3.1 A review of Institutional Theory

Institutional Theory offers insights into the rationale behind establishing SAR practices for SDG integration in planning, accounting, and reporting, exploring potential effects on

organisations (DiMaggio & Powell, 1983). Essential terms, including institutions, organisational field, and institutionalisation, will be introduced before reviewing the theory.

Institutions encompass rules, regulations, ideas, understandings, and cultural frameworks embedded in an organisation's social values, shaping its actions and providing rationale (DiMaggio & Powell, 1983). The organisational field denotes the specific context where institutions influence organisations, with entities at the same institutional level generally developing similar internal structures (DiMaggio & Powell, 1983; Scott, 2013). Institutionalisation is a process where organisations in a field resemble each other, assimilating and preserving common meanings, beliefs, practices, and values, leading to institutional isomorphism (DiMaggio & Powell, 1983).

Institutional Theory explains institutionalisation as a constraining process where institutions compel one organisation to resemble others at the same institutional level, resulting in similar internal structures under comparable environmental conditions (DiMaggio & Powell, 1983). Initially, organisational fields may exhibit diverse approaches to practice, but pressures like competition prompt organisations with similar circumstances to engage, defining inter-organisational structures and forming a coalition, leading to field homogenisation (DiMaggio & Powell, 1983). The field becomes well-established, characterised by specific institutions that set criteria for organisational preferences within that field.

Understanding the core elements of institutionalisation and isomorphism is crucial for this research. Institutions exert varying pressures in each field, leading to diverse responses in organisational structures and practices (DiMaggio & Powell, 1983). According to Higgins and Larrinaga (2014), sustainability reporting patterns can be explained by stronger institutional influences in a particular field or industry. For instance, sustainability reporting in public sector organisations might differ from their private counterparts based on distinct pressures.

Institutions wield a significant influence on shaping the understandings, self-perceptions, perspectives, and social actions of organisational actors within a practice (Meyer & Rowan, 1977; DiMaggio & Powell, 1983; Jepperson, 1991). They also impose constraints on actors' preferences, impacting how agendas and outcomes are established through orders to intervene in existing arrangements, strategies, or associated actions for a given practice (Jepperson, 1991). The arrangements for practice are thus influenced by the agenda-setting powers inherent

in the orders established by actors in response to institutional pressures (Jepperson, 1991). Consequently, institutions play a dual role by constituting and constraining actors while also empowering and controlling both actors and organisations (Jepperson, 1991).

This research contends that Institutional Theory is pertinent to this study's context, particularly in elucidating how the external environment (DiMaggio & Powell, 1983) influences the development of SAR practices for SDG integration at the organisational level (Adams & Larrinaga, 2007; Bebbington et al., 2009; Ball & Craig, 2010; Higgins & Larrinaga, 2014). Empirical studies further underscore the extensive application of this theoretical framework to explain organisational motivations for disclosing information in their sustainability reports under institutional pressures (Buhr et al., 2014; Kaur & Lodhia, 2019). The subsequent discussion outlines how the three types of pressure in Institutional Theory can impact organisations' sustainability accounting and reporting practices.

3.3.1.1 Institutional pressures

Three institutional pressures—coercive, normative, and mimetic—facilitate isomorphism within fields (DiMaggio & Powell, 1983). While these pressures may interact in practical business operations, they originate from different conditions, leading to distinct outcomes (Jepperson, 1991). The ensuing explanation delves into the mechanisms through which these institutional pressures are developed and explores their potential impact on SAR practices.

Coercive isomorphism operates through rule-based mechanisms arising from political influence and the challenge of legitimacy (DiMaggio & Powell, 1983). These mechanisms include laws, codes, rules, directives, regulations, and formal structures designed to govern an organisation's behaviour within a field (DiMaggio & Powell, 1983; Scott, 2013). Non-compliance can result in financial losses and reputational damage, jeopardising the organisation's legitimacy (Higgins & Larrinaga, 2014).

Coercive isomorphism in practice can result from both formal and informal pressures (DiMaggio & Powell, 1983). For instance, organisations may be required by resource providers or regulations to adopt a similar organisational structure for specific business activities, enforced through methods like persuasion or invitations to join collaborative efforts (Jepperson, 1991). Government mandates, as a crucial resource with high coercive power, often lead to uniform procedures and structures across organisations in a country (DiMaggio &

Powell, 1983; Scott, 1987). In the context of this research, Indonesian regulations mandating the integration of SDGs into public and private organisations' operations serve as a coercive source. Public organisations, responding to mandated regulations, apply similar SAR for SDG practices to enhance transparency and accountability in SDG implementation within their business processes. This illustrates how they conform to coercive pressures imposed by regulations.

Normative pressures stem from the enforcement of social values and norms, guiding individuals within organisations to align their actions with societal expectations (DiMaggio & Powell, 1983). Professionalisation, acquired through formal education and professional networks offered by educational and training institutions, serves as a primary source of normative pressures (DiMaggio & Powell, 1983; Scott, 2013). These institutions play a crucial role in shaping organisational norms for managers and staff. Professional networks or associations also contribute to disseminating normative rules for organisational and professional behaviour. These normative mechanisms create individuals with shared values and perspectives on appropriate organisational behaviour, fostering normative isomorphism in an organisational field (Scott, 2013).

Mimetic pressures arise when organisations imitate peers perceived as more successful and legitimate due to uncertainty in their business processes DiMaggio & Powell, 1983). This uncertainty encompasses ambiguous organisational issues with unclear solutions, such as a lack of understanding of technology and ambiguous goals. In the context of the practice of SAR for SDGs, uncertainty arises in articulating SDGs into business operations using SAR (Bebbington & Unerman, 2020; KPMG, 2020). DiMaggio and Powell (1983) note that organisations tend to emulate successful peers to address uncertain issues, a strategy that is economically feasible and convenient through mechanisms like employee transfers or consulting firms. Mimetic isomorphism is conveyed through symbols, meanings, and roles shaped by social interaction (Bryson, 2004). Mimetic mechanisms guide individuals and organisations to establish stability, compliance, and adherence to best practices for legitimacy (Scott, 2013).

3.3.1.2 Coupling and decoupling

DiMaggio and Powell (1983, p. 156) argued that, according to modern social theory, society expects organisations to tightly couple their internal institutions with institutional pressures.

Consistent alignment of internal organisational behaviour with institutional pressures is reinforced, as these practices become normatively endorsed, taken for granted, and supported by authorized powers (Scott, 2013). Consequently, institutional pressures operate subtly, positively influencing organisations as rational actors strive to align organisational goals with societal expectations (Jepperson, 1991).

However, not all organisational actors may purposefully construct arrangements expected by institutions to control and govern organisational actions. Organisations, driven by collective interests that may conflict with societal interests, might pursue strategies serving their collective interests (Boxenbaum & Jonsson, 2017). Meyer and Rowan (1977) argue that organisational daily activities are often loosely coupled or decoupled, deliberately disconnecting organisational practices from structure. Organisations adopt formal structures and rules to superficially show compliance with regulations without necessarily implementing them in related practices (Scott, 2013). Decoupling actions, observed in loose structural elements, rule contraventions, and unimplemented decisions, create a disconnection between formal structures and actual organisational activities (Meyer & Rowan, 1977).

Scott (2013) argued that internally, decoupling practices are more likely when the symbolic gain is high, and the cost of implementing the related practice is high. Meyer & Rowan (1977) asserted that organisations might adopt decoupling strategies when organisational and environmental expectations conflict or when there is conflict among institutional pressures due to political or economic factors, leading to organisational inefficiency.

Boxenbaum & Jonsson (2017) contend that contradictions may arise from strong coercive pressure to implement a new practice or doubts about the efficacy of the new practice in business operations. They further argue that internal power dynamics, whether from top executives or strong pressures from stakeholders such as suppliers, customers, shareholders, and governments, play a crucial role in organisations' decisions regarding coupling or decoupling. Figure 3.2 summarises how the three pressures influence organisational structure and practice.

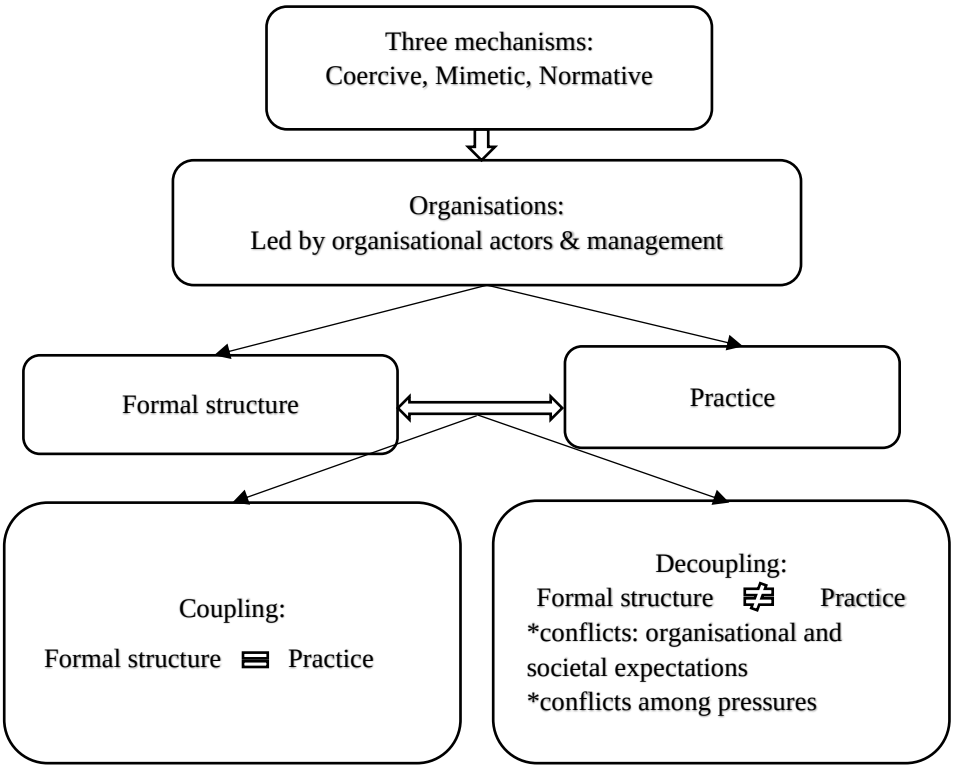


Figure 3.2 Three mechanisms, organisations, (de)coupling strategies

Figure 3.2 illustrates how institutional pressures—coercive, normative, or mimetic—may influence organisations. These pressures shape the formal structure and practices established by organisational actors and management. Additionally, these pressures may give rise to challenges that impact business practices, prompting organisations to adopt either coupling or decoupling strategies. Coupling occurs when actual practices align with the formal structure, while decoupling is more likely when conflicts arise between organisational and societal expectations or among pressure mechanisms, resulting in a misalignment between actual practices and the formal structure.

3.3.2 Prior SAR studies employing Institutional Theory

This section reviews prior studies applying Institutional Theory to analyse SAR practices in PSOs, particularly in public-owned companies and local-level government. Given this study's focus on SAR for SDG integration practices in Indonesian ROEs, the discussion centres on research findings in developing countries, specifically within the Indonesian context.

Institutional Theory is widely utilised in investigating SAR practices in organisational fields due to institutionalisation (Higgins and Larrinaga, 2014). This theory can explain diverse SAR practices influenced by different level of institutional pressures and how actors and management respond to the pressures in interpreting SAR requirements embedded into business process as manifestations of internal dynamics (Higgins and Larrinaga, 2014; Boxenbaum & Jonsson, 2017). For example, considering institutional influences and internal dynamics, sustainability reporting patterns in PSOs may diverge from their private counterparts. The subsequent discussion reviews prior studies applying Institutional Theory to SAR practices in public enterprises and local-level government, both in developing countries and specifically within the context of Indonesia.

Prior studies indicate that coercive pressures notably influence sustainability disclosures of SOEs in developing countries. For instance, Said et al. (2009) emphasise the significance of government regulations in driving sustainability disclosures among Malaysian SOEs. These regulations enforce corporate governance mechanisms to ensure compliance with accounting standards and legal requirements, thereby enhancing the reliability of CSR disclosures for stakeholders. Notably, penalties for non-compliance improved sustainability disclosures, as seen in the plantation industry of Malaysian SOEs (Amran & Haniffa, 2011). Additionally, enterprises with legally binding contracts with the government tend to provide more disclosures, perceiving sustainability reporting as a tool to demonstrate social responsibility and legitimacy to the government, a key stakeholder (Amran & Haniffa, 2011).

Moreover, research findings demonstrate the influence of coercive, normative, and mimetic pressures on sustainability reporting practices in Chinese public-owned enterprises. Zhao & Paten (2016) identified peer institutions and government as the most significant pressures compelling sustainability reporting practices in Chinese SOEs. These pressures stem from regulatory guidance issued by both the Shanghai and Shenzhen Stock Exchanges and sustainability actions and reporting by peer institutions.

Marquis & Qian (2014) found that Chinese government-owned companies are more inclined to produce CSR reports under coercive pressures, driven primarily by political factors. These factors include serving political councils, political legacy considerations, and financial support, with the government exerting substantial ownership and control over these SOEs. To respond to government enforcement, these companies adopt a decoupling strategy, engaging in

substantive CSR actions only when likely to be monitored by the government. These SOEs recognise the risks of decoupling and limit this strategy to periods without monitoring. The internal dynamics of these SOEs, shaped by strong government pressures as shareholders and primary financial providers, influence decisions regarding coupling or decoupling in sustainability reporting.

These studies highlight government interventions as the primary catalysts for sustainability reporting implementation in government-owned enterprises. Moreover, in numerous developing countries, regulations and policies mandating SAR practices have been in place since the 2000s, influencing PSO managers' perceptions of their disclosure practices (Qian et al., 2021).

In Indonesia, government rules and regulations have governed sustainable business operations for public enterprises since 2001. This is because governments act as both investors and regulators, have stronger influence on these enterprises' business operations. Previous CSR studies in Indonesia, encompassing SOEs, yielded diverse findings regarding institutional pressures on CSR practices. Cahaya et al. (2015) analysed labour-related CSR disclosures in Indonesian government-owned enterprises. They found that coercive pressures alone are not strong enough to compel enterprises to disclose labour-related CSR information. While government ownership significantly influenced higher levels of employment-specific disclosures from 2007 to 2010, the study identified insufficient disclosures in specific employment categories, including labour/management relations, occupational health and safety, training and education, and diversity and equal opportunity. The research revealed conflicts between coercive pressures and organisational interests shaping the enterprises' employment-specific disclosure practices.

Joseph et al. (2016) applied Institutional Theory to investigate the disclosure of anti-corruption practices (ACP) in Malaysian and Indonesian enterprises, including public-owned companies. The study revealed that anti-corruption disclosure practices are nascent in both countries, with the most reported items being disclosures of anti-corruption codes of conduct and whistle-blowing practices. However, Joseph et al. (2016) found that Indonesian enterprises disclosed higher anti-corruption measures than Malaysian companies, stemming from heightened coercive pressures, particularly from Indonesian anti-corruption law, prompting enterprises to incorporate government mandates into their disclosures in annual and sustainability reports.

Kuswantoro et al. (2023), employing Institutional Theory, found that despite insignificant disclosed SDG achievements, Indonesian listed SOEs outperform their private counterparts in presenting their SDG engagement in the disclosures. The study suggests that the pursuit of legitimacy and potential coercive isomorphism among SOEs drives their disclosure practices. SOEs are owned by the government and enforced to adopt specific internal structures and procedures for SDG contributions published in their sustainability reports.

Indonesian studies indicate that coercive pressures primarily drive institutional mechanisms influencing sustainability reporting practices in Indonesian public-owned companies. Government ownership and control significantly shape CSR reporting, including SDG disclosure practices in Indonesia.

These prior studies provide valuable insights into how institutional pressures impact sustainability reporting. However, they insufficiently explore how institutional drivers may either motivate or undermine the internal development of practices, particularly concerning SDG integration (Argento et al., 2019; Bebbington and Unerman, 2018; 2020). Therefore, this study extends prior research by incorporating Institutional Theory into Practice Theory to examine how the Indonesian ROEs strategically plan, account for, and report on their SDG performance driven by the institutional pressures and challenges. This study will significantly contribute to the literature by offering a deeper understanding and holistic implications. Institutional Theory guides the analysis of how pressures and challenges influence practices, leading to meaningful contributions disclosed in reports, including an exploration of adoption strategies such as coupling or decoupling.

3.3.3 Applying Institutional Theory to the current study

In the realm of sustainability reporting, institutional theorists propose that the institutionalisation of reporting within specific fields is influenced by coercive, normative, and mimetic pressures, as outlined by Higgins and Larrinaga (2014). Notably, in the Indo-Pacific region, including countries such as Indonesia, Bangladesh, The Philippines, Vietnam, and Sri Lanka, normative and regulatory pressures exert a significant impact on sustainability reporting practices (Qian et al., 2020). Similarly, European state-owned companies demonstrate patterns of sustainability reporting driven by a combination of regulative and normative pressures,

particularly in response to the mandatory implementation of European directive 2014/95/EU (Nicolo et al., 2020).

Additionally, corporations operating in countries with robust corporate social responsibility enforcement exhibit a higher likelihood of including SDG information in their sustainability reports (Rosati & Faria, 2019). Moreover, organisations aligning with international standards, such as GRI member organisations, show a greater propensity to report on SDGs (Elalfy et al., 2021). The adoption of GRI standards for SDGs is often driven by mimetic behaviour where organisations emulate their peers, symbolising the legitimacy of their commitment to sustainability and their value-based competitive positioning (Bebbington et al., 2012).

Institutional pressures can politically or economically influence organisations, leading them to employ coupling or decoupling strategies in report content creation. For example, Ruiz-Lozano et al. (2021) found that some European SOEs employed decoupling strategies to adhere to the European directive 2014/95/EU. These strategies involved adopting a symbolic approach by selectively highlighting positive or favourable sustainability issues without transparently disclosing the processes behind material issue selection, aiming to shape a positive organisational image.

Concerning this research context, this study argues that embedding SDGs into the ROEs' SAR is subject to institutional pressures that may lead to coupling or decoupling practice. Utilising Institutional Theory enables this research to explain the pressures and challenges driving the managerial behaviour during SAR development of SDG integration in the planning, accounting and reporting. It can explain the motives for engaging in SAR practices stemming from knowledge from the professional networks, emulation of peers or the compliance to such regulations to maintain legitimacy in business operations (Bryson, 2004). The subsequent discussion delves into the potential effects of these pressures on SAR for SDGs practices within organisations.

This research asserts that in Indonesia, the main coercive pressures influencing SAR practices for SDG disclosures stem from government regulations. Specifically, Presidential Decree No. 59/2017 enforces SDG integration into business operations, while Financial Services Authority No. 51/2017 and Ministry of SOEs No.05/2021 regulation impose the integration into specific

regulations. This study focuses on how these regulations drive SAR practices, internalising these regulations into their practice element development, ensuring their compliance.

Normative pressures in Indonesia driving SAR practices for SDG disclosures may include adherence to Global Reporting Initiative (GRI) standards, specifically for SDG reporting, such as A Practical Guide for integrating SDGs into reporting. Notably, Indonesian organisations predominantly adopt GRI standards for sustainability reporting (NCSR, 2019). Other normative influences can be from professional networks, such as the National Centre for Sustainability Reporting (NCSR, 2019) and the Institute of Indonesia Chartered Accountants (IICA) with their CSR reporting standards. Since 2017, these organisations have promoted SDG integration into SAR, with NCSR annually recognising contributions through awards based on sustainability reports potentially incentivising robust reporting practices (NCSR, 2017). Moreover, IICA has advocated the inclusive role of the accountancy profession in SDG-based SR reporting since 2018 (IIAC, 2018). This research analyses how these normative pressures drive internal motivations in SAR development practices in the Indonesian ROEs. Specifically, it explores how ROEs engage with their professional networks, aligning with expectations to contribute to Indonesian SDG initiatives and acquire normative authority for sustainability reporting development.

Mimetic pressures can include the influence of private sector initiatives on public sector organisations related to SAR practice development for SDG disclosures. Successful private and public entities serve as models for ROEs, leading them to emulate peers who have adopted GRI for SDG integration. This mimicking behaviour is driven by the perceived enhancement of legitimacy (Bryson, 2004). This research investigates how ROEs absorb symbols, meanings, and roles from successful and legitimate peers, whether in the public or private sector, to shape their SAR practices and inspire individuals within their organisations.

A comprehensive grasp of the institutional pressures illustrated in Figure 3.2 facilitates this research as it is used to frame the analysis and discussion to explore the challenges and predominant influences on SAR practice development for SDG integration. This understanding helps this research to investigate whether the current SAR practices established by ROEs result from a substantive strategy (Coupling), characterised by alignment between practice and formal structures, or a symbolic strategy (Decoupling), marked by gaps between routine activities and formal organisational structures and rules (Meyer & Rowan, 1977).

3.4 Integrating Practice Theory and Institutional Theory to explore SAR for SDG practices

This section highlights the importance of combining Practice Theory and Institutional Theory as lenses to investigate how Indonesian ROEs develop SAR practices aligned with SDGs. There are calls to explore how institutional pressures shape practice development for meaningful SDG contributions, a topic with limited prior research (Argento et al., 2019; Awuah et al., 2023). This study addresses this gap by integrating both theories, as the topic cannot be comprehensively explored using a single theoretical approach. Indeed, previous research has inadequately combined theories to examine SDG reporting practices (Awuah et al., 2023). As reviewed in Chapter 3, this is the first study to combine Practice Theory and Institutional Theory to elucidate the dynamic relationships between organisational practices and institutional pressures. This theoretical linkage enables a comprehensive understanding of how practice elements, shaped by external pressures and challenges, constitute organisational practices, thereby addressing key research questions.

Practice Theory and Institutional Theory are employed in accounting studies to elucidate practice development and organisations' motivations for engaging in such practices (Ahrens & Chapman, 2007; Lodhia, 2015; 2017; Higgins & Larrinaga, 2014). This research argues that practice and institutional theories are interrelated. They are not contesting but complementary. The integration of these theories in investigating SDGs accounting and reporting practice allows for a comprehensive understanding of practice development and multiple drivers or motives. Figures 3.1 and 3.2 further illustrate the strong connection between these theories, facilitating a more comprehensive understanding to investigate SAR practices for SDG integration in Indonesian ROEs.

Figure 3.1 shows that SAR practices for SDG integration are constructed through the development of practice elements, practical understanding, rules, teleoaffectivity, and supporting arrangements. Practice Theory, specifically regarding 'structures of intentionality,' suggests that constructing these elements and arrangements in SAR for SDG integration constitutes a site ontology, emphasising shared understandings within organisations established by ontological perspectives in the order from organisational actors or management (Schatzki, 2001; 2002). Additionally, it underscores that developing orders to constitute practices as site ontology relies on the cognitive capacity of actors and management, reflected in their

understandings, perspectives, and values (Schatzki, 2001; Ahrens & Chapman, 2007), alongside institutional pressures influencing practice development (Schatzki, 2002).

This study contends that Institutional Theory enhances the understanding of how institutional pressures drive organisations to develop SAR practices for SDG integration. Institutional Theory clarifies how orders for the practices, linked to social values and norms, are established. Practice Theory suggests that these orders should be developed as a middle ground between individual and social perspectives in creating practice elements and proper arrangements. Figure 3.2 illustrates that organisation, guided by actors and management, construct SAR practices for SDG integration under the influence of institutional pressures aligning with societal expectations. These pressures, enforced through coercive, mimetic, and normative forces, complement Practice Theory in this research. Institutional Theory further explains how such pressures impact organisations' practices. These pressures may motivate organisations to establish practices confirming proper arrangements and practice elements expected by society, referred to as coupling or substantive strategy. However, conflicts with organisational interests or other mechanisms may lead organisations to employ decoupling or symbolic strategy, disconnecting the practice from their formal structure as expected by society.

This argument elucidates the relevance of the connection between practice and Institutional Theory in addressing research questions. Figure 3.3 illustrates the interconnected concepts of these theories employed to answer the research questions.

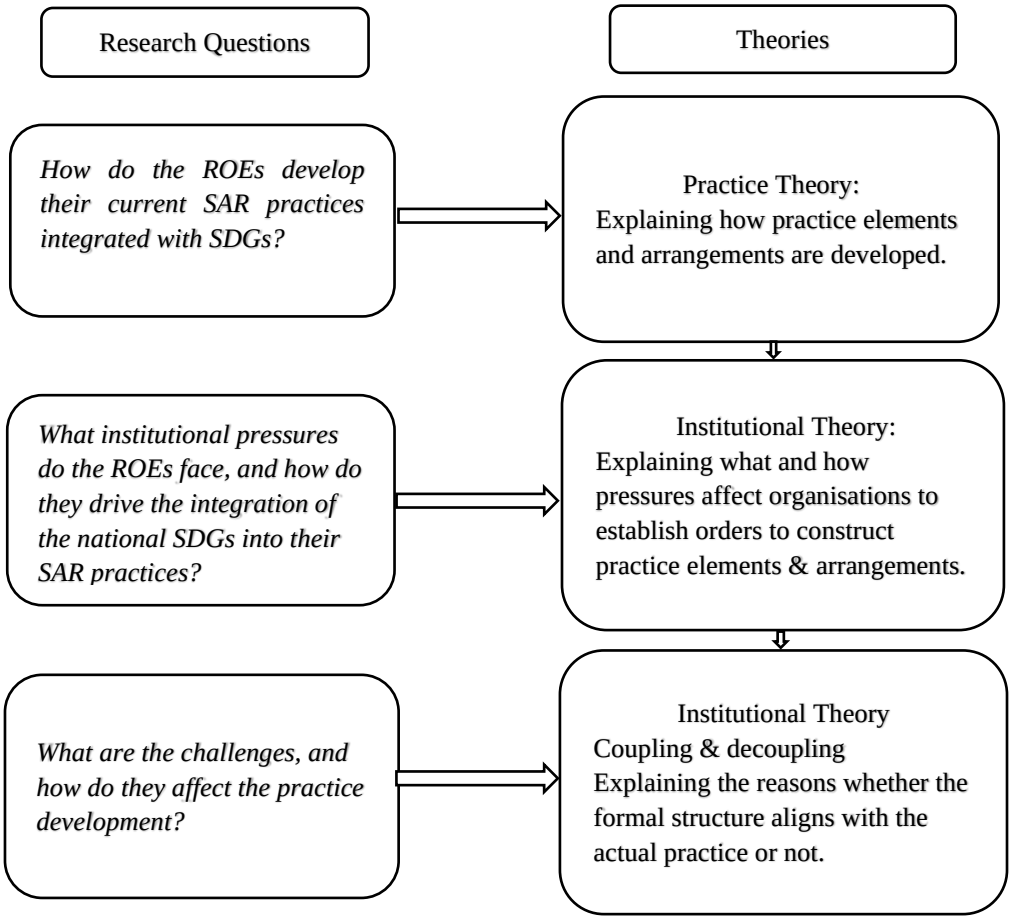


Figure 3.3 Linking research questions to the theories

Figure 3.3 outlines the use of Practice Theory and Institutional Theory guiding the analysis to address the research questions focussing on the SDG practice development in planning, accounting and reporting, including institutional pressures and challenges encountered. Initially, Practice Theory elucidates the development of SAR practices of SDG integration in Indonesian ROEs' business operations. This theory facilitates the analysis of how ROEs develop practice elements and supported arrangements, fostering shared understandings within organisations to integrate SDGs into their business operations. The emphasis is not solely on utilising SAR as a technical communication tool in meeting some regulatory requirements for SDG disclosures but also on transforming SDGs into organisational values, culture, and shaping strategic planning, accounting, and reporting.

Furthermore, Institutional Theory further elucidates whether the practice aligns with societal expectations. Firstly, it explains how certain institutional factors influence the practice development. Secondly, the theory enables aids this research in assessing conflicts between institutional pressures and organisational interests or conflicts among institutional mechanisms. Such conflicts may lead organisations to employ decoupling strategies, manifesting in disparities between actions and statements due to the disconnection between the formal structure of ROEs and their actual practices.

This research is guided by the framework in Figure 3.3 combining SAR for SDGs, Practice Theory, and Institutional Theory. In Stage 1, developing the initial themes for analysing SDG disclosure practices in Indonesian ROEs (see Table 4.2) was based on the SAR for SDGs framework as this stage focuses on sustainability disclosure, rather than sustainability practice. In Stage 2, to examine practice development, including the pressures and challenges influencing it (see Chapter Four, Table 4.5) additional themes from the two theories were developed to guide the case study analysis.

3.5 Summary

This chapter discusses the use of practice and institutional theories as lenses in this research to examine in investigating the development of SAR practices for SDG integration into business operations. The discussion of Practice Theory focuses on the development of practice elements and their supported arrangements, shaping practice as a site ontology. Practical understandings encompass shared knowledge, extending beyond technical skills to include attitudes, bodily experiences, surface presentations, and physical structures among organisational members with a unified understanding of the practice. Rules involve implementing concrete formulations to regulate both new and existing activities, enforced to ensure compliance and readiness to adopt the practices. Teleoaffectivity establishes a teleological order, managing acceptable emotions and actions among organisational members in pursuit of SDGs by executing their functions within organisational practices.

Furthermore, arrangements play a crucial role in supporting the implementation of a practice (Schatzki, 2001). Practice elements can only be effectively implemented through the governance of actions, facilitated by the structure of arrangements that manage people,

artifacts, and resources. Therefore, the connection between practice and arrangements is integral, requiring orders involving organisational actors and management interventions.

Moreover, the discussion of Institutional Theory describes how this theory complements Practice Theory in this research context. Specifically, employing Institutional Theory enables this research to examine the impact of institutional pressures through coercive, normative, and mimetic forces on actor and management perspectives in formulating orders to establish the arrangements for practice development that align with societal expectations. The theory also scrutinises how these pressures may influence organisations to construct practices in accordance with their formal structures and arrangements, known as coupling strategies. However, some pressures may conflict with organisational expectations or other mechanisms, leading organisations to adopt a decoupling strategy, resulting in a disconnection between their formal structure and actual practices.

The theoretical perspectives contribute to studying the complexity of practice development, including motivations and challenges leading to coupling and decoupling actions. The next chapter will present the methodological framework aligned with these theoretical perspectives and research questions.

Chapter Four: Research Methodology

4.1 Introduction

This chapter explains the research methodology aligned with the conceptual framework and theoretical framework presented in Chapters 2 and 3 to investigate the research question of how and why Indonesian ROEs develop SAR practices in planning, accounting, and reporting to integrate SDGs into their business operations for meaningful contributions. Section 4.2 outlines the research design, encompassing two main stages: selecting contextually rich cases and conducting case studies. Section 4.3 provides an overview of the relevance of the case study methodology in this research. Section 4.4 explains the methods applied in this research, and Sections 4.5 and 4.6 detail the application of these methods in the two main stages introduced in Section 4.2. Section 4.7 discusses the procedures established to ensure credibility and trustworthiness. Section 4.8 explores the case study compilation, followed by Section 4.9, summarising the research methodology designed and applied to conduct the investigation.

4.2 Research design

This section explores the framework depicted in Figure 4.1. designed in two stages to investigate the research question. This section briefly explains the research design concept and elaborates its application in this research.

Research design presents the logical arrangements of the research methods for data collection and analysis in investigating the research questions to derive findings and conclusions (Yin, 2018). Figure 4.1 presents the design of this research that aligns the specific research questions, theories and methods to attain some conclusions to answer the general research question.

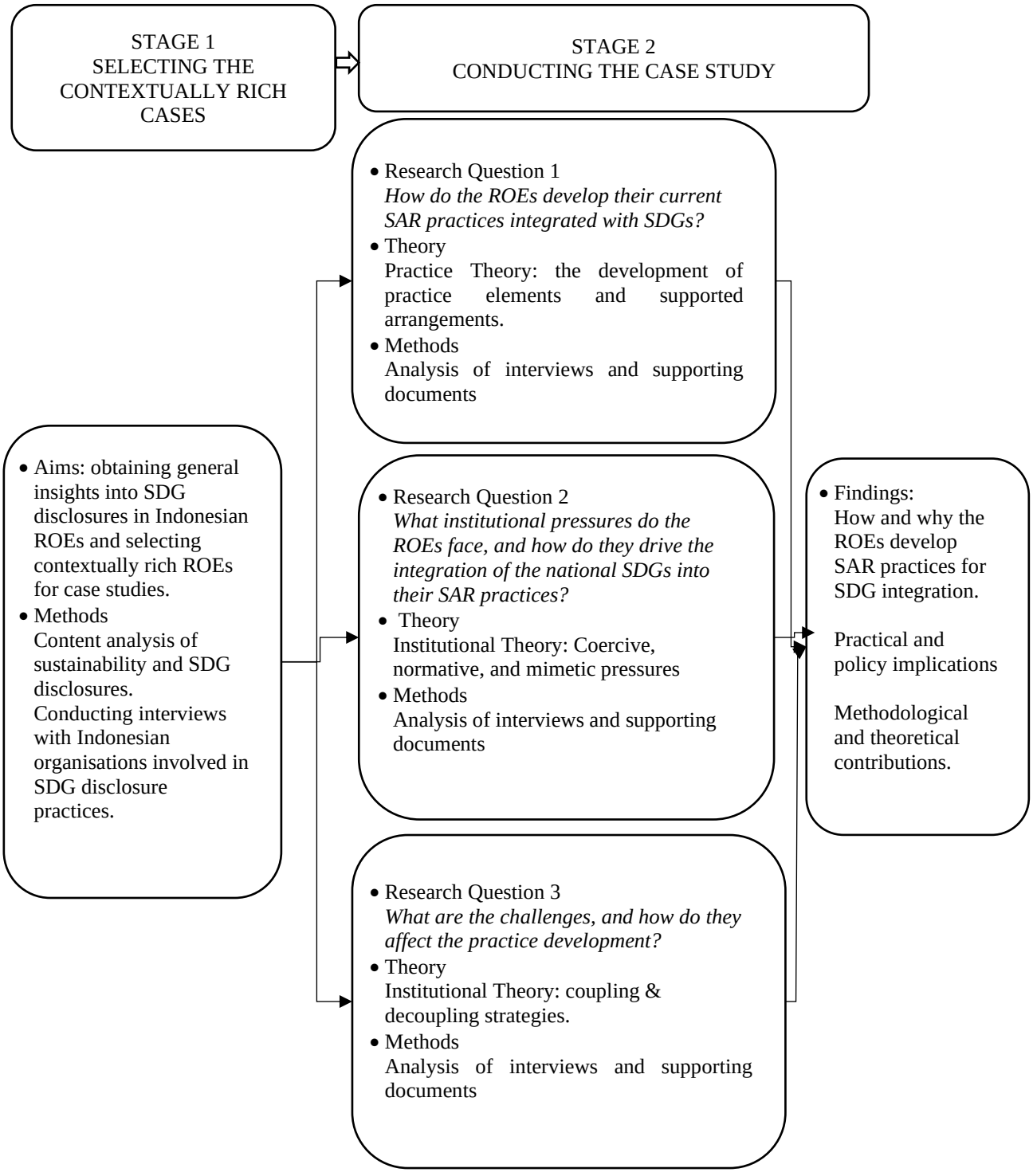


Figure 4.1 Research design: aligning the research questions, theories and methods

Figure 4.1 shows that the research design comprises two main stages. The first stage involves a content analysis of sustainability and SDG disclosures, aiming to obtain a general understanding of SDG disclosures in Indonesian ROEs and to select contextually rich cases for case studies. The second stage entails conducting case studies in five ROEs to delve deeply into how these entities holistically develop SAR practices in planning, accounting and reporting in integrating SDGs into their business operations for impactful contributions to the Indonesian SDGs, as the main focus of this research (see Section 1.3).

The initial stage involves collecting annual/sustainability reports from ROEs and utilising content analysis in their SDG disclosures regarding their SAR practices to produce the disclosures. This stage aims to provide a general overview of SDG reporting practices in Indonesian ROEs and gather information on entities with contextually rich cases. Analysis results are discussed with two institutions actively involved in SDG disclosure practices in Indonesia: the Ministry of National Development (Bappenas) and the National Centre for Sustainability Reporting (NCSR). The discussion aims to validate the general understanding and identify ROEs suitable for case studies.

In the second stage, a case study is carried out on the selected ROEs identified in stage one. Primary data is gathered through interviews, supplemented by organisational and governmental documents to provide comprehensive evidence on the development of Sustainable Accounting and Reporting (SAR) for SDG integration practices. Content analysis is applied to scrutinise collected documents, while thematic analysis is employed to study interviews. This stage aims to comprehend the development of SAR for SDGs, exploring practical dynamics that influence or impede the practice during the planning, accounting, and reporting stages.

This study contends that this research design, comprising these data collection and analysis methods across both stages, ensures a reliable research process. Furthermore, the study asserts that this design establishes a logical connection between the research questions, theories, and methods, thereby yielding compelling results with implications for methodological, theoretical, practical, and policy contributions, as elucidated in Chapter One.

4.3 Case study methodology

Aligned with the discussion in Chapter One, this study investigates the development of SAR practices in planning, accounting, and reporting by Indonesian ROEs to integrate SDGs into

their business operations for impactful contributions. Drawing from Practice Theory and Institutional Theory (as detailed in Chapter Three) and corresponding to specific research questions (refer to Figure 3.3), an appropriate research approach is employed.

This study utilises the case study method, and this section provides an overview of its nature and characteristics. The following subsection establishes the relevance and application of this methodology in the research context by connecting research questions, contexts, theories, and the multi-case study approach.

4.3.1 An overview of the case study approach

A case study, as a qualitative research methodology, investigates a contemporary phenomenon within its natural context, utilising multiple sources of evidence to achieve a comprehensive understanding (Yin, 2018). This approach collects information from documents, archival records, interviews, observations, and physical artifacts, triangulating data between these sources (Yin, 2018; Stake, 1995). Findings are presented using diverse literary techniques, such as quotes and narratives (Yin, 2018). As outlined by Stake (1995), these characteristics enable researchers to describe the context from different perspectives, considering various variables affected by the studied phenomenon.

Yin (2018) advocates for considering a case study design under the following circumstances: (a) when addressing "how" and "why" questions, (b) when participant behaviour cannot be manipulated, and (c) when contextual conditions are crucial for revealing the relevant phenomenon of the case. These considerations highlight several key points. First, a case study is well-suited for investigating unique and functional cases in critical circumstances, encompassing events, situations, programs, or activities (Stake, 1995; Hancock & Algozzine, 2006; Baxter & Jack, 2008). Second, it is an apt approach for conducting an in-depth investigation into the implementation of the case(s). Third, a case study is particularly relevant for research exploring the social construction of facts, facilitating a comprehensive understanding of the phenomenon within its natural context.

Yin (2018) delineates specific types of case studies: exploratory, explanatory, and descriptive. An exploratory case study investigates unclear phenomena, such as examining the implementation of interventions with ambiguous outcomes. Conversely, an explanatory case

study is employed for causal investigations, addressing "why" questions, such as the reasons behind adopting certain interventions.

Conversely, a descriptive case study addresses "how" questions, emphasising the process. To conduct such research, a descriptive theory is essential as a conceptual and theoretical framework (Baxter & Jack, 2008; Tellis, 1997). These frameworks should encompass the purpose of description, cover the full range of topics related to the research object, and demonstrate the logical relationships between topics to elucidate the essence of the description in addressing the research questions (Creswell & Báez, 2020; Yin, 2018).

It is important to note that a single study can encompass all three purposes—exploratory, descriptive, and explanatory. This research, focusing on the "how" and "why" questions related to SAR for SDG integration practice development, concurrently conducted both explanatory and descriptive investigations.

Moreover, the choice between single-case or multiple-case applications in these studies is contingent on how researchers perceive the context for investigating phenomena (Yin, 2018). This research opted to use multiple cases (or sub-cases within an overall case study of the sector) to ensure robust findings regarding SAR for SDG integration practice development. Multiple case studies are pertinent in research demanding rigorous investigation across more than one case to yield compelling and robust evidence (Creswell & Báez, 2020).

Applying multi-cases demands significant resources and time, involving extensive fieldwork for each case (Creswell & Báez, 2020). This approach initiates by scrutinising each case individually before comparing findings and conclusions across cases. It further explores how the phenomenon manifests in diverse environments, revealing its characterisations in different contexts by comparing similarities and differences between cases and replicating findings across them (Stake, 1995; Yin, 2018; Creswell & Báez, 2020).

The selection of cases for a multiple-case study involves purposive sampling guided by criteria derived from the theoretical framework (Creswell & Báez, 2020). Cases can be chosen as atypical or typical based on the research framework (Stake, 1995; Creswell & Báez, 2020). This study employed typical cases for their ability to better explore cross-case relationships of causal mechanisms within the phenomenon (Creswell & Báez, 2020; Stake, 1995). Exploring typical cases involves pattern-matching investigations, comparing evidence with specific

causal pathways in existing theories (Yin, 2018). This exploration may yield evidence that is either consistent with the stipulated theory, features different causal mechanisms, or lacks plausible causal mechanisms as per the theory (Stake, 1995; Yin, 2018; Creswell & Báez, 2020).

Exploring typical cases aims for replication by analysing the similarities and differences in themes and categories across cases (Silverman, 2013; Yin, 2018). This replication follows a logic of duplicating significant findings from a single study in other typical cases to recreate the initial conditions (Creswell & Báez, 2020; Yin, 2018; Stake, 1995). However, some replications may alter certain conditions, posing challenges to the original findings (Creswell & Báez, 2020; Silverman, 2013). This alteration serves to test the duplicability of the findings, with both replicated and altered replications contributing to strengthening the original findings (Yin, 2018).

This study employed the replication process to investigate Sustainable Accounting and Reporting (SAR) for SDG practice development in Indonesian ROEs. Instead of proving relationships or testing hypotheses, the study discovered significant findings in a single case and replicated them in other typical ROEs exhibiting similar phenomena.

While case studies face criticism for issues in generalisation (Tellis, 1997), Yin (2018) addresses this concern by presenting the concept of analytic generalisation. This involves transferring theories to other cases where similar phenomena may occur, substantiating claims of replication. Stake (1995) complements this with the idea of naturalistic generalisation, emphasising practice transferability. Yin (2018) details how case studies can achieve analytic generalisation by emphasising theory transferability for replication in cases with similar phenomena. Additionally, natural generalisation focuses on practice transferability, offering diverse readers a more empirically grounded understanding of the phenomenon based on findings from multiple data sources (Stake, 1995; Parker & Northcott, 2016).

In summary, this discussion offers a broad perspective on the utility of the case study methodology for in-depth investigations. Emphasising the exploration of contextual phenomena, the case study facilitates both analytical and natural generalisation through multi-case replication. This research contends that this methodology is pertinent to this research

context, and the subsequent subsection further justifies that the case study approach is relevant to thoroughly investigating SAR for SDG integration practices in Indonesian ROEs.

4.3.2 Applying case study methodology

A case study is suitable for this research, which aims to comprehensively investigate the development of SAR for SDG integration practices in Indonesian ROEs, including motivating and challenging factors in practice development. Leveraging the features of a case study, this research obtains a nuanced understanding of the social reality of SAR phenomena for SDG practice development from diverse perspectives. The application of multi-methods within a multi-case study framework contributes to establishing compelling findings, supporting both analytical and natural generalisation of SAR for SDG integration practices in the Indonesian ROE context.

This research aligns with Yin's (2018) case study criteria. The research question delves into understanding how and why Indonesian ROEs develop their integration of SDGs into their SAR practices, focusing on the actual process without control over behavioural events. To fulfil the research aims, this study investigates contextual conditions across SAR stages in the ROEs, from sustainability planning to accounting and reporting. The case study approach is strongly advocated in this research, providing a comprehensive portrayal of SAR for SDG integration practice development within the specific context of the Indonesian ROEs.

The previous subsection notes that it is essential to establish connections between the research questions, context, and conceptual and theoretical framework before formulating the research design. Figure 4.2 illustrates this consideration in designing the research, encompassing the research context and questions, conceptual framework, types of case study (exploratory, explanatory, or descriptive), and the choice between a single or multiple cases. Typical cases are selected for case compilation to support claims of replication.

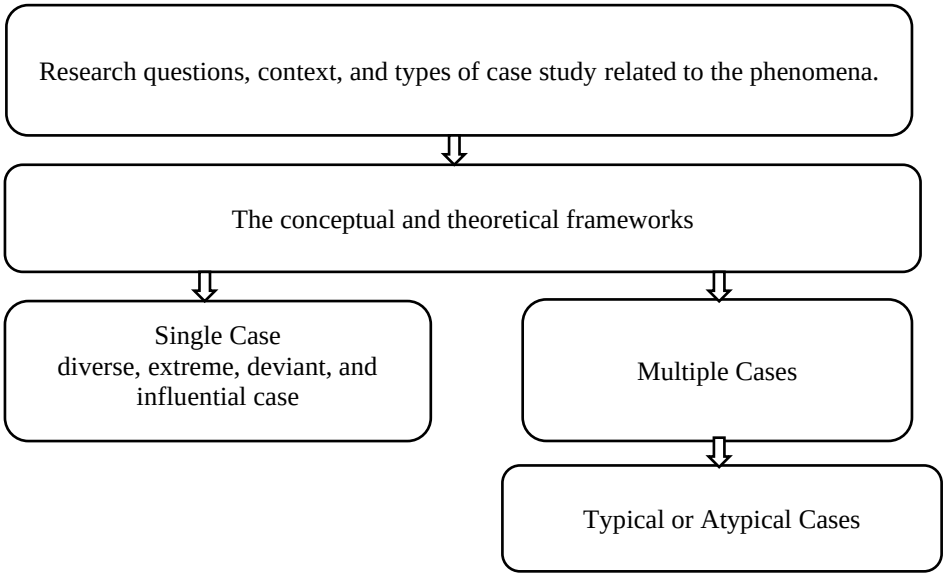


Figure 4.2 Important considerations before establishing research design.

The research question, addressing the "how" and "why", places this study under explanatory and descriptive case studies. Specifically, the focus is on a contemporary phenomenon: SAR for SDG integration practice development within the natural context of Indonesian ROEs. Consequently, this research prioritises explaining and describing the process rather than solely focusing on the outcomes of the practices.

Additionally, this research narrows its focus to exploring the planning, accounting, and reporting of SDGs in ROEs' business processes using the SAR framework, as outlined in Chapter 2. The conceptual SAR for SDGs framework, detailed in Figure 2.1, encompasses sustainability planning, accounting, and reporting for SDGs. The case context is further confined to Indonesian ROEs, specifically local-level PSOs in developing countries.

Moreover, the theoretical framework in Chapter Three highlights the relevance of Practice Theory and Institutional Theory to understand how and why ROEs develop the SAR for SDG practice development. Summarised in Figure 3.1 and Figure 3.2, these theories offer critical insights into investigating practice development, encompassing the drivers and challenges. Constructed from the SAR for SDG conceptual framework, Practice Theory and Institutional Theory, this research framework guides the development of research design and methods, encompassing the research instruments discussed in the subsequent sections.

This research is a case study of Indonesian ROEs, represented by five sub-cases of the that together they provide a picture of the SDG practice development in Indonesian ROEs. This approach was made to obtain robust research evidence for exploring SAR for SDG practice development and claim convincing replication for analytical and natural generalisation (Yin, 2018). Specifically, it opts for typical cases, representing instances with contextually rich characteristics in SAR for SDG practices, to delve into cross-case relationships of causal mechanisms (Creswell & Báez, 2020; Yin, 2018; Stake, 1995). Criteria to identify such contextually rich ROEs are established and will be further explored in the research design section.

The case study approach has been previously employed to gain an in-depth understanding of sustainability accounting and reporting practices in PSOs (Ball, 2005; Ball & Grubnic, 2007; Amran & Hanifa, 2011; Lodhia, 2015; Lodhia et al., 2012; Marquis & Qian, 2014; Thijssens et al., 2016; Kaur & Lodhia, 2018; Goswami & Lodhia, 2014; Ruiz-Lozano et al., 2021; Kasim et al., 2019). This research extends these studies using the case study methodology to investigate SAR for SDGs in PSOs within a developing country context, specifically in Indonesian ROEs. The research design employed for this investigation is detailed in Section 4.3.

4.4 Research methods

This section discusses the research methods applied in data collection and data analysis in the two stages of this research. The methods include documents and interviews for data collection and content analysis for studying the data. This section starts the discussion with an overview of research methods. Then, it explores the concept of each method used in this research data collection and analysis.

Research methods refer to systematic processes for collecting and analysing data to derive findings (Miles & Huberman, 1994; Silverman, 2013; Creswell & Báez, 2020). Qualitative research methods encompass diverse techniques, including interviews, documentation, archival records, physical artifacts, direct observations, and participant observation, chosen for their strengths in comprehensively understanding research problems (Creswell & Báez, 2020; Silverman, 2013).

Moreover, the collected data undergoes analysis through content analysis, documentary analysis, website analysis, and thematic analysis (Creswell & Báez, 2020; Miles & Huberman, 1994). This research employs content analysis to scrutinise data gleaned from documents and interviews.

The selection of documents and interviews for data collection in both stages stemmed from a methodological consideration aligned with the research context. In stage 1, data from sustainability reports and interviews offered a general overview of SDG disclosure practices in the Indonesian ROEs, enabling the identification of contextually rich cases for the case study. In stage 2, the case study collected data from interviews and supporting documents, aiming to obtain rich sources of evidence for an in-depth investigation into SAR for SDG integration practice development.

This research asserts that these methods facilitate a comprehensive exploration of SAR for SDG practice development in ROEs. Moreover, a triangulation approach was adopted, combining multiple methods to ensure credibility through diverse evidence and perspectives (Yin, 2018; Stake, 1995). Subsequent discussion elaborates on each research method applied in this study.

4.4.1 Document analysis

Data collection from documents proves valuable for offering background, context, supplementary questions, tracking change, and verifying findings from other sources (Yin, 2018). Documents are particularly effective when detailed information is required, and observations may fall short. However, potential biases may arise, especially when data selection is necessary due to limitations or restricted access, necessitating the establishment of criteria to ensure data availability and access (Yin, 2018).

Data from documents sourced from private and public records, the internet, physical evidence, and researcher-created instruments (Hancock & Algozzine, 2006) can be obtained from public domains like libraries, newspapers, archives, government files, and websites (Hancock & Algozzine, 2006). These documents, encompassing reports, meeting minutes, manuals, procedures, news releases, diaries, and electronic/printed reports, contain both textual and visual elements (Yin, 2018; Hancock & Algozzine, 2006).

This study acquired documents from electronic sources from ROEs and government official websites. The documents obtained from the websites, considered crucial for providing transparent and readily available data, serve to corroborate findings from other methods, such as interviews (Silverman, 2013). Reports or documents obtained from websites were categorised as documents to streamline data classification.

This study set criteria guided by procedures aligned with the research questions and framework (Hancock & Algozzine, 2006; Silverman, 2013) to select eligible documents, ensuring the inclusion of relevant data in the research context (Kolk & Walhain, 2001). The criteria aid the researcher in determining the inclusion of organisations in the analysis, specifying the types of documents and information to be reviewed, and considering the time of publication (Hancock & Algozzine, 2006).

The data collection process for relevant documents may commence in the public domain, with researchers seeking permission from organisations when access is restricted (Silverman, 2013). Researchers must strategically identify critical areas within the study context and align them with the documents to gather pertinent evidence that illuminates the studied phenomena (Silverman, 2013; Creswell & Báez, 2020). Nevertheless, in the context of this research, all necessary documents are provided on the ROEs' websites, such as annual/sustainability reports to depict SDG disclosure practices in Stage 1.

Figure 4.1 illustrates the document sources utilised in the two stages. In stage 1, the documents used for the analysis were primarily derived from the Annual/Sustainability reports of the ROEs, emphasising disclosed practices in integrating SDGs into the planning, accounting, and reporting. Content analysis was used to thoroughly investigate the SDG disclosures to obtain a general understanding of practices through the disclosures and selecting contextually rich cases for the case study. Stage 2 documents comprised the ROEs' annual/sustainability reports, focusing on integrated practices in planning, accounting, and reporting, including disclosed rules and regulations, organisational arrangements and procedures to develop the practices. Additional documents considered government regulations related to SDG implementation in ROEs. The aim was to corroborate interview findings, ensuring reliable data on SAR practices for SDG integration provided by the ROEs.

4.4.2 Interviews

Interviews, the most common method for data collection in case studies, involve an exchange of perspectives between the interviewer and interviewees, transformed into textual data (Kvale, 1996). These interviews can be conducted with individuals or groups. Individual interviews yield valuable evidence from a personal standpoint but are less efficient. Conversely, group interviews are more efficient and encourage the development of new perspectives, though they may only partially capture individual viewpoints (Kvale, 1996).

Interviews can be categorised as structured, semi-structured, or unstructured categories (Creswell & Báez, 2020). Employing semi-structured interviews, researchers begin with predefined questions or topics, elaborating on participants' answers by probing relevant issues (Salmons, 2015). This approach generates robust data, allowing participants to express their experiences, perceptions, or opinions freely and providing valuable insights to researchers (Salmons, 2015).

Additionally, unstructured interviews, akin to conversations, provide flexibility for interviewees to elaborate on studied topics (Kvale, 1996; Creswell & Báez, 2020). Commencing with a single question and minimal interruption from the interviewer, interviewees freely elaborate and respond to their views (Salmons, 2015), fostering a relaxed atmosphere. Despite the flexibility leading to unpredictable directions and a large amount of data, researchers must focus on the specific phenomenon being studied (Kvale, 1996).

As outlined by Kvale (1996), a structured interview is a pre-planned and researcher-controlled session. Questions are prepared in advance, and interviewees are directed to answer these questions specifically (Salmons, 2015). While this method effectively maintains control over the interview topic and enables easy comparability of answers for analysis, it may limit the acquisition of rich, in-depth evidence. Structured interviews are particularly suitable for researchers who have clearly defined the expected pattern of information for their research (Salmons, 2015).

The discussion of interview types indicates the choices researchers have to suit their needs effectively. Interviews, compared to other qualitative research methods, enable the acquisition of rich, personalised information. The flexibility inherent in interviews encourages individuals to freely share their experiences on the studied topics (Salmons, 2015; Yin, 2002; Kvale, 1996).

The interview process is time-consuming, involving accessing and contacting participants, conducting interviews, and transcribing data for analysis (Creswell & Báez, 2020). Data interpretation may be subjective and biased if the interviewee's meaning is mis-conveyed or if the interpretation is influenced by the researcher's ideology and theoretical standpoint, which holds power over the research (Yin, 2018). Therefore, interpretation must adhere to validity requirements, including confirming findings with interviewees.

Researchers should take essential steps to mitigate biases and enhance the robustness of evidence from interviews. This includes defining a clear direction for interviews, specifying the purpose, key questions (what, why, and how), and expected interview duration (Creswell & Báez, 2020; Silverman, 2013; Yin, 2018). Decisions on individual or group interviews, key participants, number of participants, and required resources should be made, and access to interview participants should be established (Kvale, 1996). Ethical approval is mandatory to ensure confidentiality, ethical conduct, and the protection of interviewees, including obtaining consent forms to guarantee anonymity and confidentiality and informing interviewees about result dissemination timelines (Salmons, 2015).

During interviews, interviewers should introduce topics and ask direct, probing, and follow-up questions, incorporating briefing and debriefing (Silverman, 2013). Interviewers, characterised by cooperativeness, friendliness, motivation, and knowledge, aim to elicit rich and personalised answers from interviewees (Miles & Huberman, 1994; Creswell & Báez, 2020). Questions should be concise, encouraging interviewees to express their views freely (Creswell & Báez, 2020). Conducting interviews in a natural setting enhances realism and minimises distractions (Yin, 2018). Additionally, preparing a method for recording interview data, such as note-taking or audiotaping, is crucial (Kvale, 1996).

Post-interviews, collected data must undergo transcription, converting oral speech into written text (Creswell & Báez, 2020). Prior to transcription, ensuring the recorded interview is audible and using multiple mediums to minimise risks of unrecorded interviews, certifying transcript reliability and validity (Kvale, 1996; Patton, 2014). However, in the case of non-English-speaking participants, such as in this study the context translation of transcripts into English becomes necessary, particularly for presenting research findings to international, including English-speaking audiences (Temple & Young, 2004).

Researchers can personally translate interviews to ensure a deeper understanding of the context, preserving the quality of the original expression by interviewees (Temple & Young, 2004). Alternatively, some researchers increasingly turn to the internet and artificial intelligence (AI) for efficient voice recognition transcription and translation (Palys & Atchinson, 2012; Wu et al., 2016). AI, notably neural machine translation, proves effective and efficient in multilingual transcription and translation (Wu et al., 2016). However, ethical considerations (Temple & Young, 2004; Sutrisno et al., 2014) regarding privacy and AI limitations, such as language expression biases, must be addressed to maintain research integrity (Jobin et al., 2019). For instance, Google Translate's frequent errors in grammar and semantics highlight potential misunderstandings in the original interviews (Pham, 2022). Therefore, researchers using Internet or AI-based transcripts/translations must carefully re-read them to ensure an unbiased and accurate representation of the original sources (Jobin et al., 2019).

This study utilised semi-structured interviews in both stages for comprehensive data collection, offering flexibility to discuss various ROE profiles and SDG concerns that the ROEs integrate into their SAR practices in planning, accounting and reporting. The interviews in Stage 1 included officials from Bappenas and NCSR to validate data from ROEs' annual/sustainability reports to provide a robust understanding of SDG disclosures and select contextually rich ROEs for the case study. In stage 2, interviews with decision-makers and operational staff involved in SAR practice development for SDG integration to understand the dynamics and complexities of the SAR practices in planning, accounting, and reporting, examining their nature, extent, drivers and challenges. In this research, the post-interview activities involved transcribing the original interviews conducted in Bahasa Indonesia, followed by translation into English to cater to English-speaking audiences. Google Docs and AI neural machine translation tools facilitated the transcription and translation processes, with rigorous checks to maintain accuracy and impartiality. Further elaboration on this process is provided in Subsections 4.6.1 and 4.6.3.

Overall, a qualitative researcher must comprehend phenomena from diverse perspectives, utilising various evidence sources and research methods (Hancock & Algozzine, 2006). This study employed a triangulation process, combining multiple sources of evidence to enhance data credibility. Examining information from different methods allows the researcher to corroborate evidence and mitigate potential biases associated with relying on a single source (Patton, 1990).

4.4.3 Content analysis

Content analysis is a systematic method involving the coding and analysis of texts to derive meaningful insights (Krippendoroff, 2004). As a robust data reduction technique, it systematically condenses text into fewer categories through coding (Hsieh & Shannon, 2005). Figure 4.2 illustrates the application of content analysis in both stages of this research. Employing this method enables a systematic examination of this research data to reveal patterns in SAR practice development of SDG integration within the ROEs.

This research employed conventional and directed approaches in developing codes and categories in content analysis (Hsieh & Shannon, 2005). Codes were derived conventionally from the text and directed from the conceptual and theoretical frameworks, facilitating the preparation of coding schemes for a comprehensive understanding of the phenomena.

Content analysis involves developing codes and categories to guide coders in analysing patterns or themes (Poole & Folger, 1981). The large quantities of text are then organised into these codes and categories (Weber, 1990), with flexible adjustments made throughout the process. Researchers may develop additional codes or revise existing ones as needed. Additionally, content analysis identifies and studies relationships among categories to interpret and discover findings in the data (Weber, 1990).

Content analysis has been employed in prior literature to investigate sustainability reporting practices and stakeholder engagement in both public and private organisations (Hahn & Kuhnen, 2013; Greco et al., 2015; Ringham & Miles, 2018; Gunawan et al., 2020; Safari & Areeb, 2020; Caputo et al., 2021; Lodhia et al., 2022). This method, known for its rigorous and systematic approach, has produced credible and valuable results by analytically developing and linking codes and categories. Hence, this research selected content analysis for its applicability in rigorously examining the issues within the research context.

This section justifies the relevance of the chosen data collection and analysis methods in the research context. Combining interviews, documents, and content analysis goes beyond mere techniques. It reflects the research context outlined in the research design and provides reasons for their application.

4.4.4 Applying the research methods

As depicted in Figure 4.2, the research design comprises two stages: report investigation for obtaining general overviews of the SDG disclosure practices and selecting contextually rich cases, and the case study analysis. This section outlines the research methods used in data collection and analysis for these two stages. The following table provides an overview of data collection in both stages.

Table 4.1 Data collection overview

Stages	Period	Focus	Methods
1. Report analysis and selecting the cases	January – April 2022	Obtaining general overview of SDG disclosures and selecting the contextually rich cases	• Examining 847 Indonesian ROEs meeting eligible criteria. • Collecting the 24 (eligible) ROEs' sustainability reports and semi-structured interviews with Bappenas and NCSR. • Content analysis of the reports and interviews
2. Conducting the case study	September 2022-February 2023	In-depth study of the Indonesian five ROE cases	• Semi-structured interviews with the decision-makers and operational staff involved in the SAR practices SDG integration in the five ROEs. • Collecting documents, from five ROEs: annual/ sustainability reports, online documents published in the ROEs' websites, and related government regulations provided in the regulators' websites. • Content analysis of the collected data from interviews and documents.

Publicly available documents were initially accessed to gather evidence of ROEs' SAR for SDG integration practices. Due to restricted access, documents from both ROEs and relevant government regulations were obtained solely from their respective official websites.

Interviews, preceded by obtaining human ethics approval (E1) from the University of South Australia's Ethics Review Committee, offered profound insights into how ROEs comprehend and implement SDG integration into their SAR framework. Ethics consent forms were signed during the initial interviews, and ethical norms were upheld during the entire process, including analysis, data storage, and reporting. Sections 4.5 and 4.6 detail the application of the research methods in both stages to derive essential findings related to the research questions.

4.5 Stage 1 – Report analysis

Stage 1 aims to comprehensively understand SDG disclosures in Indonesian ROEs and select contextually rich cases for the case study. With limited comprehensive studies on SDG integration practices in Indonesian ROEs, the selection process involves two steps. Initially, sustainability/annual reports are collected, and content analysis is performed on SAR for SDG-related disclosures. Subsequently, the analysis outcomes are verified through interviews with relevant authority bodies, which are Bappenas and NCSR, that are actively engaging in the SDG implementation in Indonesia.

4.5.1 Sample selection process

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

The first criterion was the publication of annual or sustainability reports on ROEs' websites to ensure the availability and transparency of the information. Additionally, the publications had to be annual or standalone sustainability or CSR reports. If an enterprise published both an annual report and a sustainability report, only the latter was selected. The publications had to be written in both Indonesian and English due to the use of GRI standards by many ROEs and the global nature of SDGs, ensuring the information in English is effective to global audiences. Finally, selected reports were limited to those published at least once a year from 2019 to 2020,

aligning with the IFSA Regulation 51/2017, which required financial service providers, issuers and limited liability ROEs to prepare their SDG disclosures in 2019 and publicly publish them in 2020 (IFSA D1, 2017. Only 24 ROEs, dominated by limited liability and financial service organisations, met the inclusion criteria. The 48 reports of these 24 ROEs from 2019–2020 were downloaded for analysis.

4.5.2 Content analysis

Content analysis was employed to examine the SDG practices disclosed in the annual or sustainability reports of 24 ROEs in 2019 and 2020. Guided by the adapted SAR framework (See Figure 2.1), this study investigates ROEs' disclosures regarding the holistic practices in the planning, accounting and reporting that should be depicted in their disclosures to demonstrate their commitment to meaningful actions.

To ensure the reliability and validity of the content analysis, a coding scheme was developed and tested, enabling the classification, analysis and interpretation of the information disclosed about the ROEs' SDG-related practices. The process begins with establishing coding rules to categorise texts (Krippendoroff, 2004; Weber, 1990). In this study, words and sentences formed coding units, capturing the contextual nuances of SDG-related practices and enabling more comprehensive (Zeghal & Ahmed, 1990) and reliable analysis (Milne & Adler, 1999). The second step involves the creation of categories combining a priori or emerging data approaches (Krippendoroff, 2004; Weber, 1990). A priori coding draws on existing theories and frameworks, while the emerging data approach is based on categories that emerge from the data (Weber, 1990). This study first employed the a priori approach, utilising the framework depicted in Figure 4.3 as a guide for establishing the initial categories.

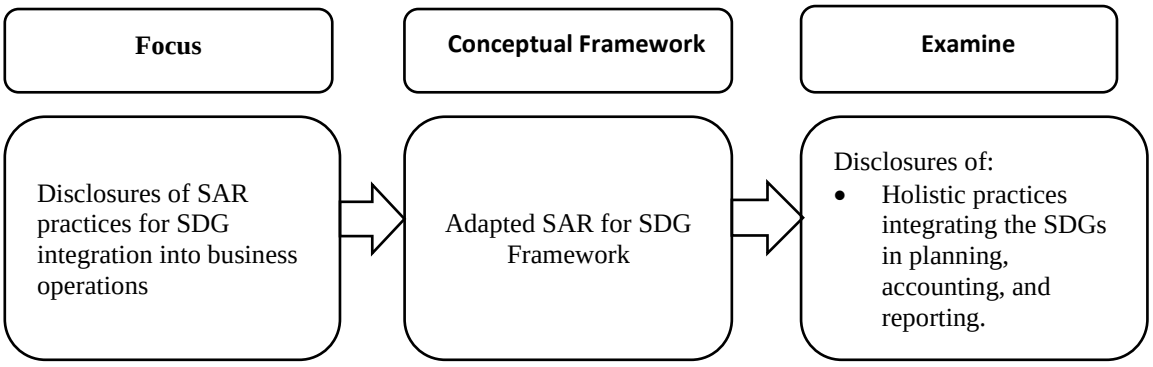


Figure 4.3 Conceptual framework used to develop initial categories.

Using an a priori approach, themes were developed limited to the adapted SAR framework (see Figure 2.1), customised to holistic SDG-related practice disclosures in planning, accounting, reporting stages, future plans, and stakeholder engagement. As Stage 1 aimed to obtain a general understanding of planning, accounting and reporting SDG contributions through SDG disclosures, it did not incorporate themes derived from Practice Theory and Institutional Theory that are not directly evident from the reports. To ensure reliability and validity, a pilot study of three different ROE reports was conducted to test these initial themes (Weber, 1990). The pilot study revealed that SDG-related practices were mainly disclosed in sustainability reports, which showed a broader range of sustainability practices linked to the SDGs. Therefore, a new theme ('About the report') was added to the initial themes to examine ROEs' general understanding of the SDGs in their sustainability reports. Finally, an intercoder reliability test was conducted following the pilot test (Weber, 1990), leading to further adjustments in the coding rules. Over three iterations, both coders achieved an agreement of over 80%. These testing procedures aim to ensure mutually exclusive and exhaustive theme development, effectively covering the research objectives (Weber, 1990). Table 4.2 presents the final themes/subthemes developed using both a priori and emerging approaches that were applied to particularly code the SDG practice disclosures as the focus of this research context in the 48 reports.

Table 4.2 Themes applied to analyse the disclosure of SDG-related activities

No.	Theme	Practices should be disclosed
1	About the report	General understanding of the relevant SDGs and their link to sustainable business processes to support the Indonesia's SDG achievement.
		Standards, frameworks or government guidelines used to plan, account and report SDG-related activities and performance
2	Disclosure of practices 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 programs to devise strategies. - Links between indicators, strategies, and programs for prioritised SDGs
		Accounting stage: - Establishment of data collection systems and methodologies to measure performance based on defined indicators in the planning stage. - Implementation of program 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 performance.
3	Future plans for the SDG agenda	A review of existing SDG practices to plan future SDG-related practices and programs.
4	Stakeholder engagement in managing SDGs	Stakeholder engagement in the three stages, including the methods and platforms used to involve stakeholders.

The subsequent explanation details the items listed in Table 4.2.

About the report

This theme explores the initial understanding of SDG disclosures within sustainability reports, focusing on how ROEs perceive SDGs as presented in the Section 5.2. It examines whether ROEs view SDGs as driving their sustainability operations, as suggested by the adapted SAR for SDG framework and empirical studies, or if they have opposing views. The theme also investigates the frameworks guiding reporting, including the use of specific standards like the GRI Standard for SDG integration and general sustainability reporting standards. Additionally, it explores government regulations influencing the reporting process regarding SDG contributions. Thus, this theme is not used to assess the level of practice disclosures across the three stages as presented in Table 5.5.

Disclosure of practices in the planning, accounting, and reporting stages

This theme comprises three subcategories related to practices that should be disclosed in the planning, accounting, and reporting stages. Following the adapted SAR for SDG framework, the study particularly investigates whether organisations strategically plan and disclose their contributions to relevant SDGs, including how they conduct a business impact assessment to identify their prioritised SDGs. Furthermore, the study examines whether ROEs disclose planned targets and develop SMART indicators to demonstrate their contributions. Alternatively, they may justify aligning their targets and indicators with the United Nations SDG targets and indicators that have been integrated into the Indonesian SDG action plans (Bappenas, 2018). The disclosures should also reveal strategies and justify how SDG programs and activities align with defined strategies.

In the accounting stage, disclosures should outline data collection systems and methodologies used to measure performance, including comparing actual versus targeted indicators from the planning stage. In the reporting stage, ROEs should elaborate on their SDG contributions measured through the performance metrics established in the accounting stage. Emphasising a holistic approach to what was planned and measured to report contributions, they should demonstrate a commitment to meaningful SDG attainment rather than viewing reports solely as communication tools. Additionally, they must verify and validate their performance, ensuring the accountable data of their SDG contributions collected for reporting aligns with Indonesia's SDG achievements.

Future plans for the SDG agenda

This theme examines how ROEs disclose the review of their existing SDG programs, impacting future plans for SDG-related practices and programs to enhance performance for significant contributions.

Stakeholder engagement in SDG disclosures.

This theme delves into ROEs' disclosures regarding stakeholder engagement, encompassing the methods and platforms utilised for stakeholder involvement in the planning, accounting, and reporting of their SDG contributions.

The definition of these developed themes and detailed information of the activities involved in Subsection 2.2.3 assists this research to identify related themes/subthemes of the disclosures in the report. Despite potential differences in terminology, disclosures depicting relevant processes are categorised accordingly. For instance, although the ROEs do not explicitly use the term "business impact assessment," they illustrate the process of identifying sustainability impacts from business operations within the term “materiality assessment”. Thus, disclosures related to materiality assessment are categorised under business impact assessment activities. This approach was also applied when identifying activities related to establishing sustainability strategies, performance measurement, mapping activities, verification and validation, and other activities regarding SDG integration practices in the accounting and reporting stages. Thus, when the ROEs described activities substantially relevant to SDG integration practices in the planning, accounting, and reporting stages as identified in the adapted SAR Framework, the activities were coded into the Themes/Subthemes in Table 4.2. These developed themes and subthemes are based on the SAR Framework (see Figure 2.1), which may have limitations when applied to real-world practices, as explored in Chapters Five and Six. The discrepancies will be highlighted to draw comprehensive implications.

The collected data on the disclosures in these themes was analysed to gain a general understanding of SDG practices in the Indonesian ROEs. Content analysis focused exclusively on these themes to understand ROEs' perspectives affecting disclosure development. This research utilised NVivo 12 to conduct the analysis (Jackson & Bazeley, 2019). In order to score the content analysis, word counts, adapted from Zeghal & Ahmed (1990), were employed to identify contextually rich ROEs for the case study. First, the number of words of the disclosures related to each Theme was calculated. For instance, the disclosure of “ROE 20 supports the realisation of SDG 5 and SDG 10 with alignment to targets: 5.2, 5.5, 10.3, 10.4” is counted 19 words. All the counts from the disclosures of the Themes/Subthemes were tabulated in Tables 5.5 and 5.6 by (1) percentage of the enterprise's total words and (2) percentage of the category's total words. This procedure effectively enables the analysis more effective to provide a general understanding of SDG disclosures and identifying contextually rich ROEs, was validated with Bappenas and NCSR before advancing to the second stage of case studies.

4.5.3 Interviews with Bappenas and NCSR

In Stage 1, interviews served as the second data collection method to validate the analysis findings of the sustainability reports of ROEs. These interviews involved discussions with officials from the Ministry of National Development of Indonesia (Bappenas) and the National Centre of Sustainability Report (NCSR). These interviews provided insights into SDG practices in Indonesia prior to the interviews with ROEs.

Bappenas, as the Indonesian Ministry of National Development, oversees the national SDG achievement through its SDG secretariat. This entity manages the inclusive process of SDG implementation at national and sub-national levels, collaborating with various stakeholders such as public and private organisations, NGOs, universities/research institutions, and philanthropy. The interviewee from Bappenas, the manager of the economic development pillar in the national SDG secretariat, provides valuable insights into challenges and government expectations regarding SDG transformation at the organisational level. For instance, the interview explores government challenges in ensuring SDG report accountability for reliable data sources in measuring national SDG achievement and expectations related to SDG transformation within organisations.

NCSR, as an organisation facilitating the development of sustainability reports for Indonesian entities, plays a crucial role, with Indonesian ROEs being among its primary stakeholders. The interview with NCSR offers insights into current SDG integration practices at the ROE level in Indonesia. This information is also essential for selecting ROEs with exemplary practices for the subsequent analysis phase.

In Stage 1, semi-structured interviews were employed, commencing with predefined questions about SDG disclosure practices among Indonesian ROEs. Participants' responses were further explored through probing relevant issues (Salmons, 2015). Bappenas and NCSR were chosen for their roles in SDG disclosure practices in Indonesia. Bappenas oversees SDG implementation in Indonesia, including contributions and reports to the UN, while NCSR assists Indonesian ROEs in developing reporting practices, conducts annual assessments, and recognises outstanding sustainability reporting efforts. Figure 4.4 provides the list of predefined interview questions.

1. What is your role in the Bappenas/NCSR and how long have you been in this role?
2. What are your sustainability and SDGs related responsibilities?
3. How do you enforce the incorporation of SDGs into organisations' SAR?
4. What is Bappenas/NCSR's role in supporting PSOs to embed SDGs in SAR, and how long has it been involved?
5. How significance is embedding SDGs in SAR to accelerate national SDG achievement, especially regarding standard/rule enforcement for PSO SDG reporting?
6. Can you identify leading Indonesian ROEs in embedding SDGs into SAR?
7. Can you discuss key programs supporting SDG reporting in ROEs, emphasising their significance?
8. In my preliminary analysis of the disclosures of embedding SDGs into the planning, accounting and reporting to produce holistic disclosure practices, I have revealed that many ROEs merely disclose SDG contributions by linking their SDG-sustainability/CSR programs to specific SDGs, any insights into this finding from your perspective?
9. Would you like to discuss any other issue related to SDG disclosure practices in the Indonesian ROEs?

Figure 4.4 List of interview questions with Bappenas and NCSR

The questions start by enquiring about the interviewees' roles and responsibilities to explore their perspectives on embedding SDGs in organisations' SAR. Emphasis is placed on implementing national SDGs and adherence to rules and regulations for PSOs. The objective is to uncover how these organisations' perspectives influence the enforcement of standards and regulations governing the integration of SDGs into SAR within organisational practices.

The questions further explore supportive programs by these organisations to enhance practice development in ROEs. These programs can be capacity building for practical knowledge, understanding rules, and establishing SAR procedures for comprehensive SDG integration. Interviewees provided insights into implementing these practices in Indonesian ROEs, focusing on leading practices identified in sustainability report assessments. Additionally, interviewees were allowed to raise any issues concerning SAR for SDG practices in Indonesian PSOs, specifically in ROEs.

The study contends that these interview questions facilitated an in-depth understanding of SDG disclosure practices in Indonesian ROEs, elucidating motivating factors and challenges in their development. The interviews are crucial for both validating the results of the content analysis and helping to determine the criteria for selecting specific ROEs for the subsequent case study. The collected data underwent content analysis to identify contextually rich Indonesian ROEs

within the framework of SAR for SDGs practice development. These interview findings are explored in Section 5.4

4.6. Stage 2: Case studies

The second stage aimed to thoroughly investigate SAR practices in planning, accounting, and reporting, specifically in embedding SDGs within the business operations of Indonesian ROEs. Data for this stage were obtained through interviews and document analysis. The subsequent discussion details the collection of research evidence through these two methods.

4.6.1 Interviews

The Stage 1 analysis identified 17 ROEs with contextually rich cases, demonstrating the most comprehensive SDG disclosures. Invitations for interviews were extended to these 17 ROEs, resulting in responses from five. To ensure anonymity, these five ROEs are designated as ROE A, ROE B, ROE C, ROE D, and ROE E. Interviews were conducted in these five ROEs with a total of 12 participants. Table 4.3 provides details of the ROEs and participants.

Table 4.3 Descriptions of the groups of interviews in each ROE

No	Interviewees	ROEs	Position	Job Responsibilities
1	A1	A	The coordinator of the corporate social responsibility (CSR) unit	Responsible for managing CSR activities for community development
2	A2		Staff at the CSR unit	Responsible for executing CSR activities
3	B1	B	Assistant Vice President (AVP) of corporate image, communication and CSR	Responsible for managing the corporation's functions on safeguarding the corporate image and communication, and CSR activities to maintain mutually beneficial interactions with society.
4	B2		Staff at the corporate image, communication and CSR unit	Responsible for executing activities related to corporate image, communication and CSR.
5	C1	C	The team leader of sustainable finance implementation	Responsible for planning, developing the framework and reporting the performance of sustainable finance products
6	C2		Chairman of risk management	Responsible for managing risks of the business operation, particularly in the implementation of sustainable finance.
7	C3		Coordinator of CSR unit	Responsible for planning, implementing and reporting CSR activities.

8	D1	D	The corporate secretary	Responsible for managing sustainability in the enterprise's projects and CSR activities, including planning, implementing and reporting the performance in sustainability reports.
9	D2		Staff at the corporate secretary	Responsible for planning and executing the CSR activities, including developing the sustainability report.
10	E1	E	The compliance and risk management director	Responsible for managing risks of the business operation, particularly in the implementation of sustainable finance.
11	E2		The head of the strategic planning division	Responsible for planning, developing the framework and reporting the performance of sustainable finance products
12	E3		The head of the retail business and consumer division	Responsible for distributing sustainable finance products, such as analysing and approving financing products for sustainable business operation

The interview questions in Figures 4.5 and 4.6 were developed using the procedures outlined in Subsection 4.4.3, combining both a priori and emerging approaches. Initially, questions were formulated based on the conceptual framework, Practice Theory, and Institutional Theory. These questions addressed planning, accounting, and reporting practices, as well as practice element development, institutional pressures, and challenges. Detailed explanations of the questions follow these two figures. One subtheme, which is roadmap development under the theme practices in planning, accounting and reporting emerged during the interviews. After the interviews, responses were categorised into themes and subthemes for analysis, as detailed in Table 4.5.

The participant selection was influenced by the level of access granted by the ROEs. Interview invitations were emailed in March 2022 to the Corporate Secretary, including a brief introduction and ethics approval. The ROEs then directed the researcher to specific departments running SDG-supporting programs, as detailed in Table 4.3. Unfortunately, top management levels, such as Directors, were not accessible despite their significant roles in SDG integration practice development according to the SAR for SDG Framework and empirical findings. Due to time constraints requiring completion by 20/02/2024, the researcher chose to refrain from insisting on higher access and conducted interviews with the available 12 participants who also hold significant positions in SDG-related program planning, accounting, and reporting. The selection of participants was driven by their roles and responsibilities in

developing the practices of SDG-related programs in the planning, accounting and reporting stages.

The interviews were conducted through the Zoom platform. For ROEs A to C, the research employed semi-structured interviews with individuals. For ROEs D and E, the interviews conducted with groups of three participants per their request. These interviews were conducted between September 2022 and January 2023.

Prior to the interviews, participants received the participant information sheet, consent form, and interview guide to review interview topics, interview questions in Bahasa Indonesia and ethical considerations. These documents succinctly outline the research and assure anonymity and confidentiality of participant identities. Copies can be found in Appendices A-D.

The initial Zoom interviews were conducted sequentially with participants from ROEs A-E, followed by confirmation telephone interviews. While telephone interviews lack visual cues like facial expressions and body language, they are cost-effective, less time-consuming, and perceived as less intrusive, potentially enhancing participation likelihood (Farooq & De Villiers, 2017). Further, a study has found no significant difference between telephone and face-to-face interviews (Farooq & De Villiers, 2017).

The 12 interviews, lasting between 1 and 1.5 hours, were recorded and later transcribed for analysis. Formal contact initiation began in May 2022 through emails to Corporate Secretaries responsible for sustainability reports, obtaining the initial interview access in September 2022. Further contacts, using the snowballing technique (Bleich & Pekkanen, 2013), involved coordinators, divisional managers, project managers, or operational staff. Interview questions, grounded in conceptual and theoretical frameworks and Stage 1 analysis results, were tailored to the integrated functions of those planning, measuring, and reporting SDG-related programs. Questions were flexibly adjusted for coordinators/divisional managers and operational staff to extract specific information about contextual SAR practices for SDG integration based on their responsibilities. The following subsections elaborate on the two-interview series with managers/coordinators and operational staff.

4.6.1.1 Coordinators/divisional managers/corporate secretaries

This group comprised middle management officials from each ROE responsible for formulating policies related to SAR practices for SDG integration. The interviews focused on exploring the development of SAR for SDG practices across the planning to reporting stages, particularly examining how directives are formulated to shape practice elements and supported arrangements in these interconnected stages. These interviews aimed to identify key personnel involved in SAR for SDGs practice development in the planning, accounting, and reporting stages. Figure 4.5 provides the list of questions used in these interviews.

1. What is your position within the ROE, and for how long have you been in this role?
2. What are your responsibilities concerning embedding SDGs into your organisation's SAR?
3. What are the key SDG issues in your local area?
4. What steps do you take to plan the most relevant SDGs to your business process?
5. Who are the key stakeholders involved in prioritising SDGs during the planning phase?
6. How do you formulate your organisation's SDGs performance measures?
7. How do you collect data to assess your organisation's performance against SDGs?
8. How do you communicate your SDGs information to your stakeholder?
9. How does your organisation support personnel in acquiring practical knowledge for embedding SDGs into SAR, considering relevant rules and regulations, especially related to the national SDGs?
10. What systems and procedures has your organisation developed for SAR in SDGs practices across planning, accounting, and reporting stages?
11. What are the primary motivations for your organisation to develop, plan, implement, and report on SDGs? Are these motivations driven by compliance with rules and regulations, government monitoring, professional networks, or other ROEs?
12. What are the key drivers in planning, implementing and reporting the SDGs?
13. What are the key challenges to develop SAR for SDGs into practice?

    Probe: to identify a general overview of SAR for SDGs practice development, the drivers and challenges

14. Are there any other issues related to this interview that you would like to raise?

Figure 4.5 List of questions for the coordinators/divisional managers/corporate secretary

Rapport with interviewees was established by discussing their general roles and responsibilities. The researcher introduced the research context and initiated the conversation by inquiring about SDG concerns in local areas, how organisations address these issues, and the significance of SAR practices for SDG integration.

The interviews commenced with inquiries about the interviewees' roles in SAR for SDG integration practice development and obtaining a general overview of the practices. The focus shifted to sustainability planning, exploring how ROEs conduct a business impact assessment to identify prioritised SDGs, establish rationales, and formulate performance indicators. Subsequent questions delved into the accounting stage, investigating how organisations develop and utilise accounting systems for data collection and reporting performance. The interviews also addressed sustainability reporting stages, covering reporting procedures, disclosure content, and platforms for communicating SDGs' performance.

Additional questions focused on developing practice elements, along with supported arrangements. Interviewees were queried about how the organisation organised people, systems, procedures, and infrastructure to support personnel in gaining practical knowledge of SAR for SDGs and understanding related rules and regulations following the teleological orders. They were also asked about factors motivating or undermining practice development. Interviewees were allowed to raise any additional concerns or issues. The interviews concluded by seeking permission for future confirmation via telephone.

These questions examine the primary research question of how Indonesian ROEs incorporate SDGs into their SAR. They seek to provide an overview of SAR for SDGs practice development, encompassing drivers and challenges.

4.6.1.2 Operational staff involved in planning, accounting and reporting SDG-related programs

These interviews focused on operational staff involved in the planning, accounting, and reporting of SDG-related programs. While the themes align with those addressed in the first group, the questions specifically delve into technical aspects of how operational staff execute their functions in line with the guidance from coordinators/managers. This includes planning, accounting, and reporting on SDG integration into business processes or related programs (see Figure 4.6 for the list of questions).

1. What is your position in your organisation, and how long have you been in this role?
2. What are your responsibilities concerning planning, accounting and reporting SDGs?
3. How do you perceive the importance of planning, accounting and reporting SDGs in the contribution to the national SDGs?
4. How does your organisation define prioritised SDGs? How do you consider the national SDGs?
5. What measures does your department take to decide the most prioritised SDGs?
6. Who are the key stakeholders involved in planning prioritised SDGs, and why is their involvement necessary?
7. What is the methodology used to identify the prioritised SDGs?
8. How does your organisation identify targets and indicators for the prioritised SDGs? What is the methodology?
9. Can you outline the primary and supporting activities, metrics, targets, and timeframe for the indicators?
10. How does your organisation establish the sustainability accounting system and procedures to record, measure and report the performance?
11. How do you utilise the database as a source to measure your organisation's SDGs performance?
12. How do you think the importance of linking the information in the report to the planning and accounting system?
13. How does your organisation establish the sustainability reporting system and procedures to report the performance?
14. Is any standard your organisation referring to? Why does your organisation adopt the standard?
15. What items should be included in the reports? Why do you think they are essential?
16. How does your organisation disclose SDGs strategies, priorities and policies identified in sustainability planning? Why do you think the importance of disclosing this information?
17. How do you disclose the potential stakeholders? Why is it important?
18. How do you engage with these stakeholders in planning, accounting and reporting?
19. How do you disclose the KPIs, including the main and supporting activities, metrics, target, and timeframe to justify your SDG performance contributed to the national SDGs?
20. How do you obtain practical knowledge?
21. What and how do you implement government rules and regulations, including the instructed systems to plan, account and report your organisation’s SDGs?
22. What drivers motivate your organisation to embed SDGs into the planning system?
23. What are the challenges in planning your organisation’s prioritised SDGs and their related KPIs?

    Probe: the practice development, the drivers and challenges for sustainability planning for SDGs.

24. Do you have any additional comments concerning the issues we have raised in this interview?

Figure 4.6 List of questions for personnel in the planning department

The questions commenced with asking about the interviewees’ roles and responsibilities in planning, accounting and reporting of embedding SDGs into business operations/related programs, followed by inquiring about their perspectives on the importance of holistic planning, accounting and reporting to contribute to the national SDGs. These questions were asked to investigate their perspectives of holistic practices, including the commitment to contribute to the national SDGs.

Subsequent questions delved into the practical execution of SDG practices in planning, accounting, and reporting, focusing on how interviewees transform their perspectives to

comply with internal rules, systems and procedures to execute their functions. In planning, the questions covered methodology for identifying and prioritising SDGs, targets, indicators, metrics, and timeframes. Accounting-related inquiries addressed the system and database used for collecting indicator data for performance measurement. Regarding reporting practices, questions explored the frameworks/standards employed and how interviewees aligned, planned, measured, and presented SDG contributions in their reports to substantiate their disclosed commitment to national SDGs.

Furthermore, interviewees were questioned about their practical knowledge activities, including executing rules and regulations and the instructions given to systems for planning, accounting, and reporting SDG integration. They were also probed about factors that might motivate or hinder practice development, investigating drivers and challenges in sustainability planning. The interviews concluded by seeking permission for future telephone interviews for confirmation and providing interviewees with an opportunity to raise any issues related to sustainability planning for SDGs.

These questions delve deeply into practice development, exploring both the drivers and challenges in planning, accounting and reporting SDG integration into business operations/related programs. Data from these interviews offer insights into how ROEs integrate SDG reporting practices with planning and accounting stages, delivering valuable information to stakeholders about their meaningful contributions to the national SDGs.

4.6.2 Data collected from documents

Several documents were used to corroborate the findings from the interviews, encompassing ROEs and oversight government documents. Table 4.4 lists the documents gathered to analyse SAR for SDG integration practice development in Indonesian ROEs.

Table 4.4 ROEs' and oversight government documents included in the analysis

No	Documents	Code for the documents					Notes
		ROE A	**ROE B**	**ROE C**	**ROE D**	**ROE E**	
1	Annual/sustainability reports 2019	ROE A D1-19	ROE B D1-19	ROE C D1-19	ROE D D1-19	ROE E D1-19	
2	Annual/sustainability reports 2020	ROE A D1-20	ROE B D1-20	ROE C D1-20	ROE D D1-20	ROE E D1-20	
3	Annual/sustainability reports 2021	ROE A D1-21	ROE B D1-21	ROE C D1-21	ROE D D1-21	ROE E D1-21	
4	Articles of association*	ROE A D2	ROE B D2	Restricted, not obtained	ROE D D2	ROE E D2	
5	Good corporate governance code*	ROE A D3	ROE B D3		ROE D D3	ROE E D3	
6	Board manual*	ROE A D4	ROE B D4		ROE D D4	ROE E D4	
7	Risk management manual*	ROE A D5	ROE B D5		ROE D D5	ROE E D5	
8	Presidential Decree 59/2017	PD D1					Applies to all ROEs
9	Bappenas regulation 7/2018	BP D1					
10	The Indonesian Financial Service Authority (FSA) 51/2017	IFSA D1	Not applied	Not applied	IFSA D1	IFSA D1	Applies to ROE A, D and E
11	The manual guidelines from IFSA of sustainable finance 2018	IFSA D2			IFSA D2	IFSA D2	
12	Sustainable finance roadmap phase 1 (2015-2019), 2014	IFSA D3			IFSA D3	IFSA D3	
13	Sustainable finance roadmap phase 2 (2021-2025), 2020	IFSA D4			IFSA D4	IFSA D4	
14	The Ministry of State-owned Enterprises (SOE) regulation 05/2021	Not applied	MSOE D1		Not applied		Applies only to ROE B
15	GRI Standards core option	GRI CO					Applies to all ROEs

** These internal documents from the ROEs have varying publication years. Hence, the table does not include specific years in the document column.*

Documents 1 to 3 include the enterprises' annual/sustainability reports from 2019-2021 (D1), along with various manuals, guides and codes relevant to CSR, sustainability and SDGs. D1 documents are critical for this study, specifically in corroborating interview findings with disclosures pertaining to SDG practices in annual and sustainability reports. The information from Documents 1-3 was used to validate insights from the interviews, strengthening the comprehension of how SDG-related programs are planned, implemented, measured, and reported within the ROEs.

Document 4, the Articles of Association, provides insights into the core business activities that underpin the ROEs' sustainability impacts, resulting in SDG concerns, targets and initiatives outlined in Document 1-3. Documents 5-7—comprising the Good Corporate Governance (GCG) code, board manual, and risk management manual—are the organisational guidance. They direct the sustainability governance system, define acceptable actions, and explain the risk management procedures integral to the execution of SDG-related programs within the ROEs' business processes.

Documents 8 to 14, obtained from government websites, are essential in informing this research about Indonesia's regulatory framework and guidelines governing SDG practices. Document 8, PD D1 - Presidential Decree 59/2017, is the foundational regulation regulating integrating Indonesia's SDG targets into national and regional ministries and government institutions. Chapter Two (Subsection 2.3.3.2) of this thesis outlines the specific provisions of this decree, which requires Indonesian organisations to develop their SDG action plans, collaborate with non-government institutions for program implementation, and report their performance to the Ministry of National Development, Bappenas.

Document 9, BP D1 - Bappenas Regulation 7/2018, prescribed by the Indonesian Ministry of National Development, called *Bappenas*, further elaborates PD D1. This document provides comprehensive information about Indonesian SDG action plans for 2017-2019 and 2021-2025. It includes detailed guidelines and the SDG matrix that institutions must adopt to formulate their SDG plans and annually report their performance to *Bappenas*. These documents offer crucial insights into the regulatory landscape governing SDG practices in Indonesia.

Documents 10-13, IFSA D1, IFSA D2, IFSA D3, and IFSA D4 represent critical documents issued by the Indonesian Financial Service Authority (FSA), applicable to ROEs A, D, and E. These regulations substantially impact the integration of sustainability into the operational framework of banks, non-bank financial service institutions, issuers, and companies listed on the Indonesia Stock Exchange, with the overarching goal of advancing Indonesian SDG achievement. IFSA D1 governs the transformation process, setting the stages to integrate sustainable finance into business operations. It is a fundamental pillar for banks, issuers and listed companies to support Indonesia's journey towards SDG achievement, particularly in 12 sustainable finance issues. IFSA D2 offers comprehensive guidelines for incorporating sustainability and sustainable finance into business processes, providing the necessary

framework for enterprises to embark on the transformation process. Complementing these regulations, IFSA D3 and IFSA D4 elucidate sustainable finance roadmaps structured across two phases, 2015-2019 and 2021-2025. IFSA D2, IFSA D3, and IFSA D4 further delineate the requirements articulated in IFSA D1, outlining the stages of transformation, from preparation to initial and advanced phases. They elucidate the vital elements necessary for the establishment of sustainability practices. IFSA D2 provides the Index as a navigational tool for the enterprises to disclose the practices of their sustainable operations, including CSR programs related to SDGs.

Finally, document 14, IMSOE D1, provides the insights for this research from the Ministry of SOEs guidelines for planning, implementing, evaluating and monitoring their social and environmental responsibility (SER) programs to contribute to SDGs. Document 15, GRI CO is the international standard, GRI Core Option, these five ROEs utilise to develop their sustainability reports.

This subsection outlined the data collection process in the second stage to conduct the case study, involving interviews and documents, to investigate the development of SAR practices for SDG integration in five ROEs. The combination of interviews and multi-source documents offers diverse perspectives on practice development, enhancing the comprehensiveness of understanding and facilitating robust findings. The subsequent section delves into the analysis of the collected data in this second stage using content analysis.

4.6.3 Data analysis for the second stage

Data analysis involves drawing inferences from raw data that involves sequential multi-methods, called methodological triangulation (Patton, 2014). This process comprises data preparation and analysis, involving dismantling, segmenting and reassembling data to form meaningful findings to draw inferences (Boeije, 2002). This subsection presents the data analysis from interviews and documents collected in the second stage to derive findings.

The interview data were initially analysed by deciding the level of detail for transformation into transcripts, considering the research context and balancing readability and accuracy (Tilley, 2003). The researcher listened to the interviews, summarised each transcript, and gained a general understanding of emerging themes (O'Dwyer, 2004). Since the researcher was the sole interviewer, transcribing occurred immediately after each interview to maintain a fresh

memory. Transcriptions were performed using Google Docs for time efficiency, leveraging voice recognition (Temple & Young, 2004; Palys & Atchison, 2012). The researcher then reviewed the transcripts for accuracy, correcting words, expressions, and typos that could lead to misinterpretation. This process, conducted by the researcher, facilitated a preliminary view of the texts, aiding in code development and critical finding identification before detailed analysis (Bailey, 2008; Temple & Young, 2004).

After transcription, the original Bahasa Indonesia transcripts were translated into English. For efficiency, machine learning tools such as Google Translate, Deepl, Grammarly Go, and ChatGPT 3.5 were initially considered. However, due to limitations in expression and grammatical errors using Google Translate, the researcher opted for a combination of Deepl, Grammarly Go, and ChatGPT 3.5. While these tools may offer overly perfect grammar, they successfully maintain the expression and intent of the original sources (Palys & Atchison, 2012; Wu et al., 2016).

Moreover, the English transcripts underwent analysis at three levels: open coding, axial coding, and selective coding (Boeije, 2002). A code representing the core topic was assigned to each segment (Boeije, 2002). Open coding involves breaking down, examining, comparing, conceptualising, and categorising texts into codes. Themes were developed inductively and deductively, allowing the data to create themes while predefined themes (Corbin & Strauss, 2008; Yin, 2018) from the SAR for SDG framework guided the process (See Figure 2.1).

Open coding facilitates a meticulous examination of the data, breaking it into fragments and encouraging a comprehensive thematic approach by categorising texts into groups of themes (Boeije, 2002). For instance, responses to questions about the 'drivers of SAR for SDG integration practices' were expected to align with influences suggested by the Institutional Theory. Corresponding codes such as 'coercive influence,' 'mimetic influence,' and 'normative influence' were created. Any new issues raised by interviewees not covered by initial theoretical codes were also recognised and coded for investigation. Table 4.5 highlights key codes and associated terms used to analyse the nature, extent, drivers, and challenges in SAR for SDG integration practice development in the second stage.

Table 4.5 The list of themes and descriptions to analyse the interviews.

No	Themes	Subthemes	Explanation
1	Practices: Planning, accounting, and reporting sustainability for SDGs, including future plans and stakeholder engagement.	Planning	Roadmap development and annual plan development (comprising business impact assessment involving stakeholders to identify prioritised SDGs relevant to core operations, SDG targets and indicators, SDG strategies, programs, and activities).
		Accounting	Program and activity implementation (involving stakeholders), performance measurement, verification, and validation.
		Reporting	SDG disclosure development: comprehensive overview of planned vs actual performance (measured in the accounting stage), evaluating existing programs for improvement integrating into future plan.
2	Practice element 1: Practical knowledge.	General understanding of the organisational actors/management	The perspectives of organisational actors (top level/management) of SDG integration into business operations through holistic planning, accounting, and reporting.
		Knowledge development activities	The activities to improve or enhance practical knowledge of SDG integration into business operations through holistic planning, accounting, and reporting.
		Approaches to maintain the knowledge of practice development	Approaches utilised by organisations to maintain the knowledge of SDG integration into business operations through holistic planning, accounting, and reporting.
3	Practice element 2: Internal rules & regulation.	The government rules or standards utilised to develop internal rules and regulations	The government rules/regulations/guidelines or any standards utilised to integrate SDGs into business operations through holistic planning, accounting, and reporting.
		The established and updated internal rules and regulations	Updating internal rules and regulation to adhere with adopted government rules/regulations/guidelines or any standards.
4	Practice element 3: Teleoaffectivity/instructed systems.	Organisational values, perspectives, and commitments	Understanding and regulations are transformed into procedures and systems to enforce acceptable actions and emotions of the individuals within organisations to integrate SDGs into business operations through holistic planning, accounting, and reporting.
		Policies, managerial strategies, procedures, and structure of governance	
		Systems, operational strategies, methods, and approaches	
5	Institutional pressures driving the SDG practices.	Coercive pressures	Government regulations/mandates affecting the practices of integrating SDGs into business operations through holistic planning, accounting, and reporting.
		Normative pressures	Professional or educational networks influencing the practices
		Mimetic pressures	Mimicking successful peers in the industry influencing the practices
6	Challenges encountered in developing SDG practices.	Internal challenges	Conflicting expectations among internal parties within organisations.
		External challenges	Conflicting expectations between organisations and external parties (community, government)

			Conflicting expectations among institutional pressures.

The first theme examines the practices in the planning, accounting, and reporting stages, including future plans and stakeholder engagement according to the SAR for SDG framework (see Subsection 2.2.3). The theme delves into how the ROEs strategically design and implement SDG-related programs and measure and report their performance, influencing their future plans. This theme also explores the extent to which ROEs involve key stakeholders throughout these stages. However, in applying open coding to explore the subthemes of this theme, it became evident that certain subthemes needed further development for a comprehensive understanding of practices in the planning, accounting, and reporting stages. Specifically, it was discovered that a subtheme pertaining to the SDG roadmap or five-year action plan was mandated before the annual plan emerged. Consequently, a subtheme focusing on the development practices of roadmaps was introduced during the planning stage.

The subsequent three themes—practical knowledge, rules and regulations, and teleoaffectivity—probe into the foundational elements that underpin the practices within the first theme. They explore how ROEs establish practical knowledge, adhere to relevant rules and regulations, and establish teleoaffectivity to implement and achieve the targeted performance of their SDG-related programs. The final two themes elaborate on the institutional pressures and challenges the ROEs encountered as they constitute the practices. These themes were developed based on Institutional Theory, which categorises pressures as coercive, normative, and mimetic, and identifies challenges as internal and external. According to Meyer and Rowan (1977), challenges arise from conflicting expectations. Therefore, this research use the word “conflict” to define the internal challenges as those arising from conflicting expectations among internal parties, and external challenges as those arising from conflicting expectations between organisations and external parties.

This research applied open coding, which involved transforming the transcripts into a three-column table. The left column contained the interview texts, followed by columns for codes and comments. This structured worksheet facilitated handwritten annotations next to the interview data, enabling the researcher to compare responses from different participants to the same questions.

The next step, axial coding, involved regrouping data pieces based on their relevant content into categories or themes aligned with the conceptual and theoretical frameworks. Themes were established for the research context, encompassing SAR for SDGs practice development, drivers, and challenges in each SAR stage of planning, accounting, and reporting. Practice development entailed establishing practice elements and supported arrangements in each stage.

Each interview comment was segmented into paragraphs within the table during axial coding. Comments from interviewees' responses were categorised based on defined codes and themes from the SAR for SDG framework (see Figure 2.1) and theoretical framework (see Figure 3.3). Different colours were used to highlight texts corresponding to each theme. This analysis method facilitated organising similar themes in one file, providing insights into what is occurring in SAR for SDG integration practice development as informed by the data. Additionally, the NVivo software program was employed to validate manually defined themes, ensuring accurate recognition of themes from the data (Boeije, 2002). The software was also utilised to search for frequent words or word strings to enhance code robustness.

The collected documents were also subjected to coding. However, since the documents were used solely to corroborate the interview findings, they were not translated into English. Only statements from regulations quoted in the findings were translated using Deepl, Grammarly Go, and ChatGPT 3.5. Regulations from oversight institutions were categorised into themes, as listed in Table 4.5. For instance, the regulation in Document 14, IMSOE D1, prescribing the practice development of embedding SDGs into SOEs' planning, implementing, evaluating, monitoring, and reporting, was categorised into Theme 1. The interview findings related to these practices were then triangulated with the regulations to understand how ROEs embedded them into their CSR practices in response to institutional pressures from the Ministry of SOEs.

Furthermore, selective coding involves establishing logical connections between core themes to comprehend observed patterns (Braun & Clarke, 2019) from the interviews and documents. In this research, selective coding focused on connecting themes observed in embedding SDGs into SAR practices in planning, accounting, and reporting, including the drivers and challenges encountered. The findings from each coding process were summarised based on the identified themes, aiding in identifying any gaps that needed filling to enhance the quality of findings. The iterative process continued until conclusions were reached that addressed the research questions or revealed alternative concepts in existing SAR practices (Miles & Huberman,

1994). Adjusting and fine-tuning strategies and techniques were essential for identifying rigorous patterns, insights, or concepts to answer the main research questions of this study.

Overall, the interviews and documents were analysed using coding processes, encompassing the assignment of a code to represent a core topic for each theme (Given, 2008). Themes and patterns were identified through both inductive and deductive approaches. The defined themes in Table 4.5 from the SAR for SDG framework and theoretical framework were employed to investigate SAR development practices in SDG integration across planning, accounting, and reporting stages, considering the drivers and challenges encountered. The presentation of the analysis is divided into two main parts. Firstly, it explores existing practices in the planning, accounting, and reporting of SDG integration in the business operations of the five ROEs discussed in Chapter Seven. Additionally, it discusses how these ROEs internally develop their practice elements and how institutional pressures and challenges affect practice development, explored in Chapter Eight.

4.7 Research credibility and trustworthiness

Trustworthiness in qualitative research, as outlined by Cope (2014), is a means for the researcher to assure themselves and readers of the value of the research findings. Fundamental approaches to ensure trustworthiness include credibility, transferability, confirmability, and dependability (Tobin & Begley, 2004). Credibility reflects the researcher's confidence in the truth of the research study's findings. Transferability demonstrates the applicability of the findings to similar situations, populations, and phenomena. Confirmability assures the neutrality of the findings based on participants' responses without potential bias from the researcher. Dependability is evident when other researchers can replicate the study, yielding consistent findings.

Credibility in the research process is essential for trustworthiness, validating the selection of appropriate research methods, and designing the research to capture the phenomenon's reality accurately (Yin, 2018). The validation process also contributes to reliability, promoting a robust research design that allows future replication using the same procedures (Yin, 2018). To enhance credibility in data collection and analysis, various techniques, such as prolonged engagement, persistent observation, peer debriefing, data collection triangulation, and researcher triangulation, can be employed (Lincoln & Guba, 1985; Yin, 2018).

This study utilised data collection triangulation, researcher triangulation, and debriefing techniques. First, a two-stage approach was employed. In the first stage, a general overview was obtained by conducting a content analysis of annual/sustainability reports, confirmed by interviews with relevant entities engaged in SDG disclosure practices in Indonesia. This initial understanding paved the way for a more in-depth analysis in the second stage, which included interviews and expanded document analysis, encompassing ROE documents and government regulations. Utilising diverse sources of evidence in the two stages enables the establishment of a chain of evidence by triangulating data between respondents and documents (Yin, 2018). Indeed, the data collection involved semi-structured interviews with Bappenas and NCSR and 12 interviews with various personnel profiles from the selected ROEs. The data encompassed SAR for SDGs practices documented in annual reports, sustainability reports, and additional materials like sustainability governance and risk management policies, elucidating the system and procedures of the practice development use of diverse data collection methods in these two stages. Using various data sources in both stages facilitated the acquisition of robust evidence for the findings. Indeed, maintaining a chain of evidence in the data collection and analysis process involves note-taking during and after interviews, reviewing and re-reading interview transcripts from recorded sessions, and employing a systematic two-phase approach for case selection and study, including participant confirmation. These measures enhance the credibility and trustworthiness of this research.

Additionally, the research design, methods, and instruments were developed in alignment with the research questions, conceptual framework, and theoretical framework, receiving prior review and approval from the supervisors. Supervisor checking, considered a crucial external validation, was undertaken to ensure the credibility of the various stages in the research process (Lincoln & Guba, 1985).

This research implemented credibility checks on the operationalised process during analysis. Supervisors assessed the procedures to ensure consistency between findings and participants' interpretations, also examining sufficient references to represent initial findings and raw data interpretations. The researcher compared interviews within and across cases using a three-column worksheet, facilitating theme identification and comparison with the research framework to enhance accurate analysis and credibility (Yin, 2018). The researcher and supervisors independently checked the initial analysis to ensure credibility and trustworthiness.

The credibility of the findings is reflected in their potential for generalisation within a specific domain (Parker & Northcott, 2016). Case studies, as discussed, generate analytical generalisation, utilising previously developed theory and research design as a template to compare empirical results (Yin, 2018). The focus is on the logic to justify selecting a single or multiple cases. Analytical and naturalistic generalisation can be achieved through multiple case studies, supporting replication and comparing similar and contrasting findings across several cases.

Yin (2018) emphasises the importance of reliability in enhancing credibility. Reliability, in this context, pertains to the stability of responses among multiple coders working with data sets of the research. This was achieved by implementing case study protocols and a case study database. The case study protocol documented the entire data collection and analysis procedures, ensuring the reliability of the process. The case study database was created using materials collected during the research, contributing to the overall reliability of the study.

In summary, this research prioritised the credibility of collected data and the analysis process to investigate phenomena and establish the trustworthiness of the findings (Parker & Northcott, 2016). Credibility and trustworthiness are achieved when the researcher effectively triangulates sources, methods, and theories to convince themselves and readers of the study's findings' truthfulness (Lincoln & Guba, 1985). This aligns with Yin's (2018) constructs of construct, internal, and external validity. This section outlines the techniques and procedures employed to ensure the credibility and trustworthiness of this research.

4.8 Case study compilation

This study employs a multiple case report (Yin, 2018) to present its findings, showcasing cross-case analysis to compare similarities and differences between cases.

As noted earlier, the research design initially involved obtaining a general understanding of the SDG disclosures and selecting contextually rich ROEs as representative cases. The specific procedures and processes of this stage, along with the findings, are detailed in Chapter Five, including the contextual background of the selected five ROEs, highlighting the factors driving their SDG integration practices in planning, accounting, and reporting.

Chapters Seven and Eight offer an in-depth investigation into the SAR for SDGs practice development in the selected ROEs. Specifically, Chapter Seven focuses on comparing existing SAR practices in planning, accounting, and reporting across the five ROEs, while Chapter Eight compares and contrasts the findings related to practice element development, institutional pressures, and challenges affecting practice development. These chapters elaborate on the findings, comparing and contrasting cases to claim replication, generalisability, and theoretical predictions (Yin, 2018). To ensure confidentiality and anonymity, interviewees' names, documents, and websites are referred to by codes.

4.9 Summary

This chapter justifies the utilisation of the case study methodology and its application in this research. Case study research facilitated the design of appropriate data collection and analysis methods to investigate the research phenomena within the specific context of Indonesian ROEs.

This research comprised two main stages: first, gaining a general understanding of SDG disclosures in Indonesian ROEs and selecting cases through content analysis, and second, conducting a case study to investigate the SAR practice development of SDG integration in the natural context. These stages involved various research methods for data collection and analysis, encompassing interviews, documents, and content analysis. Documents illuminated the state of SAR for SDG practices, contributing to the contextual background of Indonesian ROEs. Interview data analysis yielded rich evidence on the planning, implementation, and reporting of SAR for SDGs in each ROE.

This chapter details qualitative procedures ensuring a credible process for trustworthy findings. It introduces the constant comparison analysis approach facilitating cross-case examination of ROE cases through robust data analysis.

Chapter Five will present an overview of current SDG disclosures in Indonesian ROEs, discussing case selection for the subsequent case study. By analysing sustainability reports and interviewing Bappenas and NCSR, this chapter provides a general overview of SAR practices and SDG disclosures before delving into the case study in the second stage. It also offers the contextual background of the selected five ROEs before elaborating the findings of the case study’s finding in Chapters Seven and Eight.

Chapters Seven and Eight provide for the case study and the findings of the cross-case analysis of SAR practice development for SDG integration into business operations. The final chapter will summarise this study's significant findings and contributions, discuss its limitations, and identify future research directions in the area of SAR for SDG practice in PSOs in developing countries.

Chapter Five: Disclosure of SDG practices in Indonesian ROEs

5.1. Introduction

This chapter explores the SDG disclosures within Indonesian ROEs to obtain a general understanding of the activities involved in planning, accounting and reporting SDG contributions before embarking on the case study in the second stage. The analysis in this Chapter also facilitates the identification of contextually rich ROEs for the case study. Section 5.2 provides a broad overview of the SDG disclosures in the ROEs' annual/sustainability reports. Section 5.3 examines how ROEs not only report their SDG-related activities and contributions but also demonstrate the planning and accounting processes behind these contributions, underscoring their profound commitment to meaningfully contributing to the national SDGs. Section 5.4 presents insights gathered from interviews with Bappenas and NCSR representatives, enriching the understanding of the Indonesian ROEs' SDG disclosure practices. Section 5.5 discusses the findings from report analysis and interviews concerning SDG disclosures within Indonesian ROEs. Section 5.6 explores the selection process of contextually rich ROEs for the case study. Section 5.7 summarises the chapter, extracting critical insights from the comprehensive findings, including selecting the contextually rich ROEs for the case study in the second stage.

5.2. SDG disclosures presented in the ROEs' sustainability reports

This subsection explains the practices presented in the SDG disclosures of 24 ROEs during 2019-2020 in demonstrating their commitment toward meaningful SDG contribution. It examines whether they view SDGs as driving their sustainability operations, as per the adapted SAR for SDG framework and empirical studies, or if they hold opposing views. It also investigates the frameworks guiding reporting, including the use of specific standards like the GRI Standard for SDG integration or general sustainability reporting standards. Additionally, it explores government regulations that may influence the reporting process regarding SDG contributions. The methodology employed in this initial phase is detailed in Chapter Four, Section 4.5. It involved a sample selection process of 24 eligible ROEs, content analysis of the annual/sustainability reports in 2019-2020 using the developed Themes in Table 4.2 and interviews with Bappenas and NCSR. This section explores the findings from Theme 1, "About

the Report". Table 5.1 shows the number of Indonesian ROEs in each industry that disclosed SDG-related practices in 2019–2020.

Table 5.1 Reporting of SDG-related practices by Indonesian ROEs

Categorised Industries[3]	**No. of ROEs in Indonesia**	**No. of ROEs studied**[4]	**No. of ROEs reporting sustainability practices**		**No. of ROEs reporting on SDGs-related practices**			
			2019	2020	2019	%	2020	%
Agriculture, forestry, and fishing	20	0						
Mining & quarrying	18	0						
Manufacturing	38	0						
Electricity and gas supply	12	0						
Water supply, sewerage, waste management, and remediation activities	382	1	1	1	0	0%	0	0%
Construction	5	2	2	2	1	6%	2	11%
Wholesale and retail trade, repair of motor, vehicles, and motorcycles	66	0						
Transportation and storage	16	0						
Accommodation and food service activities; information and communication	13	1	1	1	1	6%	1	5%
Financial and insurance activities	217	18	18	18	14	82%	14	74%
Real estate activities	18	2	2	2	1	6%	2	11%
Business services	13	0						

[3] The industry categories follow the classification from the Indonesia National Statistics, where the data was derived.

[4] The ROEs studied are the enterprises that have met the criteria in section 4.5.1.1.1 presented in Table 4.2 They provided annual/sustainability reports on their websites.

Human health and social work activities	9	0						
Other service activities	20	0						
Total	**847**	**24**	**24**	**24**	**17**	**100%**	**19**	**100%**

Table 5.1 shows that only 24 of 847 Indonesian ROEs are eligible to be included in the analysis, and of the 24 ROEs, 17 in 2019 and 19 in 2020 disclosed SDG-related practices. Over 90% of these ROEs were limited liability and banking enterprises, which were mandated by IFSA 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 IFSA, leading to a higher number of ROEs in this sector disclosing their SDG-related activities.

The findings for Theme 1 (About the report) provide an overall picture of the reporting, outlining the position of SDG disclosures within sustainability reports. The SDG disclosure development follows the guidelines of IFSA Regulation 51/2017 and the GRI Standard Core Option, which is not explicitly tailored for SDG disclosures.

Given the adoption of the same guidelines, the enterprises examined exhibited similar reporting patterns. These ROEs (17 in 2019 and 19 in 2020) began by planning their sustainability agendas and then implemented related programs and activities, which were then linked to their contributions to the SDGs. They connect their sustainable business activities, often CSR, Community Involvement and Development (CID), and Community Development (CD) activities, to SDGs, typically detailed in the report's conclusion. These terms are sometimes used interchangeably, with CSR and CD being the most frequent. Henceforth, these terms will be used in the findings. Organisations are explicitly required to align their CSR and CD activities with the SDGs (IFSA D1, 2017). These ROEs utilised the seven ISO 26000 sustainability topics in developing the link to SDGs. Table 5.2 provides a typical example derived from ROE 20 disclosures of how these enterprises linked ISO 26000 topics to their SDG-related activities and performance, more often in CSR and CD programs.

Table 5.2 ISO 26000 topics linked to the SDGs

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 programs for employees	SDGs 4 and 8
		Providing fair wages	
		Providing occupation health and safety	
4	Environment	Environmental monitoring	SDGs 6, 7, 12, 13 and 15
		Waste management	
		Community development in the environmental sector	
		Energy efficiency	
		Green building concepts	
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 programs	SDGs 1, 3, 9 and 11
		Building public facilities and transportation	

Source: ROE 20, Sustainability Report 2020.

The following disclosure from one of the ROEs in the construction industry (see Appendix E for the complete list of ROEs) illustrates typical links used to exhibit SDG contributions:

> Commitment to the environment: [ROE 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.
>
> Commitment to supporting equity: [ROE 20] supports the realisation of SDG 5 and SDG 10 with alignment to targets: 5.2, 5.5, 10.3, 10.4. The activities include fair hiring processes regardless of gender, race, or religion.

This disclosure shows ROE 20's contribution to SDG 13, aligning with its relevant targets. However, more often, disclosures did not specify targets, merely listing programs related to supporting SDGs. For instance, ROE 23 (see Appendix E for the complete list of ROEs), operated 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 ROEs mainly referenced the SDGs in their reporting, with little evidence in the disclosures of them being transformed as an agenda set from the planning stage. The focus is on the post-hoc mapping of sustainability activities or performance to specific SDGs. The following section explores the disclosed activities in Themes 2-4 to provide a more comprehensive analysis.

5.3 How ROEs disclose their SDG reporting practices

This section examines the disclosure practices of 17 ROEs in 2019 and 19 ROEs in 2020 regarding planning, accounting, reporting, future plans, and stakeholder engagement for their SDG disclosures (Themes 2-4 in Table 4.2). The analysis aims to assess the extent of their commitment to SDG achievement through comprehensive practices. The findings, presented sequentially for Themes 2, 3, and 4, provide insights into the ROEs' dedication to meaningful SDG progress.

5.3.1 Planning, accounting and reporting practices

As discussed in Section 4.5, the themes related to disclosures in the three stages were based on the SAR framework outlined in Chapter 2 (Figure 2.1). These are therefore strategic in nature as the framework suggests that SDG activities should be integrated into business decisions holistically, suggesting a strategic approach is key to making successful SDG contributions. Analysis of the disclosure indicates that approximately 90% of the ROEs disclosed specific SDG-related activities, with a higher frequency observed in the themes of accounting and reporting stages. While the terms "business impact assessment, sustainability strategies, performance measurement, mapping activities, verification and validation" were not necessarily explicitly used by the ROEs in the disclosures, the analysis showed that ROEs did undertake the process and disclosed the outcomes using similar terms in their reports. This is summarised in Table 5.3. However, as will be discussed below, many of the disclosures are limited to community development programs, therefore do not represent an organisation-wide approach. These preliminary findings are further examined in the case studies in Chapters Six and Seven. These chapters comprehensively explore how Indonesian ROEs disclose their support for SDGs by integrating these goals into their business operations. However, SDG-related activities are closely linked to CSR/CD programs, with a strong emphasis on the accounting and reporting stages.

Table 5.3 Disclosure of SDG-related practices in planning, accounting and reporting

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 programs to devise strategies	0	1
	Linkage of indicators, strategies and programs 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 program 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

Table 5.3 shows that only three ROEs 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. Their disclosures were characterised by general narratives, such as "[ROE 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".

Their assessment appears less robust, resulting in inadequate disclosure of performance-targeted indicators for sustainability activities supporting 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 ROE in the Construction industry disclosed specific sustainability targets for SDGs, such as a "Potential of 62% reduction in greenhouse gas (GHG) emission in 2020 with a target of 3.7 million passengers" [ROE 20]. With more specific defined SDG targets, this ROE is the sole entity that developed a data collection system for measuring SDG performance and integrated it into reporting. It discloses program implementation and details SDG contributions using metrics from established systems. Nevertheless, these specific disclosures are only presented in three infrastructure projects. For example, it quantifies GHG reduction

from increased public transportation passengers, linking this reduction to contribute to SDGs 7 and 15.

Table 5.3 indicates that over 90% of ROEs inadequately demonstrated integrated planning, accounting, and reporting disclosures. These ROEs prioritised practices in program implementation during the accounting stage. Due to insufficient integration of SDGs into their strategic planning with specific targets and indicators, they reported SDG contributions by calculating budget realisation, comparing outputs with the previous year, or linking activities to SDGs, as evident in the following typical quotes:

> Development of Outstanding Junior Volleyball Athletes in [ROE 07] with a 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 [ROE 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.

The disclosures show a lack of engagement in utilising comprehensive accounting methods to drive behavioural changes for meaningful SDG achievement. They merely listed sustainability/CSR activities associated with ISO 26000 to demonstrate their contributions to the SDGs. They did not compare their actual performance with their targets because the latter had not been defined in the planning stage. The SDGs appeared to be retrospectively matched to the organisation's activities in the reporting stage rather than being used to drive a sustainability agenda within business operations.

Additionally, these ROEs conducted only internal verification and validation to ensure disclosure compliance, without external verification and validation. Nevertheless, the SAR Framework emphasises the need for external assurance to independently verify that the disclosures not only meet compliance standards but are also sufficient and reliable to ensure stakeholders their impactful contribution. The following statement is their typical disclosure.

> 2020 Sustainability Report of [ROE 06] has not yet been through an assessment process by an external party or an independent auditor. However, [ROE 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 [ROE 06].

This finding will be further explored in Chapter Six to investigate the ROEs' practical understanding of the need for external assurance to ensure sufficient practice development for impactful SDG contributions.

5.3.2 Future planning and stakeholder engagement practices

It is also important to analyse organisations' future SDG plans and stakeholder engagement. Table 5.4 presents the findings for Theme 3 (Future plans) and Theme 4 (Stakeholder engagement).

Table 5.4 Disclosure of future plans and stakeholder engagement

Theme/Subtheme	No. ROEs	
	2019	2020
Future plans for sustainability practices to support the SDGs		
Reviewing programs, activities and performance	0	4
Developing a future plan: 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

Table 5.4 shows that none of the 17 ROEs in 2019 provided information about their future plans for SDG-related activities. This lack of disclosure is likely because SDG disclosures were optional in 2019, leading to insufficient enforcements to publish sustainability reports including SDG disclosures that year.

In 2020, 12 ROEs 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 ROEs 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 ROE disclosed that *"Based on the evaluation carried out, [ROE 07] did not face significant obstacles in realising priority activity programs as stated in the 2020 RAKB [Sustainable Financial Action Plan] … directly and indirectly contributed to SDGs… [ROE 07] planned priority activity programs …, such as Increasing Lending for Green Infrastructure … Efficient use of energy".* The second ROE disclosed *that "There are many practices that*

are to be adopted in 2021 … such as the stadium [JIS] is being built by [ROE 20] … expected to be completed by the end of 2021…JIS will be equipped with environmentally friendly and sustainable facilities… For instance, … use energy-efficient LED lights and utilise solar panels as renewable energy".

Moreover, Table 5.4 indicates that in 2019 and 2020, only eight ROEs disclosed key stakeholder identification, and three ROEs included the methods in stakeholder engagement to gather information about sustainability impacts, not specifically for SDGs as required by IFSA 51/2017 and GRI standards. For example, ROE 23 engaged stakeholders through meetings, government interactions, and public feedback on their websites, focusing on enhancing sustainable business tourism. The collected issues were translated into sustainable business strategies, implemented, measured, and selectively reported for SDG contributions. It appears that the disclosed stakeholder engagement practices were not explicitly designed based on SDGs, indicating a relatively low initial utilisation of SDGs to drive stakeholder engagement practices among ROEs.

Findings for themes 2-4 indicate that none of the examined ROEs integrate SDGs into their business operations; instead, they link CSR activities to SDGs in reports. Most ROEs lack strategic planning for impactful SDG contributions through CSR and fail to integrate these plans into their accounting systems. Content analysis reveals a focus on business impact assessments for sustainability but not specifically for SDG contributions. ROEs disclose SDG activities with basic accounting methods for performance measurement, lacking efficacy in driving behavioural changes for meaningful SDG achievement. Unfortunately, no external assurance is mandatorily required, hindering the improvement of these practices. They also did not conduct thorough reviews of these existing practices, presenting future plans as a list of budgets and activities without embedding improvement strategies for impactful SDG contributions. While stakeholders are involved, the engagement often lacks a deliberate connection to SDGs, emphasising sustainability in a broader context.

These preliminary insights were subsequently incorporated into the interviews with Bappenas and NCSR, detailed in the following section.

5.4 Interviews with Bappenas and NCSR

After assessing SDG disclosures in Indonesian ROEs, semi-structured interviews were conducted to complement insights from content analysis. Interviews with Bappenas and NCSR offer a deeper understanding of SDG disclosure practices, providing essential knowledge before the second-stage case study. These institutions were selected due to their active involvement in SDG implementation and developing SDG disclosure practices in Indonesian ROEs (see Subsection 4.5.1.)

The interviewee from Bappenas emphasised the Indonesian government's commitment to achieving SDGs. Bappenas, representing the government, has incorporated 94 SDG targets into the 2015-2019 national action plan and 124 targets into the 2021-2024 national action plan. Intensive collaboration with various stakeholders, including ministries, public institutions, and private businesses, ensures establishing action plans aligned with the national agenda. Bappenas enforces relevant policies to support this inclusive process, regularly monitoring, evaluating, and reporting policy implementation and target achievement to the UN for Indonesia's SDG progress.

The interviewee highlighted challenges at both macro and micro levels in national SDG implementation. Establishing trust and effective coordination across ministries and organisations is a macro-level challenge. Ensuring alignment of organisational-level business operations with national SDG goals poses a micro-level challenge, alongside balancing economic, social, and environmental aspects in business practices. Bappenas has addressed these challenges through training initiatives, particularly for state-owned enterprises (SOEs), integrating SDGs derived from the Indonesian SDG action plan into their business processes.

Moreover, the interviewee from NCSR outlined a shift in NCSR's role in sustainability reporting assistance. Initially, NCSR focused on technical report development, but it now adopts a holistic approach, assisting public and private organisations in Indonesia. This transformation responds to heightened demand for comprehensive sustainability reporting, especially from listed companies. Indeed, NCSR now assists from strategic planning to report development, helping organisations integrate SDGs into strategies, targets, performance indicators, policies, and systems for implementing SDG-related programs and activities, effectively communicating their implementation and performance.

The NSCR interviewee outlined four levels to assess disclosure practices in enterprise sustainability reporting. Level 1 involves basic compliance, where reports, including SDG disclosures, are developed solely to meet regulatory requirements. At Level 2, enterprises integrate regulations with reporting standards. Levels 3 and 4 signify advanced approaches, where enterprises adopt comprehensive reporting standards, influencing their sustainability ratings and positioning them as industry leaders in best sustainability reporting practices. The interviewee underlined that most listed SOEs and private companies in Indonesia are at levels 3 and 4.

Nevertheless, most Indonesian ROEs, particularly in the financial and insurance sector, operate at levels 1 and 2, representing compliance and compliance plus levels. At the compliance level, ROEs produce basic sustainability reports with SDG disclosures to comply with regulations, notably FSA Regulation 51/2017. Compliance plus level combines FSA regulations with other standards, such as GRI or ISO 26000, to surpass regulatory requirements. Content analysis indicates that many ROEs, influenced by external pressures, especially in the financial sector, integrate FSA and GRI standards to demonstrate sustainable finance practices as mandated. Government regulations, notably FSA guidelines, exert strong external pressure on ROEs to incorporate sustainability into their operations and reporting.

Furthermore, the NCSR interviewee underlined that inadequate human resource capacity poses a primary challenge in developing sustainability reporting practices, specifically for SDG disclosures. In response, NCSR actively addresses this issue through training, workshops, and certification programs for employees and management. These activities focus on enhancing practical knowledge, encompassing technical skills and practical insights from management on integrating SDGs into business processes.

Finally, the NCSR interviewee noted a misconception among some ROE managers who equate managing SDG-related activities to handling CSR funding, allocating a portion of profits for social community development at the end of the financial year. This perception leads to a lack of integration of SDG activities from the strategic level. NCSR actively addresses this misconception by engaging with ROEs and guiding them to establish SDG practices from the strategic to reporting levels. Developing a practical understanding is considered essential in shaping these practices.

The interviews indicate that sustainability disclosure practices among Indonesian ROEs are at level 2, compliance plus. While they combine GRI standards with FSA framework 51/2017 for sustainability reporting, showing positive progress on sustainability reporting beyond regulatory requirements, their SDG disclosure practices remain basic. There is a lack of understanding regarding the importance of integrating SDGs from strategic planning to accounting and reporting; SDG disclosures are often treated merely as CSR activities. NCSR emphasises the need for ROEs to showcase SDG integration in day-to-day operations and performance reporting. In contrast, Bappenas expects SDG integration at the organisational level, emphasising strategic planning, accounting, and reporting to contribute significantly to Indonesia's SDG achievement. Accountability is crucial in developing SDG integration practices, ensuring reliable information provided to Bappenas in assessing national SDG achievement.

5.5 Discussion - the extent of SDG disclosure practices in Indonesian ROEs

Developing countries face greater challenges in advancing their sustainability agenda (Belal et al., 2010; Qian et al., 2021), including the SDGs (Tilt et al., 2020; UN, 2019). This requires robust collaboration, particularly among PSOs (Sachs, 2012), at the local level as regional areas encounter the most challenging situations in pursuing SDGs (Guarini et al., 2022; Bappenas, 2019).

Local-level PSOs, in this research, the Indonesian ROEs, play crucial roles in accelerating SDG achievement in developing countries (Bebbington & Unerman, 2018; 2020; Guarini et al., 2022; Guthrie & Martin-Sardesai, 2020). ROEs must transparently demonstrate commitment by strategically integrating SDGs into planning, accounting, and reporting processes for meaningful outcomes (Adams, 2017; Bebbington & Unerman, 2018; 2020). Comprehensive SDG disclosures (Bebbington & Unerman, 2018; Kaur & Lodhia, 2019) become an essential medium to obtain a general understanding of the articulation of their commitment that their SDG contributions resulted from accountable activities in three stages (Bebbington & Unerman, 2020; PwC, 2019; Rosati & Faria, 2019; Silva, 2021; WBCSD, 2018).

Despite the Indonesian government's robust commitment to SDG attainment (Gunawan et al., 2020; 2022), consistent with prior studies (Gunawan et al., 2020; Kuswantoro et al., 2023), the analysis in Stage 1 indicates that SDG disclosure practices in Indonesia ROEs remain at a basic

level. This study identified that among 847 Indonesian ROEs, 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 IFSA Regulation 51/2017 enforcement. This regulation mandates the publication of sustainability reports, including SDG disclosures, for these entities from 2019 to 2020, suggesting a clear coercive influence on SDG disclosures (Gunawan et al., 2020; Kuswantoro et al., 2023). Notably, over 90% of Indonesian ROEs are not limited liability enterprises, which are only mandated to begin sustainability reporting, including SDGs from 2022–2024. It is expected that as regulatory requirements come into effect, more ROEs will disclose their SDG-related activities, underscoring their commitment to embedding the SDGs into their operations.

Consistent with the findings of Gneiting & Mhlanga (2021), Mhlanga et al. (2018) and Guarini et al. (2022) and prior studies in the Indonesian context (Gunawan et al., 2020; Kuswantoro et al., 2023), this study indicates that SDG disclosures are still in the early stages of development. Most ROEs inadequately disclosed that they initially planned their SDG contributions to control the activities in accounting and reporting. Specifically, aligned with the findings from Gneiting & Mhlanga (2021), they did not deliberately use the SDGs to drive their sustainability agenda by establishing SDG targets and indicators, which are fundamental to measuring SDG outcomes (Guarini et al., 2022; Lodhia et al., 2022). The absence of specific SDG targets and indicators appears to have resulted in the utilisation of basic accounting methods that may not effectively drive behavioural changes within organisations for impactful SDG achievement (Schaltegger & Wagner, 2006; Zyznarska-Dworczak, 2020).

The findings indicate that the disclosed SDG activities primarily focused on sustainability practices, with the SDG achievement seen as an additional outcome resulting from their sustainability efforts. Similar to the findings of Mhlanga et al. (2018), the disclosures often treated the SDGs as a post-hoc addition to sustainability practices rather than demonstrating the holistic integration of the SDGs in the three stages. For example, one ROE linked its sustainability activities in the tree planting program 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.

Unfortunately, most ROEs did not review their current SDG activities to improve performance embedded in their future plans for substantial SDG achievement. The absence of external assurance also raises questions about the significance of SDG contributions disclosed in the reports, as correspondingly found in de Oliveira Bellini et al. (2019).

Moreover, the findings indicate that none of the disclosures specified SDGs guiding stakeholder engagement. For example, the ROEs acknowledged the significance of stakeholder engagement in identifying sustainability issues but failed to adequately establish the links between the issues and SDG-related concerns during planning. This connection is crucial because issues identified in the planning stage form the basis of indicators, strategies and sustainability programs (Ball et al., 2014) to achieve the SDGs. Failing to highlight the links between these three stages in reports hinders stakeholders from ensuring the effectiveness of SDG contributions (Bebbington & Unerman, 2020).

The observed disclosures are likely to be influenced by IFSA Regulation 51/2017, which emphasises sustainability practices and mandates the disclosure of activities relevant to the SDGs for reporting. However, this guidance contrasts with Presidential Regulation 59/2017 and Bappenas Regulation 07/2018, which advocate for comprehensive integration of SDGs in planning, accounting, and reporting. This regulatory inconsistency poses a challenge highlighted by the Bappenas interviewee regarding the difficulty in achieving effective coordination across ministries and organisations at the institutional level. The misalignment between IFSA 51/2017 and Perpres 59/2017 inhibits the effective integration of SDGs into organisational business operations, thus hindering substantial contributions to national SDG goals.

These findings reveal that these ROEs employ a basic approach in developing their SDG disclosures, lacking a comprehensive demonstration of SDG commitment in the linkages of planning, accounting and reporting. This finding aligns with the NCSR Interviewee's statement, highlighting the basic level of SDG disclosure practices in ROEs. These entities primarily link their sustainability/CSR activities to specific SDGs to merely comply with FSA 51/2017 regulations. The majority of these ROEs utilise GRI standards, often adopting the GRI Core Option along with FSA 51/2017 for SDG disclosure development. However, the GRI Standard Core Option is designed for sustainability reporting development rather than SDG-specific guides like the SDG Compass. The adopted reporting standards strongly affect disclosure

development (de Oliveira Bellini et al., 2019). While this approach may not be inherently detrimental, it may not significantly contribute to Indonesia's SDG achievement. This approach may not substantially advance Indonesia's SDG agenda, as it adopts a sustainability-to-SDG rather than SDG-to-sustainability approach, where SDGs should guide sustainability efforts rather than vice versa (Gneiting & Mhlanga, 2021).

The findings highlight a need for more comprehensive inconsistent regulatory guidelines and enforcement (Belal et al., 2010; Gunawan et al., 2020) and knowledge development (Lodhia et al., 2022), as also advocated by the Interviewees from Bappenas and NCSR to improve ROEs' understanding and adoption of suitable disclosure standards for meaningful SDG reporting.

Moreover, despite the lack of comprehensive SDG disclosures by the Indonesian ROEs, it is premature to conclude that they are not concerned about meaningfully contributing to Indonesia's SDG achievement. Positive efforts such as reporting sustainability activities to meet the SDGs since 2019 (rather than 2020, as mandated by IFSA Regulation 51/2017) reflect their recognition of the importance of disclosing their 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.

ROEs demonstrate a willingness to adopt sustainability principles and align operations with broader SDG objectives. However, challenges such as human resource capacity constraints, as noted by the NCSR interviewee, and regulatory inconsistencies highlighted by the Bappenas Interviewee may emerge. This research emphasises that an in-depth case study in the second stage is crucial for a comprehensive understanding of practice development. It will uncover the drivers and challenges encountered, providing holistic insights into the implications of this research. Therefore, contextually rich ROEs are selected for the case study, with the selection process detailed in the next section.

5.6 Selection of ROE cases for Stage 2

Since this thesis focuses on SDG-related practice development, priority was given to selecting ROEs from the stage 1 analysis that disclose the development of practice elements in integrating SDGs into their planning, implementing, and reporting stages of operations. The following considerations were established to select the ROEs with contextually rich cases: This

selection process considered factors such as challenges and pressures encountered in these practices:

1. The selected ROEs disclosed their SDGs-related practices in their business process in 2019-2020 or at least in 2020 annual/sustainability reports, aligning with the Indonesia FSA mandate to publish sustainability reports with SDG disclosures, effective from 2020.

2. The selected ROEs exhibited comprehensive disclosures in Themes 2-4, covering practices in planning, accounting, and reporting stages, along with future plans for SDGs and stakeholder engagement.

3. They meet the criteria established in interviews with Bappenas and NCSR, connecting their organisational SDGs with national SDGs and demonstrating compliance level in addressing SDGs within their business processes.

4. The selected ROEs operate in different business sectors.

As discussed earlier, content analysis revealed SDGs-related practice disclosures in the annual/sustainability reports of 17 ROEs in 2019 and 19 ROEs in 2020. The table below presents the disclosure levels of ROEs related to Themes 2-4, divided into two main groups: ROEs in the financial and insurance service sector and ROEs in the construction, real estate, and recreational and hospitality service sectors. The latter group is combined due to the limited number of ROEs in these sectors. Tables 5.5 and 5.6 present the word calculation utilising the approach from Zeghal & Ahmed (1990) (see the method in Subsection 4.5.1).

Table 5.5 The level of SDG disclosures – the selected ROEs in financial and insurance services

No	Themes		ROE 02	ROE 03	ROE 04	ROE 05	ROE 06	ROE 07	ROE 08	ROE 09	ROE 10	ROE 12	ROE 15	ROE 16	ROE 17	ROE 18	Total Words
1	Practices in planning, accounting and reporting	1 (%)	10%	5%	7%	8%	7%	6%	7%	10%	3%	4%	11%	6%	7%	9%	119,285
		2 (%)	98%	99%	98%	100%	98%	96%	97%	99%	100%	93%	97%	99%	92%	86%	96%
2	Future plan for SDG agenda	1 (%)	11%	0%	0%	0%	0%	18%	0%	0%	0%	0%	0%	0%	0%	71%	1,725
		2 (%)	2%	0%	0%	0%	0%	4%	0%	0%	0%	0%	0%	0%	0%	10%	1%
3	Stakeholder engagement in managing SDGs	1 (%)	0%	3%	5%	0%	6%	0%	10%	3%	0%	13%	15%	2%	25%	18%	2,866
		2 (%)	0%	1%	2%	0%	2%	0%	3%	1%	0%	7%	3%	1%	8%	4%	2%
Total Words			12,118	6,050	8,493	9,543	8,522	7,468	8,637	12,014	3,579	5,144	13,551	7,214	9,066	12,476	123,876
%			10%	5%	7%	8%	7%	6%	7%	10%	3%	4%	11%	6%	7%	10%	1

Table 5.6 The level of SDG disclosures – the selected ROEs in real construction, real estate and recreational services

No	Themes		ROE 19	ROE 20	ROE 21	ROE 23	ROE 24	Total Words
			Construction	Construction	Real estate	Recreational & hospitality	Real estate	
1	Practices in planning, accounting and reporting	1 (%)	18%	1%	12%	0.69	0%	57780
		2 (%)	100%	100%	98%	97%	0%	98%
2	Future plan for SDG agenda	1 (%)	0%	0%	0%	1	0%	304
		2 (%)	0%	0%	0%	1%	0%	1%
3	Stakeholder engagement in managing SDGs	1 (%)	0%	0%	0.15	0.85	0%	847
		2 (%)	0%	0%	2%	2%	0%	1%
Total Words			10,400	578	7,061	40,892	0	58,931
%			18%	1%	12%	69%	0%	1

(1) percentage of the enterprise total words; (2) percentage of the category total words

Eligible ROEs, meeting established criteria, must exhibit contextually rich disclosures in Themes 2-4. ROE 24, with minimal disclosures (less than 0.5%), was excluded. The remaining ROEs were evaluated based on the criterion of having a substantial word count for disclosures and providing information on each scheme theme. ROEs with total disclosures below 6%—specifically, ROEs 03, 10, and 20—were deliberately excluded from the study.

Seventeen ROEs operating across diverse sectors and locations, meeting the criteria, were invited for interviews after confirmation with NCSR, who provided them assistance in developing their SDG disclosures and sustainability reporting. Invitations were dispatched in May 2022. Positive responses were received from only five ROEs—namely, ROEs 06, 18, 19, 21, and 23. Interviews commenced in September 2022 and concluded in January 2023.

Hereafter, cases will be identified as ROE A, ROE B, ROE C, ROE D, and ROE E. These ROEs disclosed their SDG integration practices in their 2019-2020 annual/sustainability reports. Despite imperfect disclosures mainly focusing on accounting and reporting stages, they implemented what they planned and reported. Considering NCSR's confirmation of basic-level practices among Indonesian ROEs, expectations for extensive disclosures are not high. The

disclosed information indicates future SDG plans, mostly presented as proposed budgets and activities. Notably, specific guidelines were not employed in the development of SDG integration. These ROEs disclosed the combination of the GRI Core Option and FSA 51/2017 framework in their reporting practices. Subsection 5.7 presents the contextual background of these five ROEs.

5.7 The contextual background of the five selected ROEs

This subsection discusses comprehensive business information on the five selected ROEs to contextualise their practices related to program development concerning SDGs. The information summarised in Table 5.7 includes industry categories, core business operations, ownership structures, the concern of taking SDGs into the business agenda, the primary regulatory framework influencing the practices, SDG-related programs, and the year of reporting on SDGs.

Table 5.7 The contextual information to understand the SDG practices in the five selected ROEs

Contextual aspects	**A**	**B**	**C**	**D**	**E**
Location	Jakarta	Jakarta	Jakarta	North Sumatera	Central Java
Year of establishment	1960	1969	1985	1961	1963
Ownership and business structure	DKI Jakarta Provincial government, limited liability company listed in the Indonesia Stock Exchange.	Equal ownership-50% -DKI Jakarta Provincial Government and Central Government, limited liability company listed in the Indonesia Stock Exchange	DKI Jakarta Provincial government, limited liability company listed in the Indonesia Stock Exchange.	Provincial, Regency and Municipal governments in North Sumatera province, limited liability company	Provincial, Regency and Municipal governments in Central Java province, limited liability company
Industries	Tourism and hospitality	Industrial estate - renting and development	Infrastructure development	Banking sector	Banking sector
Core business	Providing products/services in tourism and hospitality	Renting and developing industrial real estate	Developing the infrastructures, particularly the regional strategic infrastructure projects (KSD) in Jakarta	Offering banking products and services in the region	Offering banking products and services in the region

Vision	to become the largest and best-integrated tourism area in Southeast Asia, with an extensive network of recreation centres	To become a reputable international standard developer in green modern integrated estate development	to be an Excellent Company for a Better Jakarta	To become a mainstay bank in assisting and encouraging economic growth and regional development in all fields and to become one of the sources of local income to improve the standard of living.	To be a trustworthy bank as the pride of the public, capable of supporting regional development
Regulations influencing SDG practices	IFSA 51/2017	Ministry of SOEs-regulation 04/2021	DKI Jakarta Governor Decree on each KSD	IFSA 51/2017	IFSA 51/2017
SDG-related programs	Attached to CSR and some operational programs.	Attached to SER programs and activities (CSR and Partnership and community development program - PCDP)	Attached to three major projects related to its core businesses, and CSR programs and activities	Attached to sustainable finance programs related to its core businesses, and CSR programs and activities	Attached to sustainable finance programs related to its core businesses, and CSR programs and activities
Year of starting to develop SRs	2019	2021	2020	2019	2012
Year of starting reporting on SDGs-related programs	2019	2021	2020	2019	2019
Standards used for developing SRs	GRI Standards core option, IFSA 51/2017 framework	GRI Standards core option	GRI Standards core option	GRI Standards core option, IFSA 51/2017 framework	GRI Standards core option, IFSA 51/2017 framework

Sources: ROE A D1, 2019-2021; ROE B D1, 2021; ROE C D1, 2020; ROE D D1, 2019-2021; ROE E D1, 2019-2021 (see Table 4.4 for details on data sources)

Table 5.7 shows that ROEs A, B, D, and E have a more extended operational history, spanning nearly six decades. In contrast, ROE C commenced operations in 1985 and has accumulated approximately four decades of industry experience. The timelines for initiating SR development generally mirror this, with ROEs A and D embarking on their SR journey in 2019, simultaneously commencing the disclosures of their contributions toward SDGs. ROE C started in 2020, aligning its SR development with the growing importance of sustainability

reporting. Although it is a longstanding organisation, ROE B just initiated SR development more recently, in 2021. Interestingly, ROE E commenced SR development in 2012, even before SDG establishment, and began disclosing SDG contributions in 2019.

Table 5.7 also shows that the ROEs are engaged in three primary industries. ROE A primarily focuses its business efforts within the tourism and hospitality sectors. ROEs B and C, on the other hand, are actively involved in infrastructure development. ROE B concentrates on developing and leasing buildings, offices, and warehouses explicitly tailored for industrial estates. Meanwhile, ROE C focuses on infrastructure development, encompassing diverse projects such as transportation networks, hotels, stadiums, and velodromes. Their collective mission is to support sustainable infrastructure development within Jakarta (ROE B D1, 2021; ROE C D1, 2020). ROEs D and E operate in the banking sector, positioning themselves as essential to the economic development of their regions (ROE D D1, 2021; ROE E D1, 2021). This diverse range of industries reflects the unique roles and contributions of these ROEs for their regions' development, shedding light on the various factors that may influence their approaches to developing their business programs regarding SDGs.

Moreover, the information in Table 5.7 implies that the ownership and business structures of these five selected cases exhibit similarity. They share a typical ownership pattern. Across ROEs A, C, D, and E, the regional governments they serve uphold a majority stake of more than 50% threshold. This majority ownership gives the regional governments considerable control over the strategic direction of the businesses, affecting management decision-making. Therefore, these ROEs identify the regional governments as their significant stakeholders (ROE A D1, 2021; ROE C D1, 2020; ROE D D1, 2021; ROE E D1, 2021). In contrast, ROE B has a slightly different ownership pattern that is equally divided between provincial and central governments, making both regional and central governments the significant stakeholders in ROE B's operations. This distinction of the ownership structures provides insights into the contextual factors that influence the relationships with their key stakeholders, shaping their approaches to focus on developing particular programs for SDG contributions.

Additionally, the business structures of these ROEs affect the practice development of establishing SDG-related programs to make a meaningful contribution. ROE A, a limited liability company listed on the Indonesia Stock Exchange, operates within a regulatory framework that places substantial emphasis on compliance, especially in the context of listed

entities. Notably, the Indonesian Financial Services Authority (FSA) has established FSA 51/2017 to regulate sustainable operations for listed companies. ROE A adheres to the guidelines of this regulation that shape its sustainable business practices to be reported in the Sustainability Report (SR). ROE A has developed comprehensive sustainability reporting mechanisms to disclose its sustainable business, including disclosing its programs to support SDGs. The programs are primarily oriented towards Corporate Social Responsibility (CSR) initiatives and some operational activities under the responsibilities of CSR, conservation and HSE operational units.

Similarly, both ROE D and ROE E have adopted a strategic approach of utilising FSA Regulation 51/2017 as a guiding framework to shape their sustainable practices. Although neither of these companies is listed on the Indonesia Stock Exchange, they adhere to FSA Regulation 51/2017 mandates. This regulation explicitly forces banking institutions to not only report how their CSR programs contributed to SDGs but also foster sustainable finance, providing credits to companies operating in 12 key sustainability issues linked to the SDGs. The regulation also requires the banks to report sustainable finance performance in their SRs. ROEs D and E integrate this mandate by prioritising sustainable finance as an essential component of their core operations. Thus, they have extended their commitment by attaching SDGs not only to their CSR programs but also to their core business activities.

In contrast, ROEs B and C adopt a distinct approach. As the central government owns a 50% stake in ROE B, overseen by the Ministry of SOEs, ROE B utilises the guidance from the Ministry, as prescribed in regulation 05/2021. This regulatory framework particularly mandates the SDG contribution from Social and Environmental Responsibility (SER) programs, comprising the Partnership and Community Development Program (PCDP) and CSR programs. Typically, ROE B directed by this mandate aligns its SER programs to ISO 26000 to their SDG contributions. In addition, ROE C aligns its SDG programs with the terms and conditions stipulated within the DKI Jakarta Governor Decrees of infrastructure development of Jakarta regional strategic initiatives (KSD) assigned to ROE C. The decrees serve as the governing framework that shapes the practice development of SDG-related programs in ROE C. It is interesting from Table 5.7 that these two ROEs, listed on the Indonesian Stock Exchange and subject to Indonesia FSA oversight, do not adopt FSA 51.2017 for developing their

Sustainability Reports. This raises questions about the enforcement of FSA 51/2017, considering these two ROEs must adhere to the framework.

These five ROEs employ varied approaches to integrate SDGs into their business programs despite emphasising the importance of SDG integration into the entire business operations. The distinct approaches stem from their specific business context. ROE A primarily incorporates SDGs within its CSR activities, signifying a firm commitment but with a more limited scope. ROE B, on the other hand, takes a more comprehensive approach by embedding SDGs into its social and environmental responsibility (SER) programs, including partnership and community development program (PCDP) alongside CSR, reflecting broader and more diversified programs.

Furthermore, ROE C demonstrates more comprehensive SDG integration than ROEs A and B. This ROE advances the development of SDG-relates programs into its CSR activities and three main strategic projects, underscoring a more substantial commitment to SDG realisation. Similarly, ROEs D and E have elevated SDGs to their core business models. They particularly integrate SDGs into sustainable finance (SF) and complement their contribution through CSR programs. These three ROEs integrate SDGs into a few programs of their core operations, embodying a more expanded approach than ROEs A and B.

All the ROEs have developed Sustainability Reports (SRs) that comprehensively disclose their sustainability endeavours. These SRs encompass disclosures of their sustainability activities, including SDG-related programs intertwined with CSR and core business initiatives. Interestingly, all the ROEs utilise the GRI Core Option to structure their SRs, demonstrating their commitment to applying internationally recognised reporting standards. However, the GRI Core Option is not explicitly designed for SDG disclosures, such as GRI Standards: Practical Guide for SDG Integration released by GRI in 2018. Table 5.7 presents that ROEs A, D, and E combine the GRI standards Core Option with FSA Regulation 51/2017 into their reporting frameworks. This approach exemplifies their dedication to global sustainability standards and local regulatory compliance in developing sustainability reports.

The contextual information in Table 5.7, as discussed above, offers valuable insights into the degree of SDG integration into the ROEs' business programs, revealing a range of approaches that differ from the comprehensive model proposed in the SAR for SDG framework used in

this research (as outlined in Chapter 2, Subsection 2.2.3). The information in Table 5.7 suggests that the studied ROEs do not integrate SDGs across their entire business operations but instead incorporate them into CSR/SER/Community development programs and a limited number of programs within their core operations. ROE A attaches SDGs only to its CSR programs, while ROE B does so in its SER programs, encompassing the Partnership and Community Development Program (PCDP) and broader CSR initiatives. These programs primarily revolve around community development programs spanning social, economic, and environmental dimensions. These will be denoted as 'Community Development (CD)' programs in the analysis that follows in Chapter Seven.

ROEs C, D and E show a higher level of commitment, where the ROEs initially integrate SDGs into a few programs in their core operations and into their CSR programs. ROE C embedded SDGs in three primary infrastructure projects in Jakarta in addition to its CSR initiatives. ROEs D and E transform SDGs into sustainable finance (SF) implementation and continue to enrich their CSR programs related to SDGs.

Insights from Table 5.7 influenced the selection of interviewees (Subsection 4.5.2.1), document sources (see Subsection 4.5.2.2) and themes for data analysis (Subsection 4.5.2.3) to address the research questions in this second stage.

5.8 Summary

This chapter serves two primary purposes. Firstly, the analysis of SDG disclosures offers general insights of Indonesian ROEs regarding their approach to integrating SDGs into their planning, accounting, and reporting for impactful SDG contributions disclosed in their reports. This analysis is crucial for providing the researcher with sufficient understanding before proceeding to the case study in the second stage. Secondly, the analysis aids in selecting contextually rich ROEs for the case study in the second stage.

The evidence reveals that around 3% of Indonesian ROEs disclosed their SDG practices in their 2019-2020 annual/sustainability reports. Notably, 17 ROEs consistently reported their SDG practices, with most operating in financial and insurance services. These ROEs employed a combination of GRI Core Option standards, FSA standards, and ISO 26000, indicating a move beyond regulatory compliance in their sustainability reporting. However, the SDG disclosures are very basic, insufficiently disclosing the integration of SDGs into planning,

accounting, and reporting. They typically link sustainability activities, often related to CSR, to relevant SDGs without utilising specific standards, such as GRI's practical guide for SDG integration or SDG Compass. Stakeholders are engaged in implementing SDG-related activities, yet no disclosures illustrating their involvement in integrated SDG practices, spanning planning, accounting, and reporting. Stakeholder engagement primarily centres around broader sustainability activities. Unfortunately, the absence of reviews for these inadequate practices, coupled with the lack of external assurance for SDG disclosures, suggests a likelihood of their persistence in the future.

These findings align with NCSR interview results, affirming that SDG disclosure practices among Indonesian ROEs remain at a basic level, not integrating SDG into planning and often reporting them as CSR activities. The basic practices may stem from inadequate human resource capacity. The interview with Bappenas, responsible for SDG implementation monitoring in Indonesia, exposes a significant misalignment between current SDG disclosure practices among Indonesian ROEs and government expectations. This discrepancy stems from inconsistent FSA 51/2017 regulations and Presidential Regulation 59/2017, underscoring a need for more institutional level coordination. Nevertheless, it cannot be concluded that ROEs are not concerned with SDGs, particularly by solely depending on the content analysis of disclosures. It is apparent that they are willing to contribute to the national SDGs; most ROEs have shown commitment to national SDGs by including SDG disclosures in sustainability reports since 2019, preceding the mandated start in 2020. Indeed, articulating SDGs into business operations is challenging, as acknowledged in prior studies (see Subsections 2.3.2 and 3.3.3) and confirmed by the interviewee from NCSR. Thus, this study selects five ROEs based on the analysis of this stage for an in-depth case study on SDG integration practices, covering institutional pressures and challenges.

Subsection 5.7 offers valuable insights that contextualise the five selected ROEs in shaping their approach to developing, implementing, and reporting programs to contribute to SDG achievement in Indonesia. The data underscores how regulatory frameworks, affected by business ownership and structure, influence the approaches employed by these ROEs. ROE A, a listed limited liability company, complied with FSA Regulation 51/2017, focussing its SDG contributions primarily on CSR programs. In parallel, ROE B, under the jurisdiction of Ministry of State-owned Enterprises (SOEs) Regulation 05/2021, integrated SDGs limited into

its SER programs. Additionally, ROE C's SDG program development aligns with the directives outlined in DKI Jakarta Governor Decrees, mandating sustainable infrastructure development to contribute to SDG attainment in Jakarta. ROEs D and E, operating in the strongly regulated banking sector overseen by the Indonesia Financial Service Authority (FSA), leverage FSA Regulation 51/2017. They integrate SDGs into CSR programs and their sustainable finance implementation. It is essential to note that none of these ROEs integrates SDGs into their entire business operation as proposed by the SAR for the SDG framework utilised in this research. These five ROEs developed their SDG-related programs in two categories. ROEs A and B limited the SDG integration to specific community development programs. ROEs A, D, and E extend this integration to certain core business areas alongside their community development initiatives.

This contextual understanding guided the research in selecting data sources for interviews and document analysis. The data focus on participants involved in pertinent SDG programs and related documents that specifically aim to investigate the research question extended to the six key themes explored in Chapter Four. Moreover, Chapters Seven, and Eight explore current planning, accounting, and reporting practices, and examine practice element development, considering encountered institutional pressures and challenges.

Chapter Six: The practices of integrating SDGs into business programs in the selected ROEs

6.1 Introduction

This chapter investigates how Indonesian ROEs execute their practices within the planning, accounting, and reporting stages to integrate SDGs into business operations to contribute meaningfully to SDG achievement. In contrast to Chapter Five, which reviews SDG practices in all Indonesian ROEs through their disclosures, this chapter considers the practice implementation in five specific case studies, ROEs A-E. Additionally, as outlined in Subsection 5.7, there are gaps in the practices across ROEs A-E. While the SAR framework elaborated in Chapter Two (see Section 2.2.3) outlines the need for SDG integration in all three stages in developing business operations for significant SDG contributions, none of the ROEs integrate SDGs into their entire business operations. Instead, they develop specific programs within their core operations and community development (CD) programs to support SDGs. Section 6.2 comprehensively explores the findings of the existing practices in the three stages: planning, accounting, and reporting. Firstly, this section highlights the planning practices where most programs were not initially conceived with SDGs in mind, and only a few were deliberately planned based on SDGs. These practices significantly affect the practices in the accounting and reporting stages; with limited measurement methods being found, most programs merely retrofit their activities to SDGs. Section 6.3 discusses the overall findings across the three stages contributing to Indonesia's SDGs, particularly for local sustainable development. Section 6.4 summarises the findings, identifying the need for further investigation on the reasons underpinning the practices, a topic explored in Chapter Eight.

6.2 Practices in developing the programs to support SDGs

As explained in Subsection 5.7, none of ROEs A-E integrate SDGs into their business operations. They develop specific programs within their core operation and CD programs to support SDGs. Table 6.1 presents the findings on the practices in the three stages, which are elaborated in this section.

Table 6. 1 The summary of the findings of practices in developing SDG-related programs

Stage	Themes	A	B	C	D	E
Practices in planning	Developing SDG roadmap (five-year SDG plan for entire businesses).	No	No	No, on progress	No	No
	Developing SDG roadmap for specific programs (CD and core operations).	No, guided by *Rencana Jangka Panjang Perusahaan (RJPP).*	No, guided by *RJPP*.	No, guided by *RJPP*.	No, for CD (guided by *RJPP).* Yes, for sustainable finance (SF) implementation	No, for CD (guided by *RJPP).* Yes, for sustainable finance (SF) implementation
	Stating the specific programs aiming to support SDGs.	All community development (CD) and few core operation programs.	All CD programs.	All supported programs and projects assigned by the DKI Jakarta provincial government and CD programs.	Sustainable finance (SF) and CD programs.	SF and CD programs.
	The programs, not initially planned based on SDGs.	All the specific programs	Majority of CD programs.	Majority of the projects and all CD programs	All CD programs.	Majority of all CD programs.
	The programs initially planned based on SDGs.	None	Only in three CD programs.	Only in three projects.	SF/RAKB programs.	SF programs and one CD program included in SF.
	Conducting business impact analysis, involving stakeholders to identify relevant SDGs	No, for SDGs, but sustainability in general, involving stakeholders	Yes, limited to three CD programs, involving stakeholders.	Yes, limited to three projects, involving stakeholders.	Yes, limited to SF, involving stakeholders.	Yes, limited to SF and one CD program, involving stakeholders.
	Developing SDG targets and indicators (specific and measurable) for programs initially planned based on SDGs.	None	Yes, but not specific and measurable targets.	Yes, measurable targets, but not specific	Yes, but not specific and measurable targets.	Yes, specific and measurable for SF and one CD program.
	Developing SDG strategies for programs initially planned based on SDGs.	No, but for sustainability in general.	No, for sustainability in general.	Yes, based on SDGs and DKI Jakarta Province missions.	Yes, for SF implementation.	Yes, for SF implementation.
	Explicitly disclose the connection between the programs/activities to the targets and	None	Yes	Yes	Yes	None

	strategies and the specific SDGs					
Practices in Accounting	Implementing the SDG programs involving stakeholders	Yes, involving stakeholders	Yes, involving stakeholders	Yes, involving stakeholders	Yes, involving stakeholders	Yes, involving stakeholders
	Identifying methods to measure contributions.	Yes				
	Identifying approaches in internal verification and validation	Yes				
Practices in Reporting	Identifying external/independent verification for SDG program implementation	No				
	Involving stakeholders in providing feedback for SDG-related programs.	Yes				
	Reporting the performance, comparing the targeted targets and the actual results of SDG-related programs, and stating their contributions to specific SDGs	No, merely mapped and linked the entire business operation, including CD programs, to 17 SDGs.	Yes, comparing the budget and actual spending, mapping and linking the planned CD and incidental CD programs to SDGs	Yes, for three projects as planned, and mapped and linked the other programs to relevant SDGs	Yes, for SF, and mapped and linked the CD programs to relevant SDGs.	Yes, for SF and one CD program, and mapped and linked other CD programs to relevant SDGs.
	Reviewing the existing SDG-related programs and activities to improve future performance	Yes, specifically for CD programs	Yes, specifically for CD programs initially planned for SDGs	Yes, specifically the sustainability roadmap for SDGs	Yes, specifically for SF/RAKB.	Yes, specifically for SF/RAKB and CD programs

This study utilises the SAR for SDGs framework, adapted from Schaltegger & Wagner (2006) (see Section 2.2.3), to develop the themes in each stage. While recognising that the practice development in SDG-related programs is a subset of sustainability practices, this study will also explore sustainability practices more broadly. However, it primarily focuses on SDG practices, integrating SDGs into the planning, accounting, and reporting stages, including

stakeholder engagement in each stage, used by the ROEs to make a meaningful SDG contribution.

6.2.1 Practices in the planning stage

The SAR for SDG framework presented in Figure 2.1 (see subsection 2.2.3) provides a comprehensive approach guiding this research. Through open coding and findings, this research made adjustments by adding a subtheme, roadmap development before the annual plan, under the planning stage to investigate the comprehensive practices of these ROEs in planning programs supporting SDGs (see Subsection 4.5.2.3, Table 4.5 for details). Firstly, the practices in the planning stage involve the establishment of an SDG roadmap as a long-term SDG plan to guide the annual SDG planning process. Secondly, the framework suggests the practices in the annual plan, including identifying prioritised SDGs, along with the targets and SMART (specific, measurable, attainable, reliable and time-bound) indicators. It also emphasises practices in strategy development, a basis for establishing programs contributing to SDGs. The framework underscores the significance of planning outputs in reporting SDG contributions comprising program targets, indicators, strategies, and programs to guide the implementation and performance measurement in the accounting stage. The outputs can be utilised to control the progress of meaningful contributions demonstrated by ROEs A-E by comparing the results achieved with planned targets. Thus, guided by the Themes in Table 4.5, two main practices in the planning stage are examined: the development of a roadmap and the annual plan to investigate how ROEs A-E articulate their SDG commitment into strategical practices, initially integrating SDGs into their planning stage to guide their practices in accounting and reporting stages.

6.2.1.1 Developing a roadmap of programs to support SDGs.

Table 6.1 shows that ROEs A-E share a similar planning approach. As they did not fully integrate SDGs into their business processes, they lacked a specific roadmap for SDG integration throughout their operations. Nevertheless, a general understanding of the significance of creating a roadmap to integrate SDGs into its business operation is demonstrated in the following quote by ROE C.

> Our process is still ongoing...the Sustainability Report started in 2020; that's when it began. It's the initial phase of the work, as we need to commit to the future. After establishing the initial reporting strategy, we are currently working on a roadmap for ten years. We have already created the roadmap, with the hope that once it's completed, we will implement it gradually. It will be full cycle, entire process will be sustainable. Right now, we are focusing on project basis. We will move towards full-scale operation. (Interviewee 1-ROE C)

Additionally, Table 6.1 illustrates that the majority of ROEs create specific programs within their core operations and CD to support SDGs. The development of most of these programs is directed by *"Rencana Jangka Panjang Perusahaan" (RJPP)*, used as a roadmap, outlining long-term sustainability agendas for business development, including the targets and indicators for annual plans, but not explicitly incorporated into SDGs (ROE A D1, 2021; ROE B D1, 2021; ROE C D1, 2020; ROE D D1, 2020; ROE E D1, 2020). As a result, they lack a dedicated roadmap for guiding their SDG contributions through most of the specific programs. The absence of the SDG roadmap could hinder their ability to monitor the progress of their annual SDG performance, impeding their assessment of meaningful overall SDG contributions.

Additionally, as indicated in Table 6.1, ROEs D and E have established a specific roadmap of their Sustainable Finance (SF) programs of financing businesses within 12 sustainability issues linked to SDGs, not their CD programs. Notably, developing a roadmap limited to their SF programs, not including CD programs, suggests that monitoring their annual SDG contributions from SF programs may be more straightforward for them than for CD programs. The following discussion will focus on developing the SF roadmap in ROEs D-E, which guides their annual SF program planning to contribute to SDGs.

ROEs D and E are both in the banking sector and thus apply a more advanced approach in outlining their long-term SDG contributions within their five-year SF plan, known as *"Rencana Aksi Keuangan Berkelanjutan" (RAKB)*, albeit limited to SF programs. While not a full SDG roadmap, it is a step closer to meeting the SAR framework requirements than seen for ROEs A-C. This *RAKB* guides their annual plans for SF programs. These banks initiated their five-year SF/RAKB in 2019 following Indonesian FSA Regulation 51/2017, mandating an SF roadmap to steer annual SF, outlining SF initiatives' preparation, initiation, and implementation over five years (IFSA D1, 2017). The FSA regulation provides detailed requirements to the Indonesian banks to develop an SF roadmap for financing businesses in 12 sustainability issues linked to the 17 SDGs. The guidance also requires the banks to include their CD programs in

the SF roadmaps to support SDGs (IFSA D2, 2018; IFSA D3, 2014; IFSA D4, 2020). However, these practices were not reflected in the disclosures. ROE D excluded its CD programs from its SF roadmap, while ROE E included only one. Thus, all CD programs in ROE D and most in ROE E follow the *Rencana Bisnis Bank (RBB),* akin to *RJPP*, lacking specific action plans for SDGs but rather focusing on a broader sustainability agenda. Despite IFSA guidance linking SF concerns to the 17 SDGs and emphasising CD programs' contribution to Indonesia's SDG achievement, inadequate enforcement allows ROEs D-E the discretion to include or exclude CD programs. This undermines effective monitoring of their long-term SDG contribution progress from CD.

Findings further indicate that ROEs D and E delegate the SF five-year roadmap development to their SF teams, the Risk Management Division in ROE D and the Planning Division in ROE E. These divisions oversee the development process by conducting the business assessment in collaboration with stakeholders to identify specific SDGs to be incorporated into their SF programs. For example, ROE E involves the Central Java government to align their SF programs with the government's SDG priorities to meet stakeholders' expectations effectively:

> ROE E is Regional Development Bank with strategic role, allocating CSR funds for regional development programs addressing poverty. So, we are committed to ensuring that sustainable finance principles are embedded in our operations, aligning our goals with sustainable development in the region by involving regional government as our stakeholder. (Interviewee 1-ROE E)

The assessment in ROE D directs its long-term focus on SDG 13, Climate Change, while in ROE E, it is on SDG 1, Zero Poverty. The divisions then identify the units responsible for developing their action plans through their functions, including providing the units with guidance and workshops on SF roadmap development.

The RAKB guidelines highlight critical elements for the units to include in their five-year SF development, emphasising the company's core mission in SF implementation. As such, the Product division in ROE D focuses on developing credit portfolios concerning climate change, and the Human Resource (HR) division develops training programs regarding SF implementation. Additionally, as Interviewee 1 (ROE E) explained, as the prioritised SDG issue is poverty elimination, the Retail Division is required to develop their action plans of providing credits for SMEs to support regional economic development, while the CD unit develops its action plans through the CD program of developing liveable houses for people

experiencing poverty. Once these divisions complete their long-term SF plans, they submit them to the SF teams for consolidation into the company's comprehensive five-year SF/RAKB.

> Let me clarify the process. Before developing RAKB, we first assess the existing products. We explain the key elements and important points that will be addressed in the RAKB. Afterward, we request the relevant divisions to develop their five year-plan of the projects related to sustainable finance. Once, they finish, we compile into the company's RAKB. (Interviewee 1, ROE D)

Thus, planning the SF roadmap is collaboratively managed by several business divisions depending on the relevancy of the functions of the units involved. The SF teams provide guidance for roadmap development, but the actual action plans are collaboratively developed following a bottom-up approach, involving relevant units' core activities initiating the proposed programs. So, the SF teams are not the initiators; rather, they direct the collaborative process to align the SF concerns involving respective functions within ROEs concerning SDGs.

Additionally, the Interviewees in ROE D and E explained the importance of knowledge development activities among the respective units to support the implementation of SF. Thus, their SF roadmap includes a long-term plan for knowledge development activities, such as the Product Divisions include the long-term training plan for crafting SF products and the Credit Division for assessing businesses with sustainable operations for credit approval (Interviewee 1, ROE D; Interviewee 1 ROE E; ROE D D1, 2021; ROE E D1, 2021). Additionally, before formulating the five-year RAKB in 2019, ROE E conducted preparatory workshops and meetings initiated by the top management to foster a shared understanding and commitment among organisational units. They also included activities promoting sustainable practices for contributing to SDGs, such as using environmentally friendly resources to minimise greenhouse gas emissions.

> We have an initial process enforced from the top ... raising awareness and understanding of sustainable finance practices before implementing them ... we focus on increasing awareness among all levels and staff of the ROE E … then integrated into our business practices. The activities involved conducting training sessions and meetings related to Sustainable Finance … After that, we launch an internal campaign to promote sustainable practices, such as encouraging the use of environmentally friendly resources, reducing gas emissions, and adopting energy-saving measures like LED lighting ... these measures carried out by the respective divisions, but they equipped with the necessary knowledge. (Interviewee 2-ROE E).

Furthermore, the interviewees in ROEs D and E highlighted that the SF programs are a part of overall business programs. Thus, the SF roadmap is integrated into the entire enterprise's long-term business plan, *Rencana Bisnis Bank (RBB)*. This integration means that the performance of SF is measured as the company's performance of the entire business activities stated in RBB. As an integral part of business performance, this policy enforces units to accomplish the SF objectives in supporting SDGs and reported in the SRs.

> Our preparation towards sustainable finance integration in our business plans, including the alignment of our RBB and RAKB. They are interconnected. In the process of developing the RAKB, we also take into consideration macroeconomic analyses to be integrated into RBB, including aligning it with the RPJMN of the Pemda, as they are our main shareholders. (Interviewee 2-ROE E)

In summary, the findings underscore that ROEs A-E did not establish a dedicated roadmap for the integration of SDGs into their entire operations. However, ROE C demonstrates an awareness of the significance of SDGs and their integration into their business processes, although the roadmap has yet to be established. Table 6.1and the findings show that RJPP guides most specific program development across all ROEs to support SDGs. However, solely utilising *RJPP*, outlining a broader context of sustainability agenda, not specifically SDGs, may impede their ability to systematically monitor their intended long-term contributions to attain SDGs by 2030 through their specific programs. The development of a roadmap also underscores their earnest efforts to drive meaningful changes in their business processes to support SDGs.

Nevertheless, it is essential to note that ROEs D-E exhibit a strong understanding of developing practices to establish SF roadmap to support SDGs. Despite the roadmap development limited to SF programs, a smaller segment of their overall business process, their commitment is evident. They conduct business impact assessments involving stakeholders to identify climate change (ROE D) and zero poverty (ROE E) as critical issues related to SDGs, which are incorporated into their SF roadmaps. However, their practices do not fully follow the Indonesian FSA 51/ 2017 requirements, with most CD programs excluded from the SF roadmap, impeding effective monitoring of SDG contributions through CD. The roadmaps outline five-year collaborative plans, emphasising SF programs and financing business activities related to 12 sustainability issues linked to SDGs. They assign the SF teams to establish guidance, internal procedures, and knowledge development to formulate

comprehensive five-year SF plans, leading the roadmap development and collaborating with several key responsible units. The practices in roadmap development of SF programs in ROEs D-E represent a strategic approach. As suggested by the framework, this approach might provide ROEs D-E with a more focused direction for executing their SDG-related programs than ROEs A-C.

6.2.1.2 Developing annual plans for SDG-related programs

This subsection examines the practices of annual plan development of the specific programs within CD and core operations. Guided by the SAR for SDG framework (see Section 2.2.2), it explores how these ROEs employ their roadmaps (as noted above, *RJPPs* guide most specific program development in ROEs A-C, and *RBB* - akin to *RJPP* and SF roadmaps guide CD and SF program development in ROEs D-E) to direct their business impact assessments to identify the SDGs most affected by business operations and address them through specific programs. The assessment should involve stakeholders to gain holistic views of the enterprises' business operations, enabling the ROEs to identify the most impacted SDGs, along with the targets and SMART (specific, measurable, attainable, reliable, and time-bound) indicators for performance measurement. The targets and indicators are the basis for the ROEs to formulate strategies and specific programs, fostering meaningful contributions to the prioritised SDGs impacted by their business operations.

The findings summarised in Table 6.1 reveal that most specific programs within the core operations and CD aimed at supporting SDGs were not initially planned based on SDGs, lacking explicit identification and addressing of SDGs in strategic annual planning steps. Notably, none of the specific programs in ROE A were designed following the strategic practices. Only a limited number of the programs in ROEs B-E were strategically planned with explicit SDG consideration. Table 6.2 summarises the programs that were disclosed as supporting SDGs, distinguishing between those that were not planned and those that involved some planning for identifying and addressing SDGs.

Table 6. 2 Programs aiming to support SDGs

Categories of the initial plans	Programs in CD and core operations		Specific programs to support SDGs				
			A	B	C	D	E
Majority of specific Programs not initially SDG planned.	CD	Joint with community	Provide economic opportunities for community (Warung Hijau, Ecomarket, reseller partners, and tourist fishermen).	None	None	None	Partnership: financial assistance for SMEs and Village-Owned Enterprises, therapy costs for children with disabilities, and community empowerment.
			Scholarship program for underprivileged communities				
			Green mussel program to improve the quality of seawater in tourism areas.				
			Allianz Ecopark (edutainment and adventure), transforming golf areas into recreational facility.				
		One-off donations	Providing food for nearby communities and establishing Public Vaccine Centre for children and adults.	Aids for natural disasters, disabled organisations, basic food packages, developing public facilities.	Infrastructure development, education, religious and sport events in the society.	Infrastructure and public facilities, worship house, education, entrepreneurship, environmental protection and conservation.	Health and social donations): Latrine units, Ambulance Car, providing rice for people in need.
	Core operations		Technological treatments using Sea Water Reverse Osmosis.	None	Waste management program, HR training and development programs, fair hiring processes, water treatment program and green building concept.	None	None
			(SWRO) method, filtering sea water into e clean water distributing to the recreation areas.				
			Wastewater treatment program.				
A few programs initially SDG planned.	CD	Joint with community	None	Green Industry, Waste Management, Creative Community	None	None	One CD program (as a part of SF programs).

	Core operations	None	None	Three infrastructure projects: LRT, JIV, JIS.	SF Programs	SF Programs, including one CD program

Sources: ROE A D1, 2021; ROE B D1, 2021; ROE C D1, 2020; ROE D D1, 2021; ROE E D1, 2021.

Table 6.2 indicates that most programs were not initially planned by integrating SDGs into the strategic planning steps. The CD programs within those have two main categories: those involving the community in planning for program development and one-off or incidental programs, allocating a portion of the CD budget for community donations aligned with the ROEs' sustainability themes. The practices in annual plan development discussed in this subsection are categorised into two groups; the first includes the majority of programs not initially planned to target specific SDGs, while the second comprises a few programs planned to focus on specific SDGs.

(I) Programs not initially integrating SDGs (the majority)

Table 6.1shows a similar pattern of practices in ROEs A-E in developing the majority of programs to support SDGs, rooted in broader general sustainability agendas, not explicitly tied to SDGs, outlined in their long-term business roadmaps, called *RJPP*. In developing these programs, their planning departments establish sustainability themes through a combination of internal and external analyses involving surveys and forum group discussions (FGD) with key stakeholders. These efforts aim to gather stakeholder inputs to identify and address significant sustainability themes impacted by their core business operations (ROE A D1, 2021; ROE B D1, 2021; ROE C D1, 2020; ROE D D1, 2021; ROE E D1, 2021). The outcomes of the business impact assessment enable ROEs A-E to define their sustainability themes, targets, and strategies, as summarised in Table 6.3.

Table 6. 3 Sustainability themes, targets and strategies guiding the program development to support SDGs

ROEs	Sustainability Themes	Sustainability Targets and Indicators	Sustainability Strategies
A	Waste management, greenhouse gas emissions, climate change, clean water, biodiversity, employee diversity, health and safety, and economic activities impacting local community development	To become a green company through various environmental conservation programs. No SMART indicators were established.	The global eco-partnership, expanding partnerships globally to promote sustainable practices and initiatives. The urban forest and venture strategy, eco-based education, and adventure tourism through tree planting programs to reduce pollution, absorb carbon, and preserve the ecosystem. The green company strategy, advancing sustainability principles in governing business operations by improving policies, systems, and procedures.
B	Economic growth, environmental stewardship, and the social aspects of its real estate projects	Striving as optimally as possible to carry out environmentally friendly business operations. No SMART indicators were established.	Organisational transformation, advancing the business into a sustainability property developer, digitalising business processes, and shifting the company to the high-added value of an Industrial Estate developer
C	Economic performance, procurement practices, waste management, energy efficiency, environmental compliance, human resource (safety and development), and local community	Increasing economic values, operational excellence, integrated human capital, environmental resilience and people's quality of life. No SMART indicators were established.	Environmental Resilience, strengthening the Economy, enhancing people's quality of life and adaptive governance and policy.
D	Economic, Education and Entrepreneurship, Environment and corporate culture	The growth of loan lines is focused more on developing of real sector economy via micro, small and medium business and infrastructure financing. No SMART indicators were established.	Provide superior performance and services to customers, increase investment value for investors, create best working conditions for employees, increase concern for the environment and community, and enforce corporate governance in the context of SF.

E	Strengthening the capacity and capability of Micro, Small and Medium Enterprises (MSMEs) and providing assistance to improve the welfare of people's lives in various fields, such as social, education, health, and arts and culture as well as sports.	No specific targets and SMART indicators were established for the CD programs.	Strengthening the capacity and capability of Micro, Small and Medium Enterprises (MSMEs): providing working capital and investment and various assistances to support community economic empowerment. Partnership assistance, providing training and coaching to improve community's competence to be more economically independent. Non-Partnership Assistance: providing one-off assistance in social, education, health, arts and culture, and sports.

Sources: ROE A D1, 2021; ROE B D1, 2021; ROE C D1, 2020; ROE D D1, 2021; ROE E D1, 2021

These themes, targets and strategies considering sustainability guide the annual development of the most specific programs in ROEs A-E to support SDGs. However, they are not specifically designed based on SDGs that this process is crucial suggested in the SAR framework as a strategical effort to achieve meaningful SDG contribution. This finding was also indicated in Table 6.2, the development of all the specific programs in ROE A and most of the programs in ROE B-E follows these themes, based on broader sustainability agendas, specifically not integrated into SDGs. The discussion of the annual planning practices in this Subsection begins with ROE A, where none of its programs are designed based on SDGs, followed by the practices in ROEs B-E, with most programs not initially planned based on SDGs.

The annual plan development in ROE A starts with the broader concept of sustainability. According to Interviewee 1 (the coordinator of CD team in ROE A), CD annual plan development follows a broader sustainability approach encompassing social, economic, and community development. ROE A is aware that CD programs play a crucial role in contributing to SDGs. As per the 2021 SR disclosure, ROE A has entrusted the CSR unit to consider SDGs in their CD programs.

> One aim of the CSR program is to support the achievement of the Sustainable Development Goals (SDGs) as mandated by the Indonesian FSA 51/2017 (ROE A D1, 2021).

The mandate to align CD programs with SDGs aligns with Indonesian FSA Regulation 51/2017. Interviewee 2 (ROE A) clarified during the interview that the CD program plan development process at ROE A is framed around a general sustainability agenda rather than specific SDGs, which leads to SDGs not being considered in developing all the specific programs to support SDGs at the planning stage.

Table 6.2 illustrates two categories of ROE A's CD programs: joint CD programs developed collaboratively with the community and one-off donations, allocating a budget to support community proposals aligned with ROE A's sustainability themes. Interviewees at ROE A emphasised their efforts to minimise one-off donations, which are seen as less effective for sustainable impact. Instead, they focus on developing joint programs with surrounding communities to create lasting and mutually beneficial impacts, both for the communities and ROE A.

Interviewee 1 (ROE A) emphasised the importance of adhering to planning procedures, stating, "*We are not managing CSR funds like charity … I told them [the community] to develop the programs and activities integrated into the enterprise's planning system. We have the planning system and procedures that we need to comply with"*. Interviewee 2 added, "*After developing the draft of the plan … we further conducted stakeholder engagement to identify the local needs that are aligned with the corporation's sustainability agenda to finalise our CSR programs and activities*". This collaborative planning process allows ROE A to identify specific local needs that align with its sustainability themes, leading to joint programs that address shared sustainability goals and priorities within CD programs.

Additionally, Table 6.2 shows that ROE A operates two donation programs, dedicating a charity budget for community initiatives. The community is invited to submit proposals, which the CSR Team evaluates for alignment with ROE A's sustainability priorities. Upon completing the assessment, the CSR team develops the Annual Work Plan (RKAP), encompassing both joint programs and one-off donations, which is then submitted to the planning department for approval.

Thus, ROE A prioritises sustainability over SDGs, viewing SDGs as outcomes of their sustainability initiatives. Consequently, SDGs are not considered during the planning stage—the emphasis on sustainability dates back to the enterprise's establishment in the early 1960s. Interviewee 1 from ROE A stated, "*Actually, we have been undertaking efforts for economic, social, and environmental sustainability since our establishment in the 1960s*". Nevertheless, despite not aligning all programs with SDGs since the planning stage, Table 6.2 shows that ROE A offers more diverse programs than ROE B-E, demonstrating maturity in designing a sustainability concept, particularly in joint community development initiatives supporting SDGs.

This maturity is attributed (as noted by Interviewees 1 and 2) to the nature of the tourist industry, where sustainability is crucial. Preserving sustainability, especially starting from the surrounding community, is considered by ROE A to be a strategic advantage in the industry (Interviewee 1), shaping its organisational culture (Interviewee 2). Consequently, ROE A consistently focuses on joint programs, collaborates with the community, and establishes core operations to maintain a sustainable environment that positively impacts the business.

Similarly, in ROEs B-E, as outlined in Table 6.2, most programs were initially planned without explicit SDG integration. For example, ROE E's CD team involves the community in planning joint CD programs, addressing local needs and aligning with prioritised sustainability issues, not specific to SDG issues. For one-off donations, ROEs B-E allocate a budget, inviting community proposals for assessment and disbursement. Despite the occasional nature of one-off or donation programs, a meticulous assessment ensures alignment with the ROEs' sustainability agendas, albeit without specific emphasis on SDGs. For example, as Interviewee 2 of ROE B explained, "*Our CSR programs should be aligned with the priorities of the Ministry and our company RJPP. Thus, the programs will not be included if the community proposes different programs not aligned with the concerns".*

Moreover, Table 6.2 reveals that ROEs A and C stated other projects and programs in their core operations to support SDGs. However, like their CD programs, these core operation programs were not deliberately planned for specific SDGs, lacking business impact assessment to identify and address relevant SDGs as a basis to develop the programs. Instead, the programs, such as waste management in ROE A and fair hiring processes in ROE C, were

planned to follow the general sustainability themes, then mapped and linked to SDGs during the accounting and reporting stages.

These findings indicate that most of the specific programs presented in Table 6.2 were not initially designed to address specific SDGs. Not integrating SDGs into the planning stage may hinder the ROEs from effectively achieving significant SDG contributions. They lack the essential steps in business impact assessment to define clear SDG targets and indicators for monitoring their contributions. This raises concerns about the meaningfulness of these programs, particularly when a significant budget portion is allocated without a specific focus on SDGs. It becomes more concerning when a more significant portion of the CD budget, as observed in ROEs B-E, is allocated incidentally (one-off) without detailed planning, despite their claim of strict budget assessment for disbursement.

(II) Programs initially planned based on SDGs (core operations and CD)

Table 6.2 indicates that none of the specific programs in ROE A aiming to support SDGs were initially planned based on SDGs. However, as discussed earlier, some programs in ROEs B-E aimed to support SDGs and were initially integrated with SDGs. As indicated in Table 6.2 and the earlier roadmap practice discussion, this subsection elaborates on the practices in two parts: (i) ROE B within its three CD programs and ROE C in three infrastructure programs, guided by their *RJPP*, and (ii) ROEs D-E within their SF programs, guided by their SF roadmaps.

(i) ROEs B-C– Utilising the RJPP

Guided by their Planning Departments, the CD unit in ROE B and the Project Division in ROE C, responsible for planning specific programs supporting SDGs, conducted a business impact assessment to strategically identify and address SDGs most impacted by their business operations.

Interviewee 1 (ROE B) indicated that the business impact assessment for SDG-supporting CD programs is guided by the Ministry of SOEs' mandate and the planning department's directions (refer to Table 6.3) to achieve sustainability themes, particularly aiming for "blue proper" status in its RJPP. Notably, the CD team has the understanding that ROE B entrusts its CD unit to incorporate SDGs into their CD programs as mandated by the Ministry of SOEs regulation 05/2021 and Presidential Decree 59/2017. This responsibility is highlighted in the 2021 SR

disclosures: *"SER program is a refinement of the Partnership and Community Development Program (PKBL) and the Corporate Social Responsibility (CSR) Program which has been carried out based on ISO 26000, mandated by the Ministry of SOEs and following Presidential Regulation of the Republic of Indonesia Number 59 of 2017 concerning Sustainable Development Goals (TPB/SDGs)*".

Additionally, aligned with the long-term sustainability objectives outlined in ROE B's RJPP, particularly the goal of achieving "Blue Proper" status, Interviewee 1 (ROE B) emphasised, *"Yes, we are making effort ... with the current management's support, we can make it happen to obtain the "Blue Proper" award in 10 years"*, highlighting how ROE B's CD programs should align with this objective. Blue proper status serves as recognition from the Ministry of Environment, acknowledging ROE B's commitment to responsible management in sustainability aspects within its industrial areas, encompassing water governance, land degradation, marine pollution control, hazardous waste management, and air and water pollution control.

In contrast to ROE A, which does not integrate SDGs in the planning stage, the CD team in ROE B incorporate SDGs from the planning stage due to the mandate and sustainability objectives stated in the *RJPP*. While this understanding is limited to only a small portion of CD programs in ROE B, the CD team initiated a business impact assessment involving brainstorming and discussions to identify the most significant SDGs influenced by the company's operations. Interviewee 1 (ROE B) emphasised, *"Based on the assessment, we give more priority to the environment concerning SDGs 11, 13, and 15 due to the pollution and waste created by our business activity*". Furthermore, Interviewee 1 explained that the team established the *"Creative Community Program"* to support SDG 4, focusing on quality education and skill development, as well as SDG 17, concerning forming partnerships. This program development was rooted in the assessment of providing working opportunities for the local community, bridging young talent with the demands of tenants and investors in the industrial areas in ROE B. The influence of the business impact assessment is evident in the alignment of these SDGs, resulting in three distinct CD programs, as articulated by Interviewee 1: " *the [ROE B] green industry and waste management programs based on SDGs 11,13 and 15. Then, the creative community program is based on SDGs 4 and 17"*.

As depicted in Table 6.2, these three programs aim to address those specific SDGs and are collaborative programs with the community. Therefore, the CD team (ROE B) conducts stakeholder engagement with the surrounding community after drafting the plan. The meeting provides opportunities for ROE B to develop CD programs that can address the local community's needs while still aligning with ROE B's sustainability agenda. Subsequently, the CD team finalises the programs and submits them to the Planning Department for approval. Table 6.4 summarises the CD programs which are Green Industry, Waste Management and Creative Community initially planned to address specific SDG identified in ROE B's business assessment.

Table 6. 4 The programs initially planned based on SDGs in ROE B

SDGs	Programs	Program description
SDG 11, sustainable cities and communities; SDG 13, climate change; SDG 15, Life on land	Green Industry	Tree planting program to improve air quality index caused by industrial pollution.
	Waste Management	Collecting waste from tenants in the industrial Estate (free of charge) and transforming into compost to be utilised in the tree planting programs.
SDG 4, quality of education, and SDG 17, Partnership for The Goals	Creative Community	Identifying and selecting dedicated young individuals from the community, providing them with tailored training in skills that align with the demands of the industrial estate's tenants

Source: ROE B, D1, 2021.

Similar to ROE B (see Tables 6.1and 6.2), ROE C, under the guidance of its Planning Department, conducted a business impact assessment. This assessment aimed to identify specific SDGs most affected by its business operations, leading to the definition of three core projects—Light Rail Transit (LRT) Jakarta, Jakarta International Velodrome (JIV), and Jakarta International Stadium (JIS)—integrated with SDGs. The assessment involves both internal and external stakeholders, as emphasised by Interviewee 1 (ROE C), *"The analysis to select relevant SDGs is based on the step-by-step process ... It didn't happen overnight; it was a thoughtful and collaborative process, including several discussions with internal management, directors, and the DKI Jakarta provincial government as our primary stakeholders".* The DKI Jakarta provincial government actively participates in the assessment as this government

assigns more than 90% of the infrastructure projects in ROE C. Finally, the assessment led ROE C to identify several SDGs most affected by their business operations, categorising them into four themes: enhancing people's quality of life: SDGs 3,4,5, and 11; environmental resilience: SDGs 7 and 15; strengthening the economy: SDGs 8, 9, and 12; adaptive governance and policy: SDGs 16 and 17.

Additionally, ROE C established targets and strategies for these themes, encompassing the identified SDGs and analysing which projects can significantly contribute to achieving these targets. As Interviewee 1 from ROE C stated, "*Having conducted the assessment, the enterprises decided that three major projects, including the Light Rail Transit (LRT) Jakarta, Jakarta International Velodrome (JIV), and Jakarta International Stadium (JIS), are the projects that can generate the most significant contributions to SDGs".* Table 7.5 provides a detailed overview of how the themes, SDGs, targets, and the three major projects in ROE C are integrated.

Table 6. 5 The integration of SDGs into three major infrastructure projects in ROE C

Sustainability topics for SDGs	**Light Rail Transit (LRT)**	**Jakarta International Velodrome (JIV)**	**Jakarta International Stadium (JIS)**
	Targeted performance	**Targeted performance**	**Targeted performance**
Enhancing People's Quality of Life: SDGs 3,4,5 and 11	Increasing inclusive access of public facilities and essential services, diversity in the workplace, public perception of transport services	Increasing inclusive access of public facilities and essential services, opportunities for community expansion, and opportunities for different beneficiaries to practice technical skills.	Enhancing diversity in the workplace and public health awareness
Environmental Resilience: SDGs 7 and 15	Reducing traffic congestion level, greenhouse gas (GHG) emission and Improving quality of environment	Not applied	Not applied
Strengthening the Economy: SDGs 8,9,12	Increasing economic benefits for surrounding businesses, economic contribution to the Government, employee knowledge capability, productivity, leadership competencies, and health and safety in the workplace, access to job opportunity and income security.	Enhancing community connection, accessibility for the public to practice technical skills, economic contribution to the government, employee knowledge capability, productivity, leadership competencies, and health and safety in the workplace, access to job opportunity and income security.	Increasing economic benefits for surrounding businesses and communities, urban regeneration for sustainable communities, employee knowledge capability, leadership competencies, and health and safety in the workplace, access to job opportunity and income security.

Adaptive Governance and Policy: SDGs 16 and 17	Enhancing collaborative partnership with external partners	Enhancing collaborative partnership with external partners	Not applied

Source: ROE C D1, 2020.

The findings indicate that despite the absence of an SDG roadmap, ROEs B and C demonstrate a serious commitment to integrating SDGs into their annual plans, although it is limited to only a few programs. The Ministry of SOEs mandate and the long-term objective of achieving Blue Proper Status in ROE B's *RJPP* strongly drive the SDG integration. In ROE C, the involvement of the DKI Jakarta provincial government, which assigns projects to support SDG achievement, significantly influences SDG integration.

However, Tables 6.4 and 6.5 reveal that while ROE B has incorporated SDGs into prioritised programs, they lack specified targets and indicators for performance measurement. In contrast, although they are not specific, ROE C has developed measurable targets and indicators.

(ii) ROEs D-E – Utilising the SF roadmap

ROEs D-E, guided by their SF Roadmap, develop their annual plans, aligning with the focus areas identified in their five-year RAKB. As explained in the section on roadmap development practices, ROE D focuses on climate change, linked to SDG 13, while ROE E targets poverty alleviation, linked to SDG 1. Business impact assessments are conducted during annual plan development, as stated in ROE D's 2021 SR, which expanded SDG concerns to include SDGs 8, 4, 17, and 16. Specific targets and strategies related to these SDGs are integrated into various SF programs, as outlined in Table 6.6.

Table 6. 6 The Integration of SDGs into Sustainable Finance in ROE D

Sustainability aspects	Roles	SDGs	Prioritised Programs	Targets
Environment	Environmental Conservation	SDG 13-Climate Action	Sustainable Product Development	Issuance of electric motorcycle financing products
Economy	Creating regional and National Economic Growth, including fair and decent employment practices	SDG 8-Decent Work and Economic Growth		Credit Improvement of Friends of Beginner Entrepreneurs
Education and entrepreneurship	Strengthening Financial Inclusion and Literacy	SDG 4 SDG 17	Organisation and HR Development	Adjustment of organisational structure for sustainable financial implementation
				Training on the introduction and understanding of sustainable finance
				Training on product knowledge related to sustainable finance
				Credit analysis training for sustainable financial products
				Training on credit appraisal
Good corporate governance	Adjusting Internal Governance and Risk Management	SDG 16	Adjustment of Internal Governance and Risk Management	Issue a letter of instruction from the Board of Directors on the termination of plastic bottled water purchases throughout the work unit
				Replacing lights in the work unit with energy-efficient lamps
				Create a nursery room.
				Create stairways for people with disabilities.
				Provision of wheelchairs for customers with disabilities
				Review of related internal provisions to conform to the RAKB program
				Develop compliance checklist provisions for products related to SF.
				Develop sustainable financial provisions.
				Issuing a smoking ban in Bank SUMUT premises.
				Reduce paper use in office units.

Source: ROE D, D1, 2021.

Table 6.6 highlights ROE D's intentional integration of SDGs into SF product development and supporting programs. For ROE D, these include HR development, corporate governance, and risk management.

ROE E, on the other hand, based on its business impact assessment, maintains its focus on SDG 1 as determined in its SF roadmap and expands to SDG 13, climate change. Table 6.7 details ROE E's SF programs, including one CD program.

Table 6. 7 The Integration of SDGs into Sustainable Finance in ROE E

Programs concerning sustainable finance	Targets
Human resource (HR) development through training to function representatives at the head office and to employees in the fields of Productive Business Credit (KUP) analysts and risk management	Implementing training for function representatives at the Head Office (at least 60% of KUP analysts and risk management have attended. training)
Increasing awareness about sustainable finance, focussing on environmentally friendly internal management through Energy efficiency, Paperless office, and waste management.	1% reduction in electricity costs, and implementation of digitalising business processes impacting paper savings, and paper waste management cooperation with third parties
Credit Development for Sustainable Business Activities through KUR distribution, Micro Business Simulation (MBS) Training, and Credit distribution to MSMEs	Allocating Rp 4T per year (around AUD$40B); 20 times MBS training; Grow 6.3% of loans up to Rp13,022 billion (24.36% of total loans)
Preparation of a business management system that integrates environmental and social components in risk management	Review of risk management policies and implementation.
Use of CD Funds for poverty alleviation	Restoration of 200 uninhabitable houses (RTLH); Rehabilitation of 100 healthy latrines

Source: ROE E D1, 2021

Table 6.7 shows that ROE E, while not explicitly disclosing the SDG connection like ROE D, aligns its SF product with SDG 1 and provides an example related to climate change (SDG 13). Additionally, ROE E integrates one CD program into its SF efforts, mandated by the Indonesian FSA, demonstrating a commitment to addressing poverty (SDG 1) based on stakeholder engagement with the regional government in Central Java.

Tables 6.6 and 6.7 show that while ROEs D and E explicitly state their targets to support SDGs, the defined targets lack clarity and appropriate indicators for meaningful SDG contributions to Indonesia SDG achievement as defined in Bappenas Regulation (2018). Despite ROEs D and E affirming their support for SDGs through SF programs, the comprehensive integration of SDGs into these programs needs to be improved.

6.2.1.3 Summary

The findings indicate that ROEs A-E exhibit similar practices in planning to develop programs to support SDGs. Notably, they need a dedicated roadmap outlining their long-term

commitment to SDG achievement through their business operations. However, ROEs D-E stand out by developing an SDG roadmap, which is limited to only SF programs. The compliance with FSA 51/2017 and a commitment to collaboration with local governments for SDG achievement drive ROEs D-E to establish their SF roadmap.

Additionally, ROEs A-E develop specific programs across CD and core operations to contribute to Indonesia's SDG achievement. Nevertheless, most of these programs were not initially planned based on SDGs. They missed integrating SDG analysis into their business impact assessments during the planning stage, limiting their ability to set specific targets and indicators, hindering meaningful SDG contributions. However, ROEs B-E make positive steps by deliberately integrating SDGs into a few specific programs within CD and core operations, showcasing efforts to align with Indonesia's SDG mandates, although improvements in setting SMART targets and indicators are needed for more meaningful contributions. For example, ROE B outlines the development of its CD programs that aim to support SDGs as mandated by the Ministry of SOEs and the company's long-term target to achieve "Blue Proper" status. However, there is a need for a more explicit connection between the SDG-related programs and this target, including the establishment of logical cause-and-effect relationships (Schaltegger & Wagner, 2006), such as demonstrating the explicit connection of how the tree planting program, designed to contribute to SDG 13 (climate change), correlates with a measurable reduction in emissions caused by pollution, while simultaneously influencing the criteria assessed for the "Blue Proper" recognition. This insufficient clarity in targets is also evident in the SF program targets of ROEs D-E aimed at supporting SDGs. This clarity is essential for a comprehensive understanding of the program's impact and alignment with the long-term sustainability goals.

6.2.2 Practices in the accounting stage

Guided by the SAR for SDG framework (see Section 2.2.2), this theme explores the practices evident in the accounting stage in ROEs A-E, covering implementation and measurement methods, including the validation and verification process of the specific programs within CD and core operations to support SDGs. The sources and processes utilised during the accounting stage become crucial for generating interrelated information (Schaltegger & Wagner, 2006) for measuring actual SDG performance that, in the reporting stage (discussed in Section 6.2.3), should be compared with the targets defined in the planning stage to disclose the ROEs' SDG

progress. The findings in this section are discussed under two main subthemes. Firstly, program implementation and measurement methods of the specific programs supporting SDGs within CD and core operations and secondly, the verification and validation practices.

6.2.2.1 Program implementation and measurement methods.

Table 6.1indicates that ROEs A-E implemented some specific programs supporting SDGs, involving stakeholders and outlined methods used to measure their actual performance. This subsection is presented in three parts that highlight the key contextual findings in ROEs A-E that shape their practices in the accounting stage. It begins with the practices in ROE A driven by the perspectives of prioritising sustainability over SDGs, understanding SDGs as the ultimate goals and placing sustainability first. It then explores ROEs B-C practices that actively engage with their key stakeholders in program implementation and incorporate them into performance measurements. Lastly, it discusses ROEs D-E practices that underline SF programs, utilising quantitative and qualitative performance measurement approaches.

(I) ROE A – sustainability over SDGs

As outlined in annual planning development practices (see Subsection 6.2.1), the stronger perspective of considering sustainability over SDGs guides ROE A not to consider SDG at the planning stage but rather sustainability in a broader context. ROE A maintained its existing sustainability programs since 2004 without creating new initiatives explicitly aligned with SDGs. These include Warung Hijau, Ecomarket, reseller partnerships, tourist fishermen engagement, and scholarship programs, all aimed at empowering local communities economically and educationally. Other long-term programs that have been implemented for many years to support SDGs include the Green Mussel program in 2018 to address seawater toxicity in beach tourist destinations and Allianz EcoPark in 2021, developing green spaces with an educational and adventure-oriented approach, promoting botanical knowledge and outdoor experiences (ROE A D1, 2021, p. 27). Table 6.2 reveals that compared with other ROEs, ROE A limited one-off donation programs, as emphasised by Interviewee 1, "*We avoid activities that are philanthropic or charity oriented. While there is a portion dedicated to charity, it is not as extensive as our joint program*". This is because one-off donation programs are not effective in achieving sustainability goals for the surrounding community, specifically in terms of donations/charity,

Table 6.2 also highlights two ROE A's programs within its core operations. The first, initiated in 2010, focuses on SWRO technology to convert seawater into freshwater in tourism areas. The second, launched in 2021, involves constructing a wastewater treatment station for plant irrigation and implementing wastewater treatment systems in various facilities for daily operations. Disclosures regarding program implementation emphasise how these programs sustain ROE A in tourism operations while simultaneously aiming to achieve SDGs (ROE A D2, 2021). Similar to its CD programs, these core operations do not prioritise SDGs as the primary focus in driving their business; instead, SDGs are perceived as an add-on to their sustainable tourism initiatives.

The perspective of considering sustainability over SDGs guides ROE A in implementing the programs and influences the measurement methods outlined in Table 6.8. These methods are employed to assess performance that are also reported as contributions to SDGs. Thus, ROE A does not integrate SDGs into its sustainability operations; instead, it adds them at the end of the report, suggesting an indirect contribution of its sustainability efforts to the SDGs.

Table 6. 8 Methods of measurements for CD programs in ROE A

Programs	**Methods of Performance Measurements**
Warung Hijau, Ecomarket and reseller partners, as well as tourist fishermen	Number of recipients and amount allocated in current and previous years
Providing food for nearby communities during Ramadhan, a fasting-holy month for Muslims	Number of recipients and amount allocated in current and previous years
Public Vaccine Centre for children and adults	Number of recipients and amount allocated in current and previous years
Scholarship Program	Number of recipients and amount allocated in current and previous years
Allianz Ecopark	The total green area of the Allianz Ecopark
Green mussel restoration	Number of green mussels placed (in Kgs), current and previous years
Sea Water Reverse Osmosis (SWRO), and Wastewater Treatment Plant	The decreasing amount of water usage (comparing the use of current-previous years)
Partnership with IPAL and PD PAL, PMI, and Allianz	Number of partnerships

Source: ROE A D1, 2021

Driven by the perspective of sustainability over SDGs, it is apparent in Table 6.8 that the methods used to measure sustainability performance in the programs lack sufficient

measurability to assess their significance in supporting SDGs. For instance, the measurement approach for the Allianz Ecopark program calculates the total green area without specifically gauging its impact on emission reduction (SDG 13) or well-being (SDG 3). To enhance impact measurement, ROE A should adopt a comparative approach, identifying SDGs and performance indicators during the planning stage for evaluation in the accounting stage. For instance, assessing the scholarship program's impact on SDG 4 (quality of education) solely through year-to-year comparisons of recipients may need to be revised. A more robust assessment could involve collaborating with the government to identify out-of-school teenagers and setting specific inclusion targets based on available resources. Success could then be measured in the accounting stage by tracking the number of graduated students meeting these targets, ensuring more meaningful and transparent disclosure of SDG contributions.

Nevertheless, the methods shown in Table 6.8 were consistently applied from 2019 to 2021. In 2021, the CD team introduced Social Return on Investment (SROI) to assess the impacts of CD activities. Interviewee 1 explained, "We *apply SROI in calculating the impacts of our CSR activities on the community … we calculate the SROI of the impacts of the program "Sekolah Rakyat of ROE A" [the community school of ROE A]. We calculate the benefits from the impacts of the activities for the students, parents and teachers … calculate the impact of 1 Rp. of the budget on the beneficiaries"*. While this method is more advanced than methods used by other ROEs, it could significantly enhance SDG contribution assessment if ROE A aligned the SROI calculation with the SDG targets and indicators established during the planning stage.

(II) ROEs B-C – key stakeholder collaboration

Findings indicate that ROEs B-C actively engage key stakeholders in program implementation. In particular, ROE C incorporates its key stakeholders into the methods used to measure program performance contributing to SDGs.

Table 6.2 outlines that ROE B is the only ROE committing to SDG contributions solely from CD programs comprising joint programs (tree planting, waste management, and a creative community program) and one-off donations. However, Table 6.2 shows that ROE B, compared to ROE A, demonstrates a positive effort to identify and address specific SDGs from the planning stage, incorporating them into three joint programs. Despite a limited number of joint programs, ROE B actively collaborates with the community in planning and implementing

initiatives. The tree planting program, with a target of annually planting 5,000 trees, aims to mitigate industrial pollution by absorbing harmful emissions. The waste management program transforms organic and inorganic waste into economically valuable products, promoting sustainable waste management practices. The Creative Community program offers comprehensive training to local youth, empowering them for job opportunities (ROE B D1, 2021). These joint programs involve the community in both planning and implementation, engaging various stakeholders; as Interviewee 1 (ROE B) said, "…[*while showing some picture to the interviewer] you can see that we engage nearly all stakeholders … we involve the Mayor of East Jakarta since ROE B is located there. We also invite representatives from the sub-district [kecamatan] and local community [kelurahan], … invite the residents living around the area … involve our tenants and investors in these activities".* Additionally, Table 6.9 presents how ROE B utilised some methods to measure the performance of its CD programs to support SDGs.

Table 6. 9 Methods of measurements for community development programs in ROE B

Program	**Methods of Performance Measurement**
Green Industry	Budget realised (comparing current and previous years)
Waste Management	Budget realised (comparing current and previous years)
Creative Community	Budget realised (comparing current and previous years)
One-off SER Programs (charity-based programs).	Budget realised (comparing current and previous years)

Source: ROE B D1, 2021

Table 6.9 shows that, although ROE B actively involves local youth in program implementation, the methods used to measure program performance lack an assessment of the program's impact on the youth contributing to SDG 4. Despite claims of SDG support, similar to ROE A, the methods employed for performance measurement do not clearly measure program performance contributions to SDGs. For instance, Creative Community, contributing to SDG 4 (Quality of Education), employs the budget realisation method, which does not distinctly demonstrate its impact on SDG 4.

Nevertheless, ROE B, which is in the early stages of SDG-related program development starting in 2021, contrasts with other ROEs that initiated SDG contributions before 2021. As depicted in Table 6.2, most of ROE B's CD programs are one-off donations, allocating a portion of the budget for community activities aligned with its sustainability agenda (see also Table 6.4). Compared to the other four ROEs, ROE B has the fewest SDG-supporting programs, limiting the measurement of its contributions' significance due to the prevalence of one-off donation programs. Indeed, as presented in Table 7.9, ROE B measures its SDG contributions by simply calculating the budget realised from current and previous years. As highlighted by Interviewee 2 (ROE B), for the one-off CD donation activities, the CSR team records all the relevant details, including the activity implementation, funds utilised, and the recipients of the donations. These recorded items are compared with the previous year's data to assess performance. After evaluation, the performance is linked to the corresponding SDGs based on the specific activity's outputs and objectives. The following quote provides an example of how they deliver free food for impoverished individuals in the nearby community to support SDG 1, aiming to alleviate poverty.

> Donation of 250 (two hundred and fifty) basic food packages in collaboration with the Ministry of SOEs, aid for Pulo Kambing Foundation social activities, basic food packages aid for FKDM DKI Jakarta and RW 03 Jatinegara Urban Village, social service events for the Indonesian Mosque Council, contributed to SDG 1. (ROE B D1, 2021).

Interviewee 1 (ROE B) also mentioned that the 2021 performance of the Tree Planting program was assessed by comparing the number of trees planted, focusing on improving the air quality index related to SDGs 11, 13, and 15. However, these measurement methods were not reflected in the disclosures. As indicated in Table 6.9, the Green Industry (Tree Planting) program performance is measured by comparing budget realisation, not specifying the number of trees planted or the resulting improvement in air quality, as noted by Interviewee 1.

Overall, similar to ROE A, although ROE B has attempted to integrate SDGs from the planning stage, it falls short by not identifying specific SDG targets and indicators. While ROE B actively involves stakeholders, this limitation hinders the establishment of robust measurement methods for gauging SDG performance to measure the contribution to SDGs.

Furthermore, ROE C, on the other hand, demonstrated a broader commitment to supporting SDGs through specific programs in both core operations and community development (CD). Similar to ROE B, ROE C integrated SDGs into its three existing projects: LRT, JIV, and JIS.

These projects were assigned by the DKI Jakarta Provincial government to support the SDG achievement in Jakarta regarding a sustainable city. LRT, a public transportation system covering eleven stations and spanning 12.2 km, was developed in 2016 and commercially operated in 2019. JIV, a revitalised cycling track, underwent improvements from 2016 to 2018, and JIS, a sport centre and green facility, was developed from 2019 to 2021. ROE C integrates stakeholders, including the DKI Jakarta provincial government, customers, employees, and surrounding communities impacted by these substantial projects, into the methods used to measure SDG contributions, as detailed in Table 6.10.

Table 6. 10 Measurement methods of the three major projects-ROE C

LRT		**JIV**		**JIS**	
Targeted performance	**Measurement methods**	**Targeted performance**	**Measurement methods**	**Targeted performance**	**Measurement methods**
Increasing inclusive access of public facilities and essential services	percentage of agreement rate on adequate LRT facilities for passengers, including those in special needs	Increasing inclusive access of public facilities and essential services	Percentage of feedback on comfortable JIV facilities, including for those with special needs	Increasing public health awareness	Number of COVID-19 social assistance sessions conducted
Enhancing diversity in the workplace	The ratio of female: male employees	Increasing opportunities for community expansion	Number of NEW communities gathered in JIV 2020	Enhancing diversity in the workplace	The ratio of female: male employees
Improving public perception of transport services	Percentage of LRT customer satisfaction level	Improving opportunities for different beneficiaries to practice technical skills	A number of athletes use JIV track for training and percentage of positive feedback on JIV providing better place for exercising and practising skills.	Not applied	Not applied
Reducing traffic congestion level	Percentage of increasing vehicles on average, the travel speed before and after the provision of LRT	Not applied	Not applied	Not applied	Not applied

Reducing greenhouse gas (GHG) emission	Percentage of reduction in greenhouse gas (GHG)	Not applied	Not applied	Not applied	Not applied
Improving quality of environment	Percentage of decrease in total suspended particulate (TSP) level in Depo LRT	Not applied	Not applied	Not applied	Not applied
Increasing economic benefits for surrounding businesses	Percentage of tenants experiencing increasing sales	Enhancing community connection	Percentage of an increasing number of visitor in 2020	Increasing economic benefits for surrounding businesses and communities	Percentage of increase in property value due to the development of JIS property
Increasing economic contribution to the government	Total increase in tax (in IDR) contributed to Local and Central. During 2018-2020	Increasing accessibility for the public to practice technical skills	The seven days operation of JIV for public	Enhancing urban regeneration for sustainable communities	The ratio of people who originated from and outside of Jakarta that live near JIS in 2020 & percentage of communities satisfaction with the development of JIS
Increasing employee knowledge and capability	Percentage of knowledge development after training.	Increasing economic contribution to the government	An increasing number of taxes contributed to the Central Government during 2019-2020.	Improving access to job opportunities	Number of job applicants in LRT
Improving employees leadership competencies	Percentage of employee's ability to adapt rapidly in agile workplace	Improving public perception of public facilities	Percentage of multiple visits of visitors in a year (for more than 31 visits).	Increasing diversity in the workplace	Percentage of knowledge development after training.
Enhancing employees productivity in the workplace	Percentage of employee's ability to deliver their job in a timely manner	Increasing employees knowledge and capability	Percentage of knowledge development after training.	Improving employees leadership competencies	Percentage of employee's ability to adapt rapidly in agile workplace
Improving health and safety in the workplace	Percentage of knowledge improvement after completing health and safety awareness program	Improving employees leadership competencies	Percentage of employee's ability to adapt rapidly in agile workplace	Enhancing employees productivity in the workplace	Percentage of employee's ability to deliver their job in a timely manner

Improving access to job opportunities	Number of job applicants in LRT	Increasing income security for employees	Percentage of JIV employees relies on ROE C providing employment opportunities	Improving health and safety in the workplace	Percentage of knowledge improvement after completing health and safety awareness program
Increasing income security for employees	Percentage of LRT employees relies on ROE C providing employment opportunities	Improving health and safety in the workplace	Percentage of knowledge improvement after completing health and safety awareness program	Increasing income security for employees	Percentage of JIS employees relies on ROE C providing employment opportunities
		Enhancing employees productivity in the workplace	Percentage of employee's ability to deliver their job in a timely manner	Not applied	Not applied
Enhancing collaborative partnership with external partners	Number of partnerships with other public services provider	Enhancing collaborative partnership with external partners	Number of partnerships with other public services provider	Not applied	Not applied

Source: ROE C D1, 2020

Table 6.10 shows that while it is limited to only three projects, ROE C employs more comprehensive methods than ROEs A and B. ROE C also applies more combined methods, including surveys, interviews, focus group discussions, and instruments outlined in GRI standards to collect the data.

> We use three methods for measurement. The first method is based on the agreed-upon measurement items in the GRI. These items are derived from the pillars we identified and checked at the beginning of the process. The second method involves conducting interviews to gather feedback from local communities, customers and government stakeholders, especially those involved in the projects we are measuring. The third method is FGD. (Interviewee 2, ROE C)

Table 6.2 indicates that beyond these three projects, ROE C implements other programs not initially planned based on SDGs, such as fair hiring processes, training and development, one-off CD programs, and waste management programs. In the 2020 SR, no specific measurement methods were disclosed to link performance to SDGs. ROE C merely links these program

activities to relevant SDGs without providing detailed measurement methods. For instance, fair hiring processes are linked to SDG 5 and SDG 10, aligning with targets 5.2, 5.5, 10.3, and 10.4 (ROE C D1, 2020, p. 224-226). The absence of specific measurement methods may pose challenges for stakeholders in assessing the SDG contributions made by ROE C through most of its specific programs supporting SDGs.

However, despite imperfect methods, such as the absence of specifying the gender ratio targeted for comparison with actual results to link contributions to SDG gender equality, ROE C displays a more positive effort compared to ROEs A-B. ROE C involves relevant stakeholders like employees, government, and the surrounding community in the program implementation and attempts to measure the project impacts of identified SDGs on its key stakeholders through various methods. Indeed, although applied to only three projects, ROE C links planning-stage targets with accounting-stage measurements, facilitating a more apparent calculation of the significance of the three projects to SDGs in the reporting stage. Nevertheless, if all the projects were planned based on SDGs, ROE C would have made more impactful contributions. Moreover, all CD programs in ROE C are one-off donations rather than joint collaborative initiatives. This approach suggests limited participation of ROE C, as the community applies for funds, undergoes assessment, and receives disbursements from ROE C. One-off donations also lack the longevity needed for sustained and impactful progress in sustainability programs.

(III) ROEs D-E – quantitative and qualitative approaches

This subsection combines the practices in ROEs D-E as they operate in the same industry (banking sector), resulting in similar practices in integrating SDGs into specific programs. Table 6.1 highlights that these banks specifically implemented SF programs to address 12 SDG-linked issues through their financing businesses, such as green credit, as mandated by the Indonesian Financial Services Authority (FSA). ROE D targets SDG 13 (climate change) by developing a credit product for financing electric motorcycles. Conversely, ROE E focuses on providing credit to Small and Medium-sized Enterprises (SMEs) with sustainable operations, aligning with poverty alleviation (SDG 1). This SF product supports the regional government's mission of fostering SMEs for economic development. ROE E also initially included a CD program within its SF, renovating and constructing habitable houses for impoverished individuals to address SDG 1.

ROEs D and E also execute some supporting activities to strengthen SF implementation, such as employee training and education, improving governance and risk management, and energy efficiency. ROE D explicitly links its SF programs with SDGs in its annual planning development process, whereas ROE E does not. As guided by FSA 51/2017, Tables 6.10 and 6.11 present that ROEs D-E utilise quantitative and qualitative approaches in measuring their SF program's performance to contribute to SDGs.

Table 6. 11 Measurement methods-ROE D

Prioritised Areas	**Targets**	**Methods of measurements**
Sustainable Product Development	Issuance of electric motorcycle financing products	Number of Product Type
	Credit Improvement of Friends of Beginner Entrepreneurs	Product type
Organisation and HR Development	Adjustment of organisational structure for sustainable financial implementation	Adjusted structure
	Training on the introduction and understanding of sustainable finance	Number of training activities
	Training on product knowledge related to sustainable finance	Number of training activities
	Credit analysis training for sustainable financial products	Number of training activities
	Training on credit appraisal	Number of training activities
Adjustment of Internal Governance and Risk Management	Issue a letter of instruction from the Board of Directors on the termination of plastic bottled water purchases throughout the work unit.	The issued decree
	Replacing lights in the work unit with energy-efficient lamps	
	Create a nursery room.	Number of rooms
	Create stairways for people with disabilities.	The stairways for people with disabilities
	Provision of wheelchairs for customers with disabilities	Number of wheelchairs provided
	Review of related internal provisions to conform to the RAKB program	Number of sustainable finance provisions
	Develop compliance checklist provisions for products related to SF.	Number of checklist compliance provisions
	Develop sustainable financial provisions.	Number of sustainable finance provisions
	Issuing a smoking ban in all Bank SUMUT premises	Free smoking areas in all ROE D premises
	Reduce paper use in office units.	Rim

Source: ROE D D1, 2021

Table 6. 12 Measurement methods-ROE E

Programs	Activities	Methods of measurements
Human resource (HR) knowledge development through training to function representatives at the head office and to employees in the fields of Productive Business Credit (KUP) analysts and risk management	Training and Education	Hours/person
Increasing awareness about sustainable finance, focussing on environmentally friendly internal management through energy efficiency, paperless office, and waste management.	Electricity Usage	kWh and in Gigajoules
	Fuel Consumption	Litre and in Gigajoules
	Water Usage Volume (Head Office)	Cubic meters
	Paper Material Usage	Rim
	Environmental Cost	In IDR
Credit Development for Sustainable Business Activities through KUR distribution, Micro Business Simulation (MBS) Training, and Credit distribution to MSMEs	Types of Products that Meet the Criteria for Sustainable Business Activities	Product type
	Products Amount and/or Services that Meet the Criteria for Sustainable Business Activities	in Million IDR
	Percentage of Total Sustainable Business Activities Portfolio to Total Portfolio (%)	
	Fundraising	in Million IDR
	Fund Disbursement	in Million IDR
	Inclusive Financial Performance	
	Total Agents	Person
	Nominal Product and/or Service Provided by Agent	in Million IDR
Preparation of a business management system that integrates environmental and social components in risk management	Review of risk management policies and implementation.	Decree issuance concerning Risk Management Policy for Business Risk
Use of CD Funds	Partnership and non-partnership programs for SDGs-related programs	Number of activities and funds allocated

Source: ROE E D1, 2021.

While, as depicted in Table 6.12, ROE E applies quantitative and qualitative approaches to measuring SDG SF performance, ROE D applied gap analysis in measuring the performance, comparing the actual achievement with the planned targets to measure the performance based on those methods.

> We utilise "Gap Analysis" to compare and assess whether our actual achievements align with our planned objectives. This analysis helps us identify any gaps between the targets and the realised results. By conducting the Gap Analysis, we can pinpoint areas where we may need to make improvements or adjustments to better align our actions with our original plans. (Interviewee 2-ROE D)

The measurements are continuously applied quarterly to allow ROE D to detect any risks in the implementation and address the risks to make immediate improvements, such as refining the targets to meet the stakeholder's expectations.

> For the implementation, we conduct monitoring and evaluate the actual achievements against the planned targets quarterly. If there are any gaps between the realisation and the plan, we conduct a thorough evaluation to understand the reasons behind them … Upon identifying these gaps, we proceed with the necessary revisions ... adjusting our targets … Subsequently, we liaise with the OJK (Financial Services Authority) or relevant authorities to re-implement the plan in line with the revised targets. (Interviewee 2-ROE D)

ROE D demonstrates flexibility by adjusting targets based on performance gaps with justified reasons to align with stakeholder expectations. However, this practice raises questions about how ROE D engaged with stakeholders during the planning stage to grasp their expectations. If this understanding were clear from the outset, the need for flexible target adjustments might have been minimised, potentially simplifying performance measurement. Additionally, the recurrent adjustment of SDG support targets raises scepticism about potential efforts to cover poor performance. The underlying causes should genuinely explain the unachievable targets. Indeed, if internal factors are at play, it signifies an improvement input for ROE D. If external factors, such as insufficient government infrastructure support, are responsible, this information should be communicated for effective collaboration among institutions to realise the SDGs through the SF program.

Moreover, the 2019-2021 SR disclosures of ROEs D and E reveal that, as part of their accounting stage, they compare their performance over three years to assess their SF achievement. However, akin to ROEs A-B, ROEs D-E lack clarity in articulating their specific targets for SDGs. For instance, ROE D claims support for SDG 13 (climate change) through a green credit product financing electric motorcycles but does not specify the number of targeted motorcycles financed aimed at reducing the percentage of emissions as a target in achieving SDG 13.

In addition to the SF programs, ROEs D and E also have CD programs to support SDGs. The CD programs in these ROEs are typically incidental, with communities having the opportunity to apply for CD funds. When a community submits a proposal for CD funding, it undergoes analysis to ensure alignment with the company's sustainability agenda and contribution to SDGs. ROE D measures its SDG contribution from CD programs by calculating budget realisation, specifically activity reporting as stated by Interviewee 3 (ROE D), "*Until now, specifically, we haven't conducted any... We only compile reports of out activity or work ... but we haven't carried out satisfaction surveys*".

ROE E, on the other hand, describes the details of the activities and connects to the SDGs. For example, providing free food to the underprivileged people to contribute to SDG 1, zero poverty (ROE E, D1, 2021). Regarding other programs that contribute to SDGs but were not initially planned based on SDGs, ROEs D and E measure the performance by calculating the funds allocated to CD activities and mapping them to the related SDGs (ROE D D1, 2021; ROE E D1, 2021).

6.2.2.2 Verification and validation.

Table 6.1 indicates that all ROEs demonstrate some practices for internal verification and validation to ensure the accountability of information disclosed in their SRs. ROEs A-E utilise GRI Core Options to structure their sustainability reports, including disclosing performance related to SDGs. In particular, ROEs A, D, and E combine GRI Standards with FSA 51/2017 to verify and develop their reports. The disclosures show that various departments and units within these ROEs, which are involved in their SDG-related programs, assess and measure their performance. They provide this information to the corporate secretary for the development of sustainability reports (ROE A D1, 2021; ROE B D1, 2021; ROE C D1, 2020; ROE D D1, 2021; ROE E D1, 2021). The sustainability report team verifies the data from these units under the supervision of the corporate secretary. To maintain the integrity and accuracy of the information, the SR team engages in group discussions with the respective departments for verification.

However, no external assurance is currently provided by an independent party in any of the ROEs (ROE A D1, 2021; ROE B D1, 2021; ROE C D1, 2020; ROE D D1, 2021; ROE E D1, 2021). As suggested by the SAR for the SDG framework (see elaboration in Subsection

2.2.3.3), external assurance should be provided to ensure reliable processes and enhance the quality of information disclosed in the report.

6.2.2.3 Summary

The findings reveal that most specific programs supporting SDGs were implemented involving stakeholders. Driven by its perspective of "sustainability over SDGs", ROE A demonstrated a higher maturity level, implementing CD programs concerning sustainability in place even before the establishment of SDGs in 2015. ROE A stands out with more joint programs, collaborating with the community in planning and implementing the programs. Nevertheless, ROE A treats SDGs as supplemental goals linked to its sustainability operations, showcasing contributions in the reports. Thus, SDGs are not perceived as the pivotal agenda driving fundamental change in its sustainable operations.

Additionally, despite implementing sustainability programs for many years, ROE A has not introduced new programs specifically and intentionally designed for SDGs; rather, it continues to implement existing sustainability programs initiated since 2004. ROEs D-E, in contrast, deliberately created and implemented programs incorporated in SF through their financing business within 12 sustainability issues linked to SDGs as mandated by FSA 51/2017. However, ROEs B-E had fewer joint CD programs than ROE A. They implement mostly one-off CD donations and show limited long-term sustainable partnerships despite their claims of supporting SDGs through CD initiatives.

ROEs A-E demonstrate slightly different contexts in program implementation, emphasising sustainability over SDGs and involving stakeholders in measurement methods impacting program performance assessment for SDG contributions. Despite these differences, a common observation is the lack of clear focus in their measurement methods for SDG contributions. Measuring the performance of CD and core operations programs often relies on simple comparisons, budget realisation, or linking existing activities to SDGs. This lack of clarity is attributed to missing strategic planning steps, such as integrating SDGs into business impact assessments and incorporating them into performance targets, indicators, and strategies. Unfortunately, lacking external verification hampers the quality of SDG contributions reported, which is crucial for assessing achievements at national and global levels despite internal verification and validation.

6.2.3 Practices in the reporting stage

This theme investigates how ROEs A-E develop the disclosures of their specific programs within CD and core operations to support SDGs. Following the SAR for SDG framework (see Section 2.2.2), reporting should consider a comprehensive overview of the entire process, including integrating sustainability targets and indicators defined in the planning stage for performance measurement (Schaltegger & Wagner, 2006). Reporting that presents a balanced comparison between actual performance, measured during the accounting stage, and the targeted performance in the planning stage enables stakeholders to obtain insights on the company's progress towards its sustainability goals and commitments (Schaltegger & Wagner, 2006). Additionally, as the planning, accounting and reporting stages are interrelated (see the framework in Section 2.2.2), these ROEs should also assess their current program planning and implementation, contributing to SDGs and use the findings to improve next year's planning to enhance their SDG contributions. Thus, the presentation of the findings in this theme focuses on how ROEs A-E developed their practices of developing SDG disclosures by integrating interrelated outputs from the planning and accounting stages and reviewing their existing performance to inform future plans for improving SDG contributions (see the Themes in Table 4.5).

6.2.3.1 Reporting on SDG contribution and future SDG plan development

As the previous section shows, the respective divisions/units involved in SDG-related programs initiate the performance measurements during the accounting stage using the methods shown in Tables 6.7-6.11. Then, they submit the details of program implementation and performance measurements to the Corporate Secretary for verification and compilation. This information is then disclosed as their SDG contributions in the sustainability report, encompassing programs initially designed based on SDGs and others mapped to SDGs during the accounting and reporting stages. Following the level of practices in the planning and accounting stages, the practices in the reporting stage are also categorised into three groups based on key findings, starting with the (i) ROE A – Retrofitting to SDGs, followed by (ii) ROEs B-C – Budgets, mandates and standards and (iii) ROEs D-E – lack of detail.

(I) ROE A – retrofitting to SDGs

ROE A reported its CD programs along with the measurement methods in Table 6.8 and linked them with SDGs to disclose its contribution. For instance, ROE A provided the narrative of the activities in the *Sekolah Rakyat* program or scholarship fund for the community linked to SDG 4, quality of education. However, they did not measure the performance against the targets and indicators, as they were not established in the planning stage.

Interestingly, ROE A also mapped and linked the previous and current outputs of all the business activities utilising the sustainability issues in ISO 26000 to 17 SDGs (ROE A D1, 2021, p.218-226). For example, it described discrimination incidents and corrective actions during 2020-2021 as contributions to SDG 5, Gender Equality. This finding reveals that despite not integrating SDGs into all the business activities from the planning stage, ROE A shows a positive attempt to connect all business activities to SDGs in the reporting stage, as Presidential Decree 59/2017 mandated. However, it primarily linked the activities to SDGs only during the reporting stage. While this linkage is promising, reporting on SDG contributions should be more than just mapping and linking. As noted in the SAR for SDG framework, it should employ holistic integration, transforming SDGs in planning all business operations into programs, measuring progress, and reporting performance, aligning the targets and SMART indicators defined in the planning stage with measurements in the accounting stage and reporting the outcomes. ROE A appears to retrofit all its business activities to SDGs primarily for reporting purposes. They initiate sustainability programs in general and only link them to the SDGs at the end of the report, as mentioned by Interviewee 2:

> OK, if we look at your research topic, the SDGs should come first, and then we should develop our CSR activities based on SDGs. However, this is not applied in our practices. The SDGs are not used as the basis for developing programs and activities in the initial planning. Instead, we develop the programs based on the sustainability agenda, we implement them, and later we will finally link the performance to the SDGs. (Interviewee 2, ROE A)

Moreover, the CD team in ROE A assesses the performance of all its CD programs, aiming to contribute to SDGs to develop their CD plan. Notably, the team uses surveys to gather community information to improve their future CD programs.

> First, we have an independent survey conducted by a third-party institution to evaluate community satisfaction with our CSR programs and activities to improve our future activities. (Interviewee 2, ROE A)

However, the assessment underscores CD programs within a broader sustainability context, lacking a focus on reviewing the programs to contribute to SDGs meaningfully. While ROE A discloses its future CD budget stating as SDG budget commitment, it falls short in providing reflections to improve on current practices to significantly contribute to SDGs and how the proposed budget might elevate the improvement.

(II) ROEs B-C – budgets, mandates and standards

ROE B reports its SDG contribution by comparing the budget and actual allocation of its CD programs, including three CD programs and various one-off donations, as shown in Table 6.13.

Table 6. 13 The interconnection between the SDGs and CD Programs in ROE B

Sustainability pillars	**SDGs**	**Types of Aid**	**The budgeted amount for CD programs**	**The total actual amount allocated**	**Three CD programs initially planned for SDGs**	**Actual amount allocated for three CD programs**	**One-off donations of CD Programs**	**The actual amount allocated for one-off donations**
Social	1,2,3,4, 17	Natural disaster and education	288,000	328,409	Creative community program	157,159	One-off donations for natural disasters and disabled organisations include basic food packages.	171,250
Economy	8,10,17	Health, public facilities and infrastructure	1,051,990	176,850			One-off donations-i.e., providing funds for manufacturing t-shirts and clothes for surrounding community activities and training and development for SME entrepreneurship.	176,850
Environment	6,11,12,13,15	Worship facilities, nature conservation	430,000	236,434	Green Industry (Planting 3,000 trees)	67,624	One-off donations-i.e., Providing funds for garbage carts construction of sport fields.	128,490
					Waste management	40,321		
Laws and governance pillar	16	Social and community sector	486,000	387,930			Paying the SMAP certifications and consultant assistant	387,930

Total amount	2,255,990	1,129,623		265,104		864,520
% realised budget	100%	50%				
% of the Allocated amount		100%		23%		77%

**Amount in 000 IDR*

Source: ROE B D1, 2021, p.124

Table 6.13 summarises the performance of ROE B's SDG-related programs. In 2021, the allocated budget for these activities amounted to approximately 1.1 million IDR (around 111,000 $AUD). Interestingly, a significant proportion of the budget, about 77%, was allocated to one-off donation programs that were not initially designed based on SDGs. In contrast, the three programs, considered a priority from the planning stage, received a smaller allocation of 23%. Despite the higher proportion of funds allocated to charity-based programs, the 23% allocated to flagship programs reflects a very low portion of the company's commitment to supporting the essential initiatives already outlined in the planning stage.

Furthermore, regarding future plan development, Interviewee 2 (ROE B) specifically notes the involvement of community evaluation of its CD programs by utilising questionnaires to assess their existing CD programs for future improvements.

> We conduct evaluations of the programs we provide, usually at the end of the year. We distribute questionnaires to the communities around us that we have assisted during that year. (Interviewee 2, ROE B).

However, the assessment highlights how CD programs contribute to achieving the company's *RJPP*, not highlighting the SDG contribution mandated by the Ministry of SOEs. An example is the absence of assessment on the budget allocation for three joint programs designed for SDG impact, which receive less funding than one-off donations not initially planned for SDGs. As mentioned in the annual plan development in ROE B (see subsection 6.2.1.2), not only does ROE B's *RJPP* drive the integration of CD program development, but also the mandate from the Ministry of SOEs. Nevertheless, the future plan development of CD programs is primarily related to the evaluation to achieve RJPP. As Interviewee 1 (ROE B) said, *"the tree planting program aims to long-term improvement of pollution in Jakarta to obtain "Blue Proper" status stated in the RJPP. In response to this long-term vision, the company has undertaken an*

assessment, we are going to move the industrial areas outside of Jakarta … to the reduction of air pollution, which is the biggest concern in DKI Jakarta".

Compared to ROEs A-B, ROE C shows a more advanced approach to disclosing its SDG contributions, specifically in reporting the major three projects (LRT, JIV, and JIS) planned based on SDGs. In 2020 disclosures, ROE C provides specific metrics for each target aspect (see Table 6.10) for the major projects. For instance, ROE C discloses that 67% of the tenants in the LRT facility reported increased sales due to LRT activities, contributing to regional economic enhancement (SDGs 8, 9, and 12). These findings highlight that incorporating specific SDG targets during planning, as in these three projects, enables focused measurement and comprehensive reporting on SDG contributions in ROE C.

A further finding depicts that, similar to ROE A, ROE C also attempts to link its other business activities encompassing economic, social, and environmental aspects based on ISO 26000, not initially planned based on SDGs (see Table 6.2), to the SDGs. While ROE C retrospectively links various ISO 26000 programs to SDGs, such as public facilities construction for poverty alleviation (SDG 1, target 1.4), these connections lack specific SDG targets defined during planning. Despite comprising most business operations linked to SDGs, as seen in Table 6.2, these programs could secure more substantial budget allocations if designed based on SDGs since planning. This strategic approach would enhance more impactful SDG contributions.

Regarding the future plan development, ROE C exceeds ROEs A-B by assessing current SDG performance, emphasising the need for a roadmap guiding SDG practices across all business operations. Reflecting on its existing practices, ROE C also plans to include SDG-performance-based remuneration in the roadmap to enhance internal commitment to sustainability activities aligned with SDGs.

> We are developing a sustainability roadmap based on SDGs that will guide our business activities to improve our overall performance, providing significant contributions to the SDGs … to enhance our performance management and lead to better organisational arrangements … We include the remuneration in the long-term roadmap that currently … So far, we encourage volunteering activities from our employees, and thankfully, it has been well-supported … We need to prioritise setting up the KPI-related SDG first. Remuneration is based on our income, so it's crucial to establish the KPIs before considering remuneration. However, we have a clear income stream from waste management. By instilling discipline and making changes in our habits, we can gradually turn these actions into a culture. Starting small will eventually lead to more significant outcomes. (Interviewee 1, ROE C)

Another evaluation of existing projects in ROE C affecting the future plan development to contribute to SDGs is on accomplishing ongoing infrastructure development by 2023, such as waste management and LRT Phase Two. Waste is a pressing issue in Jakarta, and ROE C has been entrusted with a mandate from the DKI Jakarta government to address this challenge by developing the infrastructure to convert waste into electricity, aligning with SDG 7 on affordable and clean energy and SDG 11 on sustainable cities and communities. Interviewee 1 said*, "The project of waste facility aiming to covert waste to electricity planned to have capacity of processing 8,000 tons of waste per day scheduled to start the operation in 2023"*. Similarly, the ongoing project of LRT phase two to expand the city's transportation network to reduce traffic congestion, contributed to SDG 13.

(III) ROEs D and E – lack of detail

ROEs D and E reported their SDG contribution through their SF programs, including CD programs (see Table 6.2), as summarised in Table 6.14 and Table 6.15.

Table 6. 14 Performance- targeted and actual results of RAKB and CD programs in ROE D

SDG-related programs	Prioritised Areas	Targets	Actual Results
Programs in RAKB	Sustainable Product Development	Issuance of electric motorcycle financing products	One financing product
		Credit Improvement of Friends of Beginner Entrepreneurs	
	Organisation and HR Development	Adjustment of organisational structure for sustainable financial implementation	Adjusted organisational structure
		Training on the introduction and understanding of sustainable finance	Conducting training on introduction and understanding of sustainable finance
		Training on product knowledge related to sustainable finance	Conducting training on product knowledge related to sustainable finance
		Credit analysis training for sustainable financial products	Conducting training on credit analysis for sustainable financial products
		Training on credit appraisal	Conducting training on credit appraisal
	Adjustment of Internal Governance and Risk Management	Issue a letter of instruction from the Board of Directors on the termination of plastic bottled water purchases throughout the work unit	a letter of instruction from the Board of Directors on termination of plastic bottled water purchase throughout the work unit
		Replacing lights in the work unit with energy-efficient lamps	Replacing lights in the work unit with energy-efficient lamps
		Create a nursery room.	Developing one nursery room

		Create stairways for people with disabilities.	Developing stairways for people with disabilities
		Provision of wheelchairs for customers with disabilities	Developing provision of wheelchairs for customers with disabilities
		Review of related internal provisions to conform to the RAKB program	Reviewing of related internal conditions to conform to the RAKB program
		Develop compliance checklist provisions for products related to sustainable finance.	Developing compliance checklist provisions for products related to sustainable finance
		Develop sustainable financial provisions.	Developing provisions related to sustainable finance
		Issuing a smoking ban in all Bank SUMUT premises	Issuing a smoking ban in all Bank SUMUT premises
		Reduce paper use in office units.	Reduce paper use in office units.
CSR Programs	CSR programs for SDGs in the environment, society and economy	No established targets	The budget realisation of 20,34 B IDR to CSR activities concerning various SDGs in the economy and social pillars, and 498.04 M IDR concerning SDG 13 for the environmental pillar

Source: ROE D D1, 2021, p. 15; p.176-177

Table 6. 15 Performance- targeted and actual results of RAKB and CD programs in ROE E

SDG-Related Programs	Prioritised Areas	Targets	Actual Results
Programs in RAKB	Human resource (HR) knowledge development through training to function representatives at the head office and to employees in the fields of Productive Business Credit (KUP) analysts and risk management	Implementation of training for function representatives at the Head Office (at least 60% of KUP analysts and risk management have attended training)	Training has been carried out for function representatives at the Head Office (at least 60% of KUP analysts and risk management have attended training.
	Increasing awareness about sustainable finance, focussing on environmentally friendly internal management through Energy efficiency, Paperless office, and paper waste management.	1% reduction in electricity costs, and implementation of digitalising business processes impacting paper savings, and paper waste management cooperation with third parties	Decreasing electricity costs in Sept. 2021 by 1.12%, used electricity of 1,754,355 Kwh and 6,315 gigajoules
		Fuel Consumption	135,406 litre and 3,37 gigajoules
		Water Usage Volume (Head Office)	19,466 M3
		Paper Material Usage	3,729
		Environmental Cost	67 M IDR
	Credit Development for Sustainable Business Activities through KUR distribution, Micro Business Simulation (MBS) Training,	Allocating Rp4T per year; 20 times MBS training; Grow 6.3% of loans up to Rp13,022 billion (24.36% of total loans)	KUR distribution until October 2021 is Rp4.2T; 23 times SBM training for 282 MSME actors; MSME loans until September 2021 have

	and Credit distribution to MSMEs		reached Rp13,733 billion, or 26.30% of the total loan portfolio in ROE E.
		Types of Sustainable Finance Products	2
		Amount of money to sustainable products/services	13,947 M IDR
		Percentage of Total Sustainable Business Activities Portfolio to Total Portfolio (%)	-
		Fundraising	-
		Fund Disbursement	13, 947 M IDR
		Inclusive Financial Performance	-
		Total Agents	2806 Agents
		Nominal Product and/or Service Provided by Agent	122 M IDR
	Preparation of a business management system that integrates environmental and social components in risk management	Review of risk management policies and implementation.	Decree issuance concerning Risk Management Policy for Business Risk
	Use of CSR Funds	Restoration of 200 uninhabitable houses (RTLH); Rehabilitation of 100 healthy latrines	Assistance has been provided to improve the quality of rehabilitation of 458 RTLH throughout 2021 and for the construction of 200 healthy latrines throughout 2021.
Other CSR programs	Partnership & non-partnership CSR programs for SDGs in environment, social and economy	No targets established	The budget allocated to activities covering three sustainability pillars, mapped and linked to relevant SDGs

Source: ROE E D1, 2021, p.16-19; p.128.

Tables 6.14 and 6.15 reveal that while ROEs D and E disclose their SDG contribution through SF programs, they lack relevant details about the link between their SF products and SDGs. For instance, ROE E mentioned that its SF product addresses poverty, SDG 1, so it offered a green credit for SMEs. When reporting the performance of its SF product, ROE E disclosed the issuance of the product and the total amount of funding without providing details such as the number of SMEs financed compared with the targets or any gaps identified. Furthermore, ROE E did not explain how this performance contributes to SDG 1, specifically in demonstrating collaboration with the regional government concerning poverty (see Table 6.7).

Thus, while ROEs D-E provide a more comprehensive overview, they also lack a clear and detailed connection between providing sustainable finance and SDG targets and indicators.

However, both ROEs D and E mapped and linked their CD activities to SDGs as mandated by the Indonesian FSA. For example, ROE D discloses 110 CD activities in the economic pillar, such as infrastructure donations and support for public facilities and places of worship, totalling over 16 billion IDR, to contribute to SDGs 1, 6, 8, and 9. Additionally, Table 6.15 reveals that ROE E performed in its 2021 SR, exceeding the targets of 200 inhabitable houses (see Table 6.7) to build 485 liveable and healthy houses supporting SDG 1, poverty alleviation. This finding reinforces that when enterprises establish specific targets during the planning stage, it provides comprehensive information regarding their SDG contributions, enabling stakeholders to assess progress more effectively.

Concerning the future plan development, ROEs D and E reviewed and evaluated their SDG-related programs through SF programs. The assessment adheres to the Indonesian FSA 51/2017 mandate to disclose the evaluation of SF implementation, including the challenges encountered. Findings indicate that ROEs D and E found a need for more understanding of the staff's skills and abilities to implement SF. Interviewee 1 (ROE D) said, "*There are some challenges, for example, related to the competencies of our human resources",* while Interviewee 1 (ROE E) stated, "*Of course, there are challenges, especially faced by the credit department. In terms of credit provision… particularly the analytical skills of a credit analyst in granting the green loans".* Therefore, these ROEs continuously plan training programs to enhance the practical knowledge of the employees as one priority in their RAKB supporting programs.

6.2.3.2 Summary

The findings for the reporting stage demonstrate that ROEs A-E have similar approaches when developing practices for disclosing their SDG-related programs. They calculate performance using the methods outlined in Tables 6.8-6.12 and submit them to the Corporate Secretary for compilation. Under the Corporate Secretary's supervision, the SR team conducts internal verifications. However, these ROEs did not have external assurance. The steps in developing SDG disclosures are similar as they utilise the GRI Core Option as their guiding framework.

The analysis reveals similar SDG disclosure practices among ROEs A-E. They reported on performance contributing to SDGs through the specific programs defined in the planning stage (see Table 6.2), including a few programs initially planned based on SDGs. However, the

majority are mapped to SDGs in the reporting stage. Notably, ROEs C and E define specific targets for their small number of programs in the planning stage (see Table 6.5 and Table 6.7), enabling clear descriptions of how these limited programs contribute to SDGs. In contrast, most of the programs of ROEs A-E merely link activity outputs and budget realisation to SDGs due to a lack of integration through the three stages.

Regarding future plan development, findings reveal that ROEs A-E evaluate their existing programs in various ways. ROE C shows a more comprehensive approach, including planning to develop an SDG roadmap. In ROEs A-B and D-E, most programs are evaluated within a broader sustainability context, lacking specific evaluations of existing practices for enhancing SDG contributions embedded into their future plans. Notably, the majority of programs that are not initially planned with SDGs in mind (but retrofitted through mapping and linking during reporting), are not evaluated. This finding suggests that these practices will likely persist in the future.

6.3 Discussion – analysis of the practices in the three stages

Achieving the SDGs in Indonesia requires strong collaboration among institutions (Gunawan et al., 2020; Sachs, 2012; Jayasooria, 2016). Given the country's focus on local development and the significance of SDG issues at the regional level (Bappenas, 2019), collaboration between local governments and enterprises becomes crucial for addressing SDG-related concerns (Bello & Maidin, 2018). Indeed, with over 50% ownership, the governments have direct control over ROEs A-E, enabling enforcement of them to support government programs (Grossi et al., 2015; Ball & Grubnic, 2007; Argento et al., 2019), including SDG achievement (Izzo et al., 2020). This stands in contrast to private enterprises, which are subject to indirect government monitoring (Garde-Sanchez et al., 2018). Indeed, through Presidential Decree 59/2017, the Indonesian government mandates that Indonesian organisations, including ROEs, integrate SDGs into their planning, accounting, and reporting. However, the evidence revealing how ROEs articulate this mandate into the existing practices for significant SDG contribution is limited.

Current research provides insufficient evidence explicitly addressing how the SDGs are incorporated into SAR practices. Limited knowledge exists on SAR for SDG implementation using a comprehensive approach and employing a SAR framework, especially in local public

sector organisations (PSOs) — in this research context, ROEs (Zyznarska-Dworczak, 2020; Bebbington & Unerman, 2020; Gunawan & Tin, 2019). Notably, studies on SDG accounting and reporting in PSOs and public-owned enterprises in developing countries are still in an early stage compared to those in developed nations (Fusco & Ricci, 2019; Kaur & Lodhia, 2019; Qian et al., 2021; Garde-Sanchez et al., 2018).

This research asserts that integrating SDGs into the three stages by ROEs is crucial for accelerating substantial progress in SDGs in Indonesia, especially in local sustainable development. This focus responds to Bebbington & Unerman's (2020) observation of limited SDG accounting studies in the public sector at the local government level, a pivotal player in SD implementation (Bello & Maidin, 2018; Guarini et al., 2022). For tangible impacts, the Indonesian ROEs should employ SAR to guide their practice of holistic SDG integration. They should formulate a comprehensive, long-term SDG action plan covering their entire business operations, serving as a strategic foundation for annual plan development. This annual plan, guiding implementation, performance measurement, and disclosure, enables the comparison of actual achievements with planned outcomes to demonstrate SDG commitment progress (Schaltegger & Wagner, 2006; 2017; Burritt & Schaltegger, 2010; Laine et al., 2021).

However, the five ROEs examined in this chapter diverged from these ideal practices across the three stages. In response to the call by Zyznarska-Dworczak (2020) and Bebbington & Unerman (2018; 2020), this study employs a case study approach to expand on current literature, providing detailed and enlightening insights beyond the typical SDG disclosure analysis. The research reveals a current deficiency in articulating SDG commitments into strategic steps, significantly impacting accounting and reporting practices across the three stages. The key findings in each stage are elaborated as follows.

- Planning stage

Consistent with prior findings (WBCSD, 2018; PwC, 2019; KPMG, 2020; Vaiao & Varriale, 2019), the organisations examined perceive SDGs as a strategic opportunity but struggle to articulate them within their business operations, impeding a full transformation into strategic business functions. This study specifically details that none of the analysed ROEs created a comprehensive roadmap for SDG integration across their operations. ROEs D-E had a more confined roadmap, focusing on SF programs with a targeted approach compared to ROEs A-

C. Annual plan development is limited to specific core operations and CD programs, reflecting a tendency to choose the easiest-to-address SDG topics aligned with core operations, called cherry-picking practices (Gneiting & Mhlanga, 2021; Erin et al., 2021). Many of these selected programs lacked initial SDG-based planning, exemplified by ROE A, framing its sustainability programs initiated since 2004 to support SDGs, referred to as repackaging practices (Gneiting & Mhlanga, 2021).

Also, consistent with previous findings (Erin et al., 2021; Izzo et al., 2020), despite recognising the importance of business impact assessment and strategic practices, the ROEs struggle to execute them effectively, leading to a lack of clarity in connecting targets and indicators to SDGs. Indeed, the absence of SMART performance indicators, particularly with emphasis on forward-looking indicators to SDGs, inadequately guided ROEs A-E toward organisational change, impacting the selection of insufficient accounting methods for behavioural change within organisations (Laine et al., 2021). Consequently, integrating the SDG platform into the SAR framework falls short of driving genuine change due to these deficient strategic steps. Consistent with Gneiting & Mhlanga (2021) and Mhlanga et al. (2018), none of these ROEs leverage SDGs as a strategic function to drive their sustainability agenda.

- Accounting stage

This research addresses a research call from Zyznarska-Dworczak (2020), examining how local-level PSOs, in this context the ROEs, implement SDGs by applying the SAR framework, particularly utilising sustainability accounting tools and methods for integrated planning, performance measurement, and reporting. Findings on the accounting stage reveal variations in SDG implementation approaches among ROEs: ROE A links existing specific programs to SDGs, ROEs B-C involve numerous stakeholders but apply SDGs to a limited extent, and ROEs D-E employ simplistic quantitative and qualitative methods that fail to capture meaningful contributions. The findings show that these ROEs commonly rely on basic calculations like budget realisation and year-to-year program output comparisons, neglecting essential organisational changes that could be driven by utilising accounting methods (Zyznarska-Dworczak, 2020; Schaltegger & Wagner, 2006) that are crucial for meaningful reporting practices. As shown by Domingues et al.'s (2017) findings, sustainability accounting practices significantly influence organisational change, enhancing the availability of sustainability performance data and promoting transparency in reporting for internal and

external stakeholders (Schaltegger & Wagner, 2006; Zyznarska-Dworczak, 2020; Laine et al., 2021). This research reveals that when ROEs employ basic methods, the SAR-generated information may inadequately represent organisational change for substantial SDG contributions, also aligning with previous KPMG (2020) findings.

- Reporting stage

Stemming from planning and accounting practices, the observed reporting practices in these ROEs, particularly ROE A, demonstrate retrofitting, primarily linking most of their sustainability activities to SDGs. This finding aligns with Poddar et al. (2019) and Avrampou et al. (2019). Also, echoing the findings by Goswami and Lodhia (2014), ROEs B-C merely adhere to government regulations without substantial detail on changes. ROEs D-E establish indicators but lack specificity, presenting a broad range of SDG information without disclosing selection rationale and actions, hindering focused assessment of national SDG contributions (Avrampou et al., 2019). Additionally, these ROEs recognise and integrate various standards, including GRI standards, ISO 26000, and FSA 51/2017, into their reporting approach. However, these standards lack a specific focus on SDG reporting, indicating a struggle to adopt a comprehensive SDG reporting approach.

Consequently, their disclosures primarily function as communication tools (Lodhia et al., 2012; Goswami & Lodhia, 2014). Existing practices across the three stages are not systematically self-reviewed for improvement, indicating a potential persistence in future practices. Unfortunately, the government's mandate, which does not enforce external assurance and relies solely on monitoring functions from oversight bodies, reduces the likelihood of improvement due to weak enforcement (Sari et al., 2022).

Overall, deficient strategic planning practices, improper accounting methods to facilitate organisational change, leading to insufficient reporting practices, and lacking review for improvement raise a crucial question: How will these ROEs substantially contribute to the Indonesian government's focus on achieving SDGs in the context of local development by 2030?

In contrast, the findings also highlight the ROEs' positive understanding of the importance of supporting SDGs through sustainable business operations. While developing programs, some ROEs initially aligned them with SDGs, actively involved stakeholders (especially regional

governments) in planning, accounting, and reporting, showcasing positive collaboration for local sustainable development. Staff training for SDG-supportive practices is provided, with ongoing commitment and understanding demonstrated by ROEs D-E. However, the challenge lies in how their SDG commitment and understanding were articulated into practices, resulting in limited scope of contributions and insufficient SDG disclosures. This prompts a question about the knowledge, rules, regulations, and instructed systems in place to enable significant contributions. Moreover, it is crucial how the government requires, guides, and monitors their practice development as a collaborative effort toward shared goals.

6.4 Chapter Summary

This chapter analyses SDG integration in business programs across the planning, accounting, and reporting stages for ROEs A-E, utilising the SAR for SDG framework. Deficiencies are evident, revealing inadequate practices translating SDG commitment into effective actions. While ROEs D-E have a roadmap for SF programs, none present a roadmap plan for developing SDG integration across operations. In annual plan development, program selection prioritises easily manageable initiatives over meaningful SDG contributions in identifying specific programs within CD and core operations to support SDGs. However, the development of these programs lacked strategic integration with SDGs into planning, revealing a deficiency in strategically using SDGs to shape sustainability agenda setting. In accounting and reporting, methods fall short of instigating organisational change for significant SDG contributions. Reporting practices present SDG disclosures solely for reporting purposes, neglecting consideration of impactful contributions. Unfortunately, none of the ROEs systematically review these practices for future improvement.

However, this research identifies some optimistic evidence of positive perspectives and understandings among the ROEs, supporting SDGs in business operations, involving stakeholders, especially in specific program development and recognising the importance of knowledge development among staff. However, these positive insights are not fully reflected in the outputs of the practices.

This analysis highlights the importance of further exploring the drivers behind these practices. Chapter Eight employs Practice Theory and Institutional Theory to investigate how the development of practice elements within the ROEs drives the practices and how institutional

pressures and challenges influence the practice element development constituting the existing practices. This exploration in Chapter Eight is essential to obtain holistic insights to provide comprehensive contributions and implications of this research.

Chapter Seven: Theoretical perspectives on the practices of integrating SDGs into business programs

7.1 Introduction

Chapter Seven delved into how ROEs A-E incorporate SDGs into their SAR practices into their planning, accounting, and reporting stages to develop specific programs within CD and core operations. The findings show that despite recognising the significance of contributing to SDG achievement in Indonesia, most programs were not initially designed based on SDGs, and those planned with SDGs in mind had some limitations. It is, therefore, essential to understand the dynamics and drivers shaping the practices outlined in Chapter Seven.

This chapter utilises Practice Theory and Institutional Theory as lenses to further analyse the factors shaping the practices identified in the case of ROEs. Section 7.2, framed by Practice Theory, explores how ROEs A-E establish practical knowledge, internal regulations, and teleoaffectivity when constituting their practices. In Section 7.3, Institutional Theory is used to investigate how coercive, normative, and mimicking pressures influence practice development and analyse the challenges impacting the practices. Section 7.4 then presents an overarching discussion of the findings through the lens of these theories, linking them to the practices revealed in Chapter Seven. Finally, Section 7.5 summarises the insights, setting the stage for Chapter Nine to draw the conclusions and implications of this research.

7.2 Exploring practice element development

As discussed in Chapter Three (see Section 3.2), practices are defined as a group of interrelated human activities used to achieve an organisation's goals (Schatzki, 2016). Specifically, practices comprise three main elements: practical understanding or knowledge; rules and regulations that the organisational actors must adhere to; and teleoaffectivity or arranged instructed systems developed to manage actions, thoughts and readiness among organisational members to constitute practices. Utilising Practice Theory enables this research to comprehensively investigate how the ROEs internally established these three interrelated elements, shaping the practices detailed in Chapter Seven. Table 7.1 summarises the key findings related to the practice elements.

Table 7. 1 Summary of findings in the practice element themes-ROEs A-E

Themes	**Description**	**A**	**B**	**C**	**D**	**E**
Practical knowledge	General understanding of supporting SDG achievement in Indonesia.	Conducting sustainability practices to support SDGs, emphasising on CD programs.	Conducting sustainability practices to support SDGs, emphasising on CD programs.	Conducting sustainability practices to support SDGs, emphasising business process.	Conducting sustainability practices to support SDGs, emphasising SF and CD programs for SDGs.	Conducting sustainability practices to support SDGs, emphasising SF for SDGs.
	Practical knowledge development activities specifically to integrate SDGs into the entire business process	No	No	No	No	No
	Practical knowledge development activities specifically to integrate SDGs into the core businesses and other specific programs	Yes, for SDG reporting	Yes, only for CD programs	Yes, only for three major projects and reporting SDGs.	Yes, for SF programs	Yes, for SF programs
	Planning and designing the programs to contribute to SDGs	No	Yes, only for CD programs	Yes, specifically for three major projects	Yes, for SF/RAKB	Yes, for SF/RAKB
	Measuring and reporting the performance	Yes, technically measuring and linking the business activities to related SDGs	Yes, technically measuring and linking the CD activities for specific SDGs	Yes, for three major projects and other programs	Yes, for SF and CD programs.	Yes, for SF and CD programs.
	Knowledge sharing and maintaining	Yes	Yes	Yes	Yes	Yes
Rules and regulations	Internal procedures to specifically develop, implement, and report	Yes, only for CD programs	Yes, only for CD programs	Yes, only for three major projects and CD programs	Yes, for SF/RAKB and CD programs.	Yes, for SF/RAKB and CD programs.

	SDG-related programs					
Teleoaffectivity	procedures to enforce people and systems to develop, implement and report SDG-related programs specifically	Yes, only for CD programs	Yes, only for CD programs	Yes, only for three major projects and CD programs	Yes, for SF/RAKB and CD programs.	Yes, SF/RAKB and CD programs.

As identified in the practices examined in Chapter Seven and shown in Table 7.1, the establishment of the practice elements in the ROEs does not aim to target the integration of SDGs into entire business operations specifically. Instead, it focuses on incorporating SDGs into specific programs. Therefore, the following analysis directly highlights how ROEs A-E create these three interrelated elements limited to the development of specific programs within CD and core operations aiming to support SDGs (See also Tables 6.1 and 6.2).

7.2.1 Practical knowledge development

Practice Theory emphasises the importance of sufficient practical knowledge as a foundation to constitute practices, driving the establishment of internal regulations and teleoaffectivity. This knowledge is not solely technical skills but also encompasses general understanding, attitudes, views, and perspectives embodied in commitment that influence the actions of individuals in an organisation (Schatzki, 2016). Establishing practical knowledge within organisations is based on the general understanding of the top-level management (Lodhia, 2015; Lodhia et al., 2022), further leading the knowledge development activities (Schatzki, 2002). Thus, guided by Practice Theory to make the analysis more comprehensive, this section first explores the general understanding of the top management acting as the organisational actors (Schatzki, 2002). Then, further analysis of how ROEs A-E made deliberate efforts to acquire, share and maintain necessary knowledge through knowledge development activities, such as internal workshops, participating in external seminars, benchmarking, and engaging in self-directed learning, is presented.

Table 7.1 shows that ROEs A-E have a similar general understanding of supporting SDG achievement in Indonesia. The Directors' statements in the Sustainability Reports of ROEs A-

E from 2019-2021 convey two key points in their general knowledge. First, they understand supporting SDGs through sustainable operations and reporting their contributions through specific programs within CD and core operations. Additionally, as it is demonstrated in the following quotes, they underline developing a sustainability report, featuring their sustainable operations, and reporting their CD programs as their SDG contributions.

> In line with the declaration of the Sustainable Development Goals (SDGs), the Company is always committed to the implementation of the sustainability concept … In carrying out the CSR program, the Company also supports efforts to achieve the Sustainable Development Goals (SDGs) … We have compiled this report by presenting all the information … Reporting on the three sustainability performance is also our effort to support the achievement of global development goals. (ROE A D1, 2021)

> The TJSL BUMN Program is a refinement of the Partnership and Community Development Program (PKBL) and the Corporate Social Responsibility (CSR) … based on ISO 26000 and in accordance with Presidential Regulation of the Republic of Indonesia Number 59 of 2017 concerning Implementation of Achieving Sustainable Development Goals (TPB/SDG's) … with 17 Goals. (ROE B, D1, 2021).

Similarly, ROE C emphasises its general understanding of supporting SDGs through their business operations, particularly in their infrastructure projects:

> We strive to achieve these goals through our projects, such as environmentally friendly public transportation and waste processing facility … creating a more liveable city of Jakarta. Being a Regional-Owned Enterprise, we provide active support to the DKI Jakarta Provincial Government programs … These combined factors allow us to achieve sustainable development … As we continuously strive to embrace sustainability into our everyday culture, we commit to a more comprehensive report to prove our sincerity in supporting sustainable development efforts. (ROE C D1, 2020).

Additionally, ROEs D and E define their understanding of conducting sustainable operations through SF initiatives and CD programs:

> [ROE D] implements sustainable finance initiatives … Through the preparation of the action plan, the implementation of sustainable finance is expected to be more targeted and measurable, so that it will be the basis for [ROE D] to support the achievement of SDGs. Throughout 2021, [ROE D] has implemented corporate social responsibility (CSR) activities that are in line with the Sustainable Development Goals/SDGs) in Indonesia. (ROE D, D1, 2021).

> [ROE E] is committed to presenting sustainable finance initiatives to achieve sustainable development goals. This report discloses [ROE E] sustainability performance, in economic, environmental and social aspects, along with their impacts …as our effort to support the achievement of the Sustainable Development Goals (SDGs). Based on the monitoring and evaluation carried out by the Company, the CSR program in 2021 has

> supported six of the 17 Sustainable Development Goals (SDGs) Goals or indicators ... Various CSR programs held also a form of the Company's support for the achievement of the Sustainable Development Goals (SDGs). (ROE E, D1, 2021)

These quotes from annual reports reveal a broad recognition by ROEs A-E of the importance of sustainable business operations to support SDGs, guiding their ongoing knowledge development activities. For example, ROEs A-C transform this understanding by emphasising sustainable operations, particularly in waste management. This comprehension is translated into knowledge development activities for waste management (ROE A D1, 2021; ROE B D1, 2021; ROE C D1, 2020). Notably, ROE C demonstrates a comprehensive understanding of supporting SDGs through sustainable operations by undertaking green projects. The company actively fosters knowledge development through certification and green building design workshops held from 2019 to 2020. These workshops aim to advance expertise in sustainability, specifically in developing sustainable building projects (ROE C D1, 2020).

It is apparent from these quotes that SDGs constitute the ultimate goals of their sustainable operations, and sustainable operations take precedence in achieving SDGs rather than SDGs driving their operations as primary goals. Indeed, none of the disclosures detail how ROEs A-E transform their supporting SDG understanding through sustainable operations into specific planning, accounting and reporting practices. Additionally, the disclosures within these ROEs lack knowledge development activities aimed at integrating their general understanding of incorporating SDGs into the three stages for specific SDG achievements. The absence of specific details on how the understanding of prioritisation SDGs is thoroughly planned, implemented, measured, and disclosed as a manifestation of their SDG general understanding potentially justifies the practice of not embedding SDGs into entire business operations. Also, the absence of knowledge development activities may contribute to their recent integration of SDGs into business operations, albeit for a limited number of projects. Understanding of SDG integration comes at the end, rather than SDGs initially driving the fundamental changes of their sustainable operations.

Nevertheless, while there is lack of knowledge development of initially integrating SDGs into entire business process, the interviewee responses and documents analysed depict that they have general understandings to support SDGs through specific programs, such as ROEs D-E through SF programs (see Table 7.2). This understanding led them to acquire knowledge

development activities to develop practices in the planning, accounting and reporting stages to establish their specific programs supporting SDGs. For example, ROE B had the understanding to support SDGs through its CD programs, directing their participation in the training from the Ministry of SOEs to plan, implement, evaluate, and monitor its CD programs contributing to SDGs (Interviewee 2, ROE B). ROEs D-E had the understanding of supporting SDGs through SF programs, guiding the training in developing SF roadmap and annual planning to support SDGs as this knowledge development program has become a priority in the SF implementation within these ROEs, as demonstrated in Chapter Six (Table 6.11 and Table 6.12). These programs encompass various training activities related to SF planning and reporting, product development, credit analysis and approval, and risk management (ROE D D1, 2020, p. 90; ROE E D1, 2021, p.93).

In addition to general understanding, several knowledge development activities (e.g., meetings, training, workshops) were identified. Interviewee 1 (ROE E) explained how ROE E's directors initiated internal meetings among management and employees in 2018 to cultivate a shared commitment and perspective to implement SF successfully. This activity, fostering a shared commitment in ROE E, has proven effective with the smooth execution of SF when it was officially implemented in 2019. It also led to insignificant challenges in SF implementation as management and employees already have shared understanding and commitment since 2018 of what, why, and how to execute SF programs.

Moreover, as previously noted, ROEs A-E share a similar understanding of how to disclose their SDG contributions published in their sustainability reports transparently. Therefore, they acquired specific knowledge activities in training to develop their sustainability reports, enabling them to report their support for SDGs via their sustainable operations, particularly through specific programs such as CD and SF programs. For example, ROEs A, D-E had a training focusing on SDG reporting complied with FSA 51/2017 (ROE A D1, 2021, ROE D, D1, 2021, ROE E, D1, 2021). The training emphasises reporting sustainable business activities, including CD programs to support SDGs.

In developing their practical knowledge, ROEs A-E have used several approaches. ROEs A, B, D and E conducted internal workshops and attended external seminars (ROE A D1, 2021; ROE B D1, 2021; ROE D D1, 2021; ROE E D1, 2021). ROE C did not have any training but used benchmarking and engagement in self-directed learning, as Interviewee 2 (ROE C) said:

> We conducted desktop research related to sustainability topics from our internal and external documentation, such as the Board of Directors' minutes of meetings; risk register documentation, the corporate strategy; the corporate's performance in recent periods and peer review research of other companies' sustainability report in the same sector…We also research on GRI standards and studied how the standards are applied in other companies in developing their sustainability reports. So that we can understand how to apply GRI standards in planning, measuring and reporting the predefined indicators in the Global Reporting Initiative (GRI) linked to SDGs.

Additionally, to facilitate knowledge transfer and maintain a shared understanding of developing practices to support SDGs, ROEs A-E conduct discussions and meetings among teams involved in the development, implementation, and reporting of specific programs. Also, departing staff members pass on their knowledge to their successors before transitioning to other units.

In summary, practical knowledge extends beyond technical skills, encompassing changing the attitudes, values, and perspectives shaping behaviour. However, the findings indicate that the knowledge development is insufficient to drive holistic SDG integration practices, starting from planning, accounting to reporting stages. The development in ROEs A-E is led by the overarching understanding of top management, where SDGs are perceived as ultimate goals but are not utilised to instigate fundamental changes in sustainable operations. The emphasis remains on supporting SDGs through sustainable business operations, lacking fundamental changes achieved by equipping organisations with sufficient understanding through knowledge development activities, particularly embedding SDGs into planning, accounting, and reporting to drive sustainable operations. For instance, sustainable business operation knowledge development, like waste management training claimed to support SDGs emphasises the operational aspect but lacks the necessary focus on changing the perspectives through training in planning, accounting, and reporting of how waste management should substantially contribute to specific SDG achievement.

Additionally, the general understanding limits their SDG contributions through specific program development and disclosure practices, neglecting a holistic approach. This limitation stems from the overarching perception that SDGs are addressed towards the end or during the reporting stage. This limited understanding guides their knowledge development activities, acknowledging the significance of disclosing sustainable operations via specific programs to support SDGs with the emphasis of knowledge development on reporting, hindering the view

of reporting as a result of holistic practices encompassing planning and accounting. Although ROEs B-E exhibit some knowledge development activities for holistic practices for their specific program development, the practices detailed in Chapter Seven reflect that they inadequately transform the knowledge obtained through their training to change the organisational perspectives and behaviour.

7.2.2 Internal regulation development

The second element is the establishment of internal rules and regulations as a key element in constructing the practices. Establishing this element involves enforcing rule-following actions and ensuring understanding and compliance among individuals for practice implementation (Schatzki, 2001). Organisations can align with relevant government regulations or standards when developing internal regulations. In this research context, ROEs may adhere to Presidential Decree 59/2017, which mandates SDG integration into business activities through planning, accounting, and reporting. To integrate internal regulations into the structure of practice (Schatzki, 2016), continuous updates are necessary. Actions such as formulating, affirming, admonishing, and sanctioning should be specified to ensure organisational members comply and are prepared to adopt these practices (Schatzki, 2001). Guided by Practice Theory, this subsection comprehensively presents findings that illustrate how ROEs A-E develop their internal regulations, emphasising three interconnected aspects: the specific governmental mandates they incorporate into their internal regulations, the enforcement provisions within these regulations, and their processes for updating and ensuring compliance with government directives.

The findings show that ROEs A-E disclosed various rules and regulations guiding their internal regulations for sustainable business operations (ROE A D1, 2021; ROE B D1, 2021; ROE C D1, 2020; ROE D D1, 2021; ROE E D1, 2021). For example, they disclosed their adherence to the regulation from the Ministry of Manpower directing sustainable labour practices and relevant rules from the Ministry of Environment navigating environmentally friendly business operations. These regulations, however, are not for specific enforcement for integrating SDGs into planning, accounting, and reporting; they primarily guide sustainable business operations within specific contexts. Notably, the findings reveal that these ROEs do not reference crucial regulations, such as Presidential Decree 59/2017, further detailed in Bappenas Regulation

05/2018, which actually provide specific directives on planning, accounting, and reporting SDGs.

The findings highlight that while ROEs A-E underline the significance of Presidential Decree 59/2017, they did not apply this regulation to their practices, integrating holistic SDG integration into entire operations (see Subsection 6.2.1.2). Instead, they merely integrated SDGs into specific programs, in CD and within core operations. More importantly, the findings show that the establishment of internal regulations to limit their SDG contributions through specific programs is influenced by the regulations prescribed by their direct oversight authorities. These regulations slightly differ in emphasis from Presidential Decree 59/2017.

As outlined in Chapter Six (Section 6.2), ROEs A, D and E, guided by the Indonesian FSA regulation 51/2017, establish their internal regulations to develop the practices in planning, accounting and reporting (ROE A D1, 2021; ROE D D1, 2021; ROE E D1, 2021) in the CD and SF programs to support SDGs. FSA 51/2017 mandates sustainable operations for Indonesian limited liability companies, primarily focusing on CD programs to support SDGs, including the importance of a holistic approach to program development, from the planning to reporting stages (IFSA D2, 2017). Thus, the enforcement of SDG support appears to be mainly focused on CD programs for a limited liability company such as ROE A. However, despite FSA 51/2017's emphasis on a holistic approach to CD program development (IFSA D2, 2017), ROE A's internal regulation for CD program management has not been updated accordingly. Governed by the Director's decision letter 604/2014 (ROE A D1-21, 2021), it focuses on broader sustainability without specific alignment to FSA 51/2017. Thus, despite ROE A's disclosure that its CD programs intentionally aim to support the SDGs following FSA 51/2017, the findings reveal a lack of holistic SDG integration in its CD practice development due to inadequate alignment of its internal regulation with FSA 51/2017's mandate.

Additionally, ROEs D-E, guided by FSA 51/2017, develop their SF programs to finance businesses within 12 sustainable issues linked to SDGs. FSA 51/2017 imposes a connection between planning and reporting SF programs, including CD programs to support SDGs. However, the findings indicate that ROEs D and E lack clear internal regulations to integrate their SF, including CD programs, with SDGs from the planning stage (Section 6.2). This deficiency leads to a lack of defined SDG targets and SMART indicators (see Tables 6.5 and 6.6) in their SF programs that are not specifically aligned with SDG contributions. Also, the

absence of internal regulations enforcing SDG transformation into CD programs limits SDG integration in their CD programs.

On the other hand, ROE B follows the Ministry of SOE's Regulation 05/2021, which mandates Indonesian SOEs to plan, measure, evaluate, and monitor CD programs contributing to SDGs (MSOE D1, 2021). ROE B's CD activities are guided by Board of Directors Decree Number 015/2016, dated February 23, 2016 (ROE B D1-21, 2021), and, similar to ROE A, this internal regulation needs to be revised. This lack of updating its internal regulation aligned with the Ministry of SOEs regulation may explain why only 23% of CD activities are holistically integrated with SDGs, while 77% are linked to SDGs only during reporting. This discrepancy may be due to the outdated regulation in managing its CD programs, which does not align with the Ministry's guidelines, potentially resulting in insufficient enforcement for comprehensive SDG integration across all CD activities.

Finally, the analysis indicates that ROE C, guided by DKI Jakarta provincial government decrees, which designate all strategic initiative infrastructures for developing Jakarta into a sustainable city aligned with SDGs, established its internal regulations to integrate SDGs specifically limited to high-impact projects. Their internal regulations define procedures, including specific and measurable impact targets for various stakeholders, including employees, government entities, and the community (ROE C D1-20, 2020).

Overall, the findings show that ROEs A-E did not incorporate Presidential Regulation 59/2017 into their internal regulations for SDG integration in the entire business program development. Instead, they exhibit their internal procedures guided by regulations from the authorities directly monitoring their operations in developing the mandated specific programs within CD and core operations to support SDGs. ROE A, D, and E adhere to the Indonesian FSA 51/2017 mandate in their internal rules to support SDGs through SF and CD programs. ROE B follows the Ministry of SOEs regulation 05/2021 in developing its CD programs for SDGs. ROE C complies with DKI Jakarta Provincial government decrees for SDGs through its designated projects. These findings indicate the gap between the mandates from Presidential Regulation 59/2017 and these oversight institutions, affecting the practices of not integrating SDGs into entire operations, rather limiting them to a few specific programs. The differing interpretations of the presidential regulation and the perspectives of these overseeing entities could create

confusion for these ROEs when attempting to integrate SDGs into their practices and thus help explain the findings from Chapter Seven.

Moreover, although these ROEs have internal regulations in complying with the mandates from the oversight institutions, there needs to be enforcement in implementing the regulations to holistically integrate SDGs in planning, accounting and reporting in developing all these specific programs. Most programs are only linked to SDGs during the reporting stage, partly due to outdated regulations, as found in ROEs A-B, or only in high-impact projects, as shown in ROE C. Despite being mandated for all projects, the selective integration of SDGs into a few projects may lead to insignificant contributions. Additionally, even in cases where SDGs are integrated, there need to be more explicit internal regulations to incorporate SDG targets and indicators during the planning phase, as exemplified by ROEs D-E. Consequently, practices often involve setting funding or budget realisation targets without robust alignment to specific SDG targets.

7.2.3 Teleoaffectivity development

Teleoaffectivity refers to establishing an instructed teleological order to align organisational goals with projects and actions (Schatzki, 2001). It connects systems and people's behaviour to drive the development of practices (Schatzki, 2016). This setup requires instructed systems to compel individuals in organisations to manifest practical understanding and rules in thoughts and acceptable actions in directed orderings to implement practices (Schatzki, 2001). Practice Theory guides more thorough analysis of teleoaffectivity in this research context exploring how ROEs A-E designed and implemented instructed systems to manage complex actions among individuals engaged in activities related to planning, accounting, and reporting to achieve the goal of attaining meaningful SDG contributions through specific programs within CD and core operations.

It is apparent from the findings in Chapter Seven that ROEs A-E apply similar instructed systems to enforce people within divisions involved in the development of specific programs supporting SDGs in planning, accounting and reporting. These ROEs lack comprehensive teleoaffectivity to embed SDGs into their entire business, rather they instruct the SDG integration only in specific programs within CD and core operations (see Table 6.2). However,

despite utilising instructed systems in the development of these programs, they often lack the necessary robustness to enforce holistic practices across all three stages.

For example, the teleoaffectivity in developing CD programs through integrated planning, accounting and reporting, ROEs A-E is directed by the oversight institutions to align their CD programs with SDGs and underline the performance disclosures as contributions to SDGs in their SRs (see Subsection 7.2.1). With this instruction focussing on reporting, ROEs A-E through the CD teams often prioritise SDG disclosures for reporting purposes, leading them to merely map and link CD activities to SDGs in the reporting stage. Indeed, the findings on the second practice element (see Section 7.2.2) indicate insufficient internal regulations to direct teleoaffectivity for planning, implementing, measuring, and reporting CD programs based on SDGs. Notably, only three CD programs in ROE B and one CD program in ROE E were planned, implemented, and reported their CD programs based on SDGs adhering to the Ministry of SOEs instruction (ROE B) and Indonesian FSA 51/2017 instruction (ROE E).

Similarly, ROEs A-E lack robust teleoaffectivity to enforce holistic SDG integration into the planning, accounting and reporting stages in developing all their specific programs within core operations. For example, ROE C established the instructions to select the most impacted projects, which were limited to its three projects. However, the DKI Jakarta provincial government's instruction is to support SDG achievement through all designated projects (ROE C D1-20, 2020). Additionally, ROEs D-E established specific instruction systems to plan, implement, and report their SF programs but did not specifically highlight SDG integration to SF from the planning stage.

In summary, teleoaffectivity development aims to enforce systems and people's behaviour to transform SDGs into planning, accounting and reporting practices in developing specific programs supporting SDGs. However, the findings highlight that the established teleoaffectivity in ROEs A-E was not sufficiently robust to enforce collaboration among divisions involved in executing the specific projects and incorporating SDGs from the planning to accounting and reporting stages. This insufficient enforcement allows the respective divisions to have the option to integrate SDGs from the planning stage only in a few programs. For example, ROE B only designed three joint programs comprising around 23% of the total CD budget, and ROE C only integrated SDGs in its three most impacted projects, although the Provincial Government mandates SDG integration in all assigned projects.

While oversight institutions instruct holistic practices, particularly in integrating SDGs into specific programs in CD and core operations, the practices did not fully exhibit holistic integration. ROEs A-E have options to choose from, creating a gap in actions concerning mandatory terms in the mandates, even though they understand the aim of the instructions. Section 7.3 will further explore the pressures of the governments' mandates from the oversight authorities who directly oversee these ROEs' business operations, driving their practice element development.

7.2.4 Summary of practice element development

This subsection investigates the development of practice elements shaping the practices elaborated in Chapter Seven through the frame of Practice Theory. It focuses on the development of interrelated elements: practical knowledge, internal regulations, and teleoaffectivity in ROEs A-E in establishing SDG-supported programs. The analysis reveals that inadequate development of these practice elements contributes to insufficient holistic SDG integration.

Top management, defined as organisational actors (Schatzki, 2002), recognises the importance of supporting SDGs through sustainable operations. However, their understanding is limited to incorporating SDGs at the reporting stage rather than prioritising SDGs to drive fundamental changes in sustainable operations. Consequently, knowledge development activities focus solely on the reporting stage, communicating which sustainability programs support SDGs, without considering a holistic approach that integrates planning, accounting, and reporting as interrelated stages. Thus, despite understanding the importance of disclosing sustainable operations, their knowledge is limited to reporting rather than viewing it as a result of holistic practices. This general understanding influences the insufficient knowledge development activities for holistic SDG practices, subsequently shaping inadequate development of the internal regulations in ROEs A-E.

Indeed, although they acknowledge Presidential Decree 59/2017 for SDG integration in entire business program development, they do not incorporate this regulation into their internal regulations. Instead, they utilise solely the regulations from oversight institutions, specifically to internally regulate SDG integration in specific programs within CD and core operations. However, their internal regulations focus on specific program development, and lack

robustness, particularly due to outdated regulations, as exemplified by ROEs A and B. This limitation thereby affects their teleoaffectivity, which insufficiently enforces collaboration among respective divisions to integrate SDGs in planning, accounting, and reporting to develop specific programs to support SDGs. This inadequate enforcement allows divisions the option to integrate SDGs into planning for only a limited number of selected programs. For instance, ROE B designed only three joint SDG programs, and ROE C initially planned three most impacted projects out of nine assigned projects. Surprisingly, in the reporting stage, they linked the remaining programs and projects as their contributions to the SDGs.

These findings reveal a deficiency in establishing three interconnected practice elements essential for holistically integrating SDGs into specific program development in the planning, accounting, and reporting. Organisational success in this integration requires clear orders from organisational actors derived from a thorough understanding of integrated practices guiding sufficient arrangements for developing practice element: knowledge development activities, internal regulations, and teleoaffectivity. Schatzki (2002) emphasised that the orders are not solely shaped by the states of mind of organisational actors but are significantly influenced by institutional factors (refer to Section 3.6). Thus, further investigation is necessary to explore the institutional drivers shaping the general understanding, manifesting through orders and impacting the development of practice elements in constituting the practices.

7.3 Institutional pressures driving and creating challenges to practices

Institutional Theory frames the analysis in this section highlighting external factors impacting the planning, accounting, and reporting of related programs aligned with SDGs in ROEs A-E. It also discusses the challenges these ROEs encountered that could hinder their practices. Table 7.2 summarises the findings regarding institutional pressures and challenges affecting the practices.

Table 7. 2 Summary of findings-institutional pressures and challenges

Themes	Descriptions	A	B	C	D	E
Institutional pressures	Coercive pressures to develop and report SDGs-related programs	IFSA 51/2017	Ministry of SOEs-regulation 05/2021	DKI Jakarta Governor Decree on each designated project	IFSA 51/2017	IFSA 51/2017

	Normative pressures to specifically develop, implement and report SDG-related programs	GRI Standard core option, ISO 26000	GRI Standard core option, ISO 26000	GRI Standard core option, ISO 26000	GRI Standard core option, ISO 26000	GRI Standard core option, ISO 26000
	Mimicking pressures to specifically develop, implement and report SDG-related programs	none	none	Benchmarking the practices in the industry	none	none
Challenges	Internal challenges	None	Commitment from management	Commitment from management, insufficient knowledge of staff	Commitment from management, inadequate knowledge of staff	Inadequate knowledge of staff
	External challenges	Conflicting expectations between the ROE and community in prioritising the CD program issues.			Conflicting expectations between the ROE and customers regarding SF products.	
					Conflicting expectations between the ROE and community in prioritising the CD program issues.	

Table 7.2 reveals institutional pressures shaping practices in ROEs A-E, including coercive pressures from government regulations and normative pressures from GRI Standards and ISO 26000. Mimicking pressures through benchmarking are acknowledged only by ROE C. Furthermore, several challenges emerge, encompassing internal issues such as management commitment and insufficient staff knowledge and external challenges arising from conflicting expectations between ROEs and the community and customers. Subsequent subsections explore the detailed findings of these themes.

7.3.1 Institutional pressures influencing practice development

Institutional Theory suggests that the practice development can be driven or impeded by institutional pressures (Meyer & Rowan, 1977; DiMaggio & Powell, 1983). Guided by Institutional Theory (see Section 3.3), the findings in this subsection reveal key institutional drivers stemming from coercive, normative and mimicking pressures influencing the practice development in establishing specific programs within CD and core operations to support SDGs in ROEs A-E. Coercive pressures exerted through government laws, regulations, and mandates

primarily drive reporting practices. Additionally, normative pressures arise from the influence of professional networks, while mimicking pressures occur from benchmarking, where enterprises emulate successful practices in their industry. This research found several government mandates exerting coercive pressures, significantly influencing the SDG integration in planning, accounting and reporting stages in ROEs A-E in developing specific programs to support SDGs as presented in Table 7.3.

Table 7. 3 Government regulations as sources of coercive pressures driving the practices

ROEs	Government Regulations	Description	Focus of the regulations	The guidelines and level of enforcement
A	FSA 51/2017	Mandating Indonesian limited liability companies (ROE A) to conduct and report sustainable operations, including CD programs, contributing to SDGs in their sustainability reports.	CD programs and SDG disclosures	Mandating integrated practices in specific program development, but insufficient guidelines and enforcement to construct the practices.
D-E	FSA 51/2017	Mandating the implementation of SF for the Indonesian banks, including CD programs integrated in SF.	SF programs and the integrated process in planning, implementing, and reporting SF programs contributing to 12 sustainability issues linked to SDGs.	
B	Ministry of SOEs Regulation 05/2021	Mandating SOEs to plan, execute, evaluate, and monitor CD programs contributing to SDGs.	Integrating SDGs into the planning, execution, measurement, and reporting of CD activities	
C	The Decrees of DKI Jakarta Provincial Government for strategy initiative projects assigned to ROE C	Imposing ROE C to develop sustainable infrastructure projects to support SDG achievement in Jakarta.	Integrating SDGs in developing the infrastructure projects for SDG achievement.	

Table 7.3 reveals that FSA 51/2017 strongly drives the practices in ROEs A, D, and E, Ministry of SOEs 05/2021 regulation in ROE B, while DKI Jakarta Provincial Government Decrees for the assigned projects in ROE C. FSA 51/2017 mandates Indonesian limited liability companies, including ROE A, to conduct and report sustainable operations, including CD programs contributing to SDGs in their sustainability reports (SRs) (IFSA D1, 2017). This regulation also mandates SF implementation for Indonesian banks, including ROEs D-E, providing

guidance on planning, implementing, and reporting SF with a connection to financing businesses in 12 sustainable issues linked to SDGs.

However, FSA 51/2017 guidance (IFSA D2, 2018) for CD and SF program development merely instructs companies to disclose CD programs with details such as activity names, descriptions, and related SDGs. It lacks comprehensive steps for integrating SDGs into planning, accounting, and reporting in developing the disclosures. Clear instructions on embedding SDGs in SF programs from the planning stage are also absent (IFSA D2, 2018). While the guidance mentions linking SF programs to supporting SDGs, specific guidance on integration is not provided. One example provided by the guidance underlining how banks should link their SF programs in supporting SDGs is described in the following quote:

> Bank ABC finances a palm oil plantation company that has obtained ISPO or RSPO certification, involves and employs local communities around the plantation, and utilises palm waste for electricity (bio-mass). The plantation company prioritises gender equality in its hiring process. Additionally, the palm oil company utilises funds from TJSL [CD programs] for farmer empowerment programs, providing clean water, simple housing, and educational scholarships for plantation workers. Through these activities, the bank can convey to the public that by financing this palm oil company, it has contributed to the achievement of Sustainable Development Goals (SDGs) No. 1-8, 13, and 15. (IFSA D2, 2018).

It is evident that although the guidance (IFSA D2, 2018) expresses support for SDGs, these findings indicate a need for more enforcement from the FSA to genuinely incorporate SDGs into CD and SF programs to comprehensively plan, implement and report meaningful SDG contributions. This insufficient enforcement may explain organisational actors' and management's general understanding of not emphasising holistic practices (see Section 7.2), opting to disclose specific program activities as SDG contributions without articulating comprehensive practices. Consequently, ROEs A, D-E lack the establishment of practical knowledge, internal regulations, and teleoaffectivity for holistic integration, shaping the observed practices in Chapter Seven, highlighting insufficient SDG integration in CD and SF program development across planning, accounting, and reporting stages. The lack of enforcement for integrated processes results in ROE A focusing solely on reporting practices without revealing the holistic process. Similarly, inadequate guidelines and enforcement in the planning stage hindered clarity in SDG targets from SF programs defined by ROEs D-E, impeding meaningful contributions to SDGs as presented in Tables 6.5 and 6.6.

Table 7.3 indicates that similar to FSA 51/2017, Ministry of SOEs Regulation 05/2021, and the Decrees of DKI Jakarta Provincial Government drive the practices of specific program development in ROEs B-C but with inadequate guidance and enforcement. The lack of comprehensive guidelines affects ROEs B and C clearly articulating SDGs in planning, accounting, and reporting their specific programs. Regulatory pressures are not robust enough to compel ROEs B-C to disclose integrated processes for meaningful SDG achievement through their programs and projects. Consequently, they do not integrate SDGs into all specific programs and projects.

In terms of normative pressures, Table 7.2 shows that GRI Standards and ISO 26000 are two main factors influencing practices in ROEs A-E, by which they adopt these standards for developing sustainability reports, which include disclosing their SDG contributions. These standards, not specific to SDG reporting integrated from the planning and accounting stages, focus on a broader context of sustainability practices, influencing how ROEs A-E establish their general understanding of conducting sustainable operations and providing SDG disclosures for mere reporting purposes.

Finally, mimicking pressures, solely demonstrated by ROE C through benchmarking, is another influential driver. The practical knowledge development findings (section 7.2.1) reveal that ROE C lacked specific training for planning, accounting, and reporting projects based on SDGs. However, ROE C learns from industry practices to shape its general understanding and practice element development. Benchmarking practices, often used as mimicking strategies, are very effective for practice development.

In summary, institutional pressures, particularly coercive and normative influences, significantly shape the general understanding within ROEs A-E, transforming into organisational orders to establish arrangements for practice element development. However, the lack of robust guidance and enforcement of the pressures allows ROEs A-E to prioritise SDG integration into specific programs, with a heightened focus on the reporting stage, resulting in limited practice element development for integrating SDGs from the planning stage. Adopting standards not explicitly designed for holistic SDG integration also strongly influences insufficient element development, shaping inadequate practices in articulating SDG integration, targets, and indicators in planning, accounting, and reporting. Benchmarking, as

demonstrated by ROE C, highlights the potential for integrating measurable SDG targets and indicators into a comprehensive planning, accounting, and reporting process.

7.3.2 Challenges encountered in practice development

Institutional Theory defines challenges may emerge due to conflicting organisational expectations and various institutional pressures stemming from economic and political factors (Meyer & Rowan, 1977). This theory frames the findings presented in Table 7.2 that ROEs A-E encountered internal and external challenges in planning and executing their specific programs supporting SDGs, primarily stemming from the conflicting expectations of management, community and customers.

Table 7.2 indicates that ROEs A and E encounter relatively minor internal challenges, especially regarding conflicting expectations between the teams developing specific SDG-supporting programs and the top management. ROE A benefited from strong top management commitment driven by the nature of their core business, emphasising sustainability for competitive advantage in the industry. Additionally, ROE A recognised that as it has advocated sustainable tourism since the 1960s, its staff has strong sustainability perspectives and orientation. Sustainability has become part of its organisational culture (see the findings in Subsection 7.2.1). Similarly, ROE E, having established a shared understanding and commitment to sustainability and producing reports since 2012, experienced insignificant challenges from internal management as its leaders had set clear expectations, and everyone adhered to the established SF commitments to support SDGs since 2018.

Nevertheless, ROEs B-D underline internal challenges related to insufficient commitment from top management. This is reflected by Interviewee 1 from ROE B who states that, "*When it comes to convincing the management about CSR, it can be challenging because CSR is not a tangible investment that yields immediate financial returns".* Conflicting expectations arose between the CSR team and management, especially regarding the intangible outcomes of CD activities, which had a limited impact on tangible economic performance. Similarly, the SF team in ROE D encountered conflicting views with the directors regarding the intangible outcomes of SF products and programs. ROEs B-E faced similar internal challenges of having insufficient staff knowledge, for example, ROEs C-E emphasised a lack of skill in their internal staff to execute programs.

Table 7.2 reveals similar external challenges in ROEs A-E of conflicting expectations between the organisations and the community in developing their CD programs. Interviewees from all ROEs emphasised the differing concerns of sustainability issues within the community that are not aligned with the ROEs' sustainability issues developed based concerning the ROEs' core operations. As Interviewee 1 (ROE B) said, "*let's say we provide assistance for a sewing training program in the community. However, it turns out the community doesn't need sewing training; they actually require something like cooking classes … This doesn't align with our concerns, becoming the challenge in the planning stage"*.

Additionally, ROEs D and E faced external challenges, mainly when offering SF products to customers. These challenges stemmed from a lack of market demand, as the community and consumers showed limited interest in sustainable finance products. For instance, ROE D implemented a financing program for electric motorcycles, but businesses have shown little interest in applying for this credit scheme. This lack of interest stems from limited market demand, primarily due to inadequate public infrastructure for motorcycle battery charging. ROE E offered manufacturing equipment financing powered by renewable energy. Although a few SMEs had the credit, insufficient infrastructure support and high maintenance costs resulted in loan repayment difficulties, which led to non-performing loans. This highlights the absence of integration and collaboration among Indonesian institutions at a macro level, including inadequate infrastructure to support SF implementation.

Finally, the 2020-2021 SRs of ROEs A-E disclose that their business activities, including SDG-related programs (particularly CD), were significantly affected by the COVID-19 pandemic. However, this challenge did not directly impact the integration of SDGs into the planning, accounting and reporting stages of the ROEs' operations, so it is not considered further.

In summary, challenges arise from conflicting expectations between organisations and external stakeholders (Meyer & Rowan, 1977). Achieving the SDGs necessitates strong collaboration between organisations and interrelated institutions to align their perspectives and reduce conflicting expectations. Internally, conflicting expectations exist between top management and the teams executing SDG-supporting programs and with employees, often due to insufficient knowledge. Conflicting expectations, particularly from top management, who perceive SDG-supporting programs as economically unfavourable, may impede ROEs B-D in forming effective practices for meaningful SDG achievements.

In a broader context, conflicting expectations arise between CD teams and the community's perspectives on SDG programs and between SF teams and customers of SF products due to insufficient product infrastructure. These findings highlight a lack of collaboration among interconnected institutions, emphasising the need for effective institutional arrangements to support the implementation of SDG-supported programs.

These findings suggest that the combination of inadequate guidance and enforcement from coercive and normative pressures and internal and external challenges have impeded holistic SDG practice development in ROEs A-E. Specifically, challenges from top management who has crucial roles in establishing orders for practice development, hinder the creation of practices that would lead to substantial SDG contributions, primarily due to their lack of positive perspectives. Moreover, insufficient collaboration among interrelated institutions supporting SF implementation for SDGs contributes to ROEs D-E's inability to develop and execute programs supporting SDGs.

7.4 Discussion

As argued in Chapter Two (see subsection 2.2.2), SAR functions as an essential tool (Porter & Kramer, 2011) for institutions to integrate SDGs into planning, accounting, and reporting for meaningful SDG achievement (Sachs, 2012; Stevens & Kanie, 2016; Stafford-Smith et al., 2017; Monkelbaan, 2019). This research uses SAR as a functional integrated planning, accounting, and reporting framework for SDG policy implementation. However, successful integration of SDGs into SAR practices requires a consistent direction among those institutions exerting pressures to positively affect the understanding and perspectives of organisational actors or management, in turn impacting effective practice development at organisational levels (Ahrens & Chapman, 2007, Lodhia, 2015).

This research addresses a gap in the literature, highlighted by Silva (2021), Bebbington & Unerman (2018; 2020), and Jayasooria (2016) of organisational practices in SDG integration that show how organisations articulate their commitments to national collaboration for SDG achievement. It offers a distinct approach to exploring the intricate relationships between Institutional Theory and Practice Theory, strongly influencing SAR practices in planning, accounting, and reporting for meaningful SDG achievement. Section 3.3 discusses the influence of institutional pressures to practice development on how the pressures strongly

shape organisational actors' general understanding, constructing the orders for practice element development within organisations (Schatzki, 2001; Schaltegger et al., 2006; Ahrens & Chapman, 2007; Lodhia, 2015; Lodhia et al., 2020) that substantively contributes to SDG achievement (Rosati & Faria, 2019; Emma & Jenifer, 2021; Erin et al., 2021).

The research reveals variations in institutional pressures among industries where ROEs A-E operate, driving the organisational actors and management to respond in interpreting the requirements (Higgins & Larrinaga, 2014; Boxenbaum & Jonsson, 2017) to establish orders of sufficient arrangements for SDG integration into their core operations. ROEs B and C face more significant pressures on SDG contributions through infrastructure projects, leading them to focus on infrastructure development. In contrast, ROEs D-E, as banking enterprises, are pressured to contribute to SDGs through SF, and ROE A is concerned with sustainability in the tourism sector. Despite various SDG contributions aligned with the core operations, institutional pressures should enforce consistent steps in planning, accounting, and reporting stages to establish practices for meaningful SDG achievement (Bebbington & Unerman, 2018;2020). Particularly in the Indonesian context of multi-level governance, consistent institutional pressures, particularly from government regulations and mandates, are crucial for significant SDG achievement (Sari et al., 2022).

However, this research reveals conflicting expectations due to inconsistent mandates between top-level regulations, exemplified by Presidential Decree 59/2017, and middle-level regulations from direct oversight institutions (IFSA, Ministry of SOEs, and DKI Jakarta Provincial government) responsible for overseeing the ROEs' business activities. Presidential Decree 59/2017 advocates holistic SDG integration into entire business operations, but oversight institutions limit the mandates to specific programs in sustainable finance, community development, and infrastructure projects. While urging Indonesian organisations, including ROEs, to support SDGs through sustainable operations, the guidelines from oversight institutions lack robust direction and enforcement for holistic practice development, spanning planning, accounting, and reporting. Indeed, the alignment of sustainability policies at all levels is crucial as a manifestation of effective collaboration for meaningful SDG achievement (Bowen et al., 2017; Sachs, 2012; Stevens & Kanie, 2016; Stafford-Smith et al., 2017; Monkelbaan, 2019).

Consistency reduces conflicting expectations stemming from competing institutional pressures and organisational challenges, supporting organisational actors as key players within organisations (Meyer & Rowan, 1977) to foster continual SDG practice development in the corporate hierarchy (Sari et al., 2022). This, in turn, promotes effective practice development in establishing a holistic approach to integrate SDGs into vision, leadership values (Lodhia 2015, 2017), strategic planning, accounting methods for behavioural change (Zyznarska-Dworczak, 2020), and accountable reporting (Schaltegger et al., 2006; Laine et al., 2021).

In contrast, inconsistency poses significant challenges, particularly in hybrid ROEs serving diverse stakeholder expectations regarding SDG implementation. As observed in this case study, the findings identify conflicting regulations from top-level regulators (via presidential decree), and oversight institution regulations exacerbate these challenges. Indeed, on one side, these ROEs need to address the presidential decree as the key regulation in SDG implementation in Indonesia, but they also need to follow the regulations from oversight institutions who are most frequently acting as both regulators and shareholders, creating confusion on practice development. Clearly, the consistent institutional pressures are essential to reduce the challenges for fostering effective institutional collaboration among and within organisations (Bowen et al., 2017) to achieve the SDGs by 2030 that requires strong collaboration (Jayasooria, 2016; UN, 2015) .

Indeed, while acknowledging the top-level mandate for sustainable operations contributing to SDGs, ROEs A-E grapple with inconsistent directions from oversight institutions, limiting their contributions to specific programs with a focus on reporting purposes. Weak and unclear guidelines from oversight institutions hinder knowledge development within ROEs, impacting the enforcement of their internal regulations. For instance, ROEs A-B neglect to update their internal CD regulations in response to IFSA and Ministry SOEs mandates, resulting in weak enforcement of SDG integration into CD programs. Outdated regulations impede teleoaffectivity. Consistent with the findings of Silva (2021), insufficient teleoaffectivity results in inadequate enforcement of clear, instructed systems affecting individual functions within organisations. Unfortunately, oversight institutions, during monitoring, overlook this issue (Breuer & Leininger, 2021), and they establish inadequate enforcement, such as systematic sanctions for SDG policy monitoring. In this study's context, the monitoring

function is insufficient to expedite SDG achievement (Sari et al., 2022), as evidenced by the absence of sanctions for not following the mandates.

In fact, as has been revealed in previous studies (Said et al., 2009; Amran & Hanifa, 2009; Marquis & Qian, 2014; Erin et al., 2021), this research found that government regulations from middle-level authorities overseeing ROEs' business activities and SDG contributions significantly shape organisational actors' understanding in ROEs A-E, influencing the development of practices detailed in Chapter Seven. This strong influence is pronounced due to the PSO status of these ROEs, which are subject to direct monitoring by oversight institutions (Marquis & Qian, 2014; Emma & Jenifer, 2021). Nevertheless, relying solely on monitoring functions (Sari et al., 2022) without implementing sanctions (Amran & Hanifa, 2009; Bellal, 2008) is insufficient to ensure the effective development of practices that lead to meaningful SDG achievement.

SDG implementation in Indonesia requires robust enforcement within institutional arrangements, incorporating into coercive pressures, such as mandating SDG performance indicator audits that would assure assessing the meaningfulness of enterprise contributions to SDGs (Sari et al., 2022). Thus, despite the more substantial impact of coercive pressures from government mandates on these ROEs (DiMaggio & Powel, 1983), a gap in the middle-level regulations is revealed. Insufficient details in the guidelines and strong enforcement from the oversight authorities hinder ROEs from holistically integrating SDGs into planning, accounting, and reporting for substantial impact. Inadequate guidelines and vigorous enforcement offer limited perspectives to organisational actors for establishing comprehensive internal arrangements, hindering meaningful SDG achievement, as has been found previously (Emma & Jennifer, 2021; Erin et al., 2021; Bebbington & Unerman, 2018; 2020). Without organisational actors' sufficient and robust understanding, achieving meaningful SDGs through comprehensive practices becomes practically impossible (Erin et al., 2021; Bebbgington & Unerman, 2018; 2020).

Moreover, in developing their SDG disclosure practices, the ROEs analysed in this study are influenced by normative drivers such as the GRI Standards Core Option and ISO 26000. However, these standards primarily focus on sustainability practices rather than specifically on establishing integrated practices for SDG disclosures. This finding suggests a need to direct the ROEs to utilise a more robust SDG measurement and reporting framework to support

enterprises aligning and executing business strategies with the SDGs (Subramaniam et al., 2023), exemplified by the framework "Integrating the SDGs into Corporate Reporting: A Practical Guide" (GRI, 2018). Nevertheless, the adoption of vague guidance by the ROEs in developing their SDG disclosures may be attributed to the early stage of SDG reporting in these enterprises. This lack of specificity may arise from limited experience or a deficiency in knowledge development, as also observed by Calabrese et al. (2021). Nevertheless, normative pressures, particularly through the adoption of GRI standards for integrating SDGs into reporting, can assist enterprises in developing sufficient practices (de Villiers & Alexander, 2014).

The study suggests that mimicking pressures, solely exemplified by ROE C, positively influence SDG integration practices, particularly in disclosure development. ROE C adopts more advanced approaches by learning from industry best practices (Bryson, 2014), clearly identifying SDG targets and indicators, and employing appropriate accounting methods for measuring and reporting SDG contributions. However, these mimicking drivers are less influential than coercive and normative pressures. Although ROE C acknowledges the role of mimicking pressures in SDG integration, it prioritises the more significant impacts of coercive and normative pressures. Consequently, ROE C focuses on applying benchmarking knowledge in specific projects rather than across its entire business operations.

These findings suggest that the adoption of nonspecific standards and government guidelines for SDG reporting, along with inadequate enforcement from direct institutional pressures, influences the understanding of organisational actors and management (Schatzki, 2002; Higgins & Larrinaga, 2014; Boxenbaum & Jonsson, 2017) affecting practice development (Ahrens & Chapman, 2007; Lodhia, 2015; 2017). These institutional barriers (Tetteh et al., 2024) result in a lack of emphasis on comprehensive, integrated SDG disclosures in planning, accounting, and reporting practices. Consequently, the approach is inadequate to seamlessly integrate SDGs into organisational practices and reporting mechanisms. Essentially, these institutional pressures are the main drivers affecting the general understanding of organisational actors – top-level management in shaping practical knowledge development (Ahrens & Chapman, 2007; Lodhia, 2015; 2017), a foundational element in shaping practice in the ROEs studied.

Moreover, challenges emerge when there are internal and external conflicting expectations (Meyer & Rowan, 1977). This research found that the internal complexity is more intensified in ROEs B-D than ROEs A and E in practice development, given top management's understanding driving the practices in ROEs B-D of prioritising economic performance over sustainability. While the teams in ROEs B-D responsible for developing SDG supporting programs may possess a general understanding of holistic practices, this comprehension often remains theoretical, insufficiently articulating into practices due to limited clarity in top management understanding shaping knowledge development, internal rules, regulations, and teleoaffectivity within enterprises (Lodhia, 2015; Lodhia et al., 2020).

In a broader context, this research reveals that although ROEs A-E possess knowledge and understanding, they face conflicting expectations from external parties, such as communities and customers, when it comes to embracing programs or projects supporting SDGs. The study finds that the community lacks sufficient understanding of SDG issues, and customers of sustainable finance (SF) products are hesitant to use them due to inadequate infrastructure provided by the government for SF products. These findings highlight insufficient collaboration among interrelated institutions to support ROEs A-E in significantly achieve SDGs. Nevertheless, effective collaboration for SDG achievement among institutional levels is prominent to contribute to the achievement of the SDGs (Bebbington & Unerman, 2018; Jayasooria, 2016; Stafford-Smith et al., 2017).

These internal and external challenges, along with insufficient guidelines and enforcements from the normative and coercive pressures encountered by ROEs A-E, prompted a decoupling strategy (Meyer & Rowan, 1977) in practice development. Limited evidence of a coupling strategy, indicating a substantive strategy characterised by alignment between practice and formal structures, is observed (Meyer & Rowan, 1977). Instead, these ROEs employ a decoupling approach, evidenced by discrepancies between the actual practices and formal organisational commitments (Meyer & Rowan, 1977). Consistent with prior findings (van der Waal & Thijssen, 2020; Silva, 2021; Lodhia et al., 2022), this study reveals that ROEs A-E emphasised strong SDG commitment in their sustainability reports but failed to implement concrete actions or allocate resources for SDG achievement through fundamental changes in their business operations. For example, while pledging support for SDGs through CSR activities, allocated budgets are often diverted to one-off donations, which are less likely to

advance SDG contributions impactfully. Additionally, in line with Ruiz-Lozano et al.'s (2022) findings, ROEs A-E demonstrate a strong commitment to SDGs but engage in selective reporting, or "cherry-picking," by emphasising favourable SDG-aligned initiatives (Gneiting & Mhlanga, 2021). They lack transparency in disclosing the strategic processes behind the articulation of their commitment to addressing SDGs most impacted by their business operations and are highly likely to merely shape a positive organisational image (Lodhia et al., 2022), potentially resulting in insignificant contributions and slow progress towards SDG realisation (Haywood et al., 2020; Emma & Jenifer, 2021).

Overall, this study reveals a gap in knowledge of ROEs A-E, underscoring the critical necessity for interconnected institutions to establish consistent enforcement of institutional pressures for optimal SDG achievement to drive effective collaboration within organisations for practice development. Inconsistent mandates pose organisational challenges for ROEs A-E in developing holistic SDG integration practices in planning, accounting, and reporting. This inconsistency allows top management to prioritise economic performance over sustainability and adopt a decoupling strategy (Meyer & Rowan, 1977) in practice development. While expressing support for SDGs, led by top management's inadequate understanding, ROEs A-E insufficiently translate SDGs into business processes and merely provide SDG-related program activity disclosures for reporting purposes.

Other challenges in SDG practice development stem from conflicting expectations from the community and customers, both lacking knowledge about SDGs and infrastructure support. This underscores the absence of interconnected institutional collaboration in educating the community and providing sufficient public infrastructure for implementing SDG programs and products, hindering support for ROEs A-E in SDG program implementation for significant impacts.

7.5 Summary

This chapter underscores that practice development shaping the SDG integration practices in the planning, accounting and reporting stages in ROEs A-E is not a standalone organisational process. Combining practice and institutional theories to explore the practices within the SAR for SDG framework provides comprehensive insights, enriching the understanding of the strong relationship between institutional pressures and challenges to practice development.

Understanding the relationship is crucial to examine the holistic practice development in planning, accounting, and reporting stages within ROEs A-E aiming for meaningful SDG achievement. The findings highlight insufficient collaboration among institutional pressures to establish practices within the enterprises effectively.

The practice elements—practical knowledge, internal regulations, and teleoaffectivity—are inadequately established for the integration of SDGs across entire business operations. This inadequacy is predominantly driven by the organisational actors' insufficient understanding, affecting knowledge development in articulating SDGs into planning, accounting, and reporting practices. Despite recognising top-level institutional pressures advocating holistic SDG integration, the organisational actors' insufficient understanding is affected by inadequate enforcement from direct oversight institutions, which narrowly focus on specific programs, highly emphasising SDG disclosures only for reporting purposes.

Furthermore, while ROEs A-E develop reporting practices influenced by normative pressures from GRI Core Option and ISO 26000, these standards focus on sustainability reporting rather than specifically addressing holistic SDG reporting. The adoption of these nonspecific standards for SDG disclosures may result from a lack of knowledge in defining suitable standards for holistic SDG reporting. This deficiency in understanding could be attributed to the absence of coercive pressures shaping organisational actors' views on holistic practices.

Furthermore, while ROEs A-E develop reporting practices influenced by normative pressures from GRI Core Option and ISO 26000, these standards focus on sustainability reporting rather than specifically addressing holistic SDG reporting. The adoption of these nonspecific standards for SDG disclosures may result from a lack of knowledge in defining suitable standards for holistic SDG reporting. This deficiency in understanding could be attributed to the absence of coercive pressures shaping organisational actors' views on holistic practices.

In a broader context, challenges arise in the community and customers due to insufficient knowledge of SDGs and proper public infrastructure for SF products to support SDGs. These challenges highlight inadequate collaboration among interconnected institutions for the smooth execution of SDG-related programs by ROEs engaged with the community. These findings underscore the critical importance of collaboration in SDG achievement, strongly influenced by institutional pressures, emphasising the need for strong collaboration among institutions and

organisations. These findings offer insights with practical, theoretical, and policy implications to be discussed in Chapter Nine.

Chapter Eight: Conclusion

8.1 Introduction

This chapter provides an overview of the thesis, emphasising the significance and contributions made by the study. It also outlines the implications of the key findings and discusses limitations and recommendations for future research. First, an outline of each chapter is presented, indicating how they contribute to investigating the central research question of the study:

How and why do Indonesian Regional-Owned Enterprises (ROEs) develop sustainability accounting and reporting practices to integrate SDGs into their business operations?

The first chapter introduced three specific research questions stemming from the central research question: *How do the ROEs develop their current SAR practices integrated with the SDGs? What institutional pressures do the ROEs face, and how do they drive the integration of the national SDGs into their SAR practices? and What are the challenges, and how do they affect the practice development?*

Chapter Two outlined the role of SAR in integrating SDGs into the planning, accounting, and reporting stages of business operations. It introduced the SAR framework, adapted from Schaltegger & Wagner (2006), which is used to guide a holistic analysis of SDG integration at the organisational level. Chapter Three presents the theoretical framework, employing Practice Theory and Institutional Theory as analytical lenses, to examine SAR practice development. These theories offer essential guidelines for analysing the actual circumstances of practice development in the studied ROEs and framing institutional pressures and challenges influencing practice elements in holistic SDG integration planning, accounting, and reporting.

Chapter Four thoroughly explained the research methodology, involving two primary stages: a content analysis of 48 reports and a case study of five Indonesian ROEs. It outlines research strategies for addressing the central research question in the two stages, specifying methods, data sources, and data analysis. The subsequent four chapters present the research findings.

The findings of the analysis of SDG disclosures in the annual/sustainability reports of Indonesian ROEs for 2019-2020 are presented in Chapter Five. They are supported by insights from two organisations actively engaged in SDG reporting practices in Indonesia, providing valuable context of the extant SDG practice disclosures for the researcher before conducting

the case study. Additionally, it outlines the selection process for the five ROEs with leading practices, including the contextual background of these five ROEs, setting the stage for the case study and offering insights for data selection as reliable sources for interviews and document analysis.

Chapters Seven and Eight showcase case study findings in ROEs A-E. Chapter Seven delineated current practices in planning, accounting, and reporting of SDG integration into business operations. Chapter Eight employs Practice Theory and Institutional Theory, focusing on the development of practice elements and the influence of institutional pressures and challenges on shaping the practices discussed in Chapter Seven.

This final chapter concludes by emphasising the research's significance, implications, and contributions of key findings. Next, Section 8.2 outlines the study's importance in addressing the three specified research questions. Section 8.3 explores research implications, while Section 8.4 presents research contributions. Section 8.5 identifies research limitations and future research opportunities. Section 8.6 concludes the thesis, emphasising the importance of holistic SAR practice development for meaningful SDG integration into business operations.

8.2 Research significance

This study used the integrated SAR for SDG framework (as established in Figure 2.1) to assess the nature, extent, drivers, and challenges of SAR practices in the planning, accounting, and reporting stages of integrating SDGs into business operations. As discussed in Subsection 2.2.3, the interconnection between planning, accounting, and reporting enables organisations to plan, measure, and communicate meaningful SDG contributions, thereby accelerating Indonesian SDG achievement.

The findings, based on the evaluation of SAR practices in five ROEs with contextually rich cases, suggest that the integrated SAR framework has the potential to embed SDGs into an organisation's core operations, ensuring impactful achievement through strategic planning. Organisations aspiring to advance SDG initiatives should integrate their accounting and reporting structures with strategic planning, involving stakeholders in the process.

Additionally, as highlighted in Section 2.2.2, the SAR framework is crucial for successful SDG implementation. The findings strengthen the research argument that significant SDG achievement can be realised through effective integrated SAR, enhancing accountability and transparency of SDG information for stakeholders. However, recognising the dynamic nature of practice development and maintaining the effectiveness, the SDG integration process requires a comprehensive understanding of practice element development, including institutional pressures and challenges driving practices in embedding SDGs across the three stages. The following exploration of these findings addresses the three specified research questions.

8.2.1 RQ1 – *How do the ROEs develop their current SAR practices integrated with the SDGs?*

Guided by the SAR for SDG framework (see Subsection 2.2.3), the analysis of existing practices indicates that for tangible impacts, Indonesian ROEs should adopt SAR to facilitate holistic SDG integration. They must develop a comprehensive, long-term SDG action plan covering SDG integration into entire business operations, serving as a strategic foundation for annual plan development. This annual plan, guiding implementation, performance measurement, and disclosure, allows for the comparison of actual achievements with planned outcomes to demonstrate progress in SDG commitment (Schaltegger & Wagner, 2006; Burritt & Schaltegger, 2010; Schaltegger & Wagner, 2017; Laine et al., 2021). However, the five ROEs examined in this chapter deviate from these ideal practices across the three stages. The research reveals a deficiency in translating SDG commitments into strategic steps, significantly impacting accounting and reporting practices.

In the planning stage, the studied ROEs lack a comprehensive roadmap for SDG integration across business operations. Their SDG contributions are confined to specific programs within core operations and CD programs. However, there is insufficient integration of SDGs into these programs, lacking proper planning, affecting the practices in accounting and reporting. Many selected programs lack initial SDG-based planning, despite acknowledging the importance of business impact assessment and strategic practices. The ROEs struggle to execute them effectively, resulting in a lack of clarity in connecting targets and indicators to SDGs. Consequently, integrating the SDG platform into the SAR framework falls short of driving

genuine change due to deficient strategic steps. None of these ROEs leverage SDGs as a strategic function to propel their sustainability agenda.

This deficient strategic step impacts their accounting and reporting practices. The absence of SDG targets and indicators in the planning stage hinders the connection between planned and targeted outcomes in their performance measurement methods. They rely on basic calculations such as budget realisation and year-to-year program output comparisons, neglecting the essential use of accounting methods that could drive organisational change for meaningful reporting practices (Zyznarska-Dworczak, 2020; Schaltegger & Wagner, 2006).

This research underscores that when ROEs employ basic methods, the SAR-generated information may inadequately reflect organisational change for significant SDG contributions. Indeed, the findings in reporting practices reveal that the studied ROEs exhibit retrofitting to SDGs, merely linking SDG-related activities for display in sustainability reports to conform to government regulations without detailing substantive changes. Thus, these ROEs provide narrative information on a broad range of SDG-related aspects without disclosing the rationale for issue selection and actions taken. This hinders focused assessment of contributions to national SDGs.

On the other hand, the ROEs recognise and integrate various standards, including GRI standards, ISO 26000, and FSA 51/2017, into their reporting approach. However, these standards lack a specific focus on SDG reporting, indicating a struggle to adopt a comprehensive SDG reporting approach. Consequently, their disclosures primarily serve as communication tools. Unfortunately, the absence of systematic self-review practices across the three stages, coupled with insufficient government enforcement and sole reliance on oversight bodies for monitoring without external assurance, hinders the potential for future improvements.

To better understand the reasons for the deficiencies outlined above, this study also investigated how the ROEs developed the practice elements: practical knowledge, internal rules and regulations and teleoaffectivity to constitute their practices. The findings reveal that top management, defined as organisational actors, understand the need to support SDGs through sustainable operations but have limited knowledge of how to articulate their SDG commitments into practice development in planning, accounting, and reporting. Their insufficient

knowledge, primarily focussing on reporting rather than embracing holistic practices, limits the use of SDGs since planning stage to drive fundamental change in sustainable business operations. This limited general understanding influences the insufficient knowledge development activities for holistic SDG practices, subsequently shaping inadequate development of their internal regulations. Indeed, although they acknowledge Presidential Decree 59/2017 for SDG integration in their business program development, they do not incorporate this regulation into their internal regulations. Instead, they utilise solely the regulations from oversight institutions, specifically to internally regulate SDG integration in specific programs within CD and core operations. Their internal regulations focus on specific program development and lack robustness, mainly due to outdated regulations. This limitation thereby affects their teleoaffectivity, which insufficiently enforces collaboration among respective divisions to integrate SDGs in planning, accounting, and reporting when developing their specific programs to support SDGs. This inadequate enforcement allows divisions the option to integrate SDGs into planning for only a limited number of selected programs.

8.2.2 RQ2 – *What institutional pressures do the ROEs face, and how do they drive the integration of the national SDGs into their SAR practices?*

As outlined in Section 3.4, effective practice element development depends on clear orders from organisational actors and management, significantly influenced by institutional pressures, rather than solely originating from the actors' state of mind. This research finds that institutional pressures, particularly coercive and normative influences, significantly shape the general understanding of the organisational actors within the ROEs examined, transforming into organisational orders for practice element development. However, the lack of robust guidance and enforcement of the pressures allows the ROEs to prioritise SDG integration into specific programs, particularly in the reporting stage, resulting in limited practice element development for integrating SDGs from the planning stage. As noted in the previous section, the adoption of reporting standards not explicitly designed for holistic SDG integration also strongly influences insufficient practice element development, shaping inadequate practices in articulating SDG integration, targets, and indicators in planning, accounting, and reporting. However, benchmarking, exemplified by ROE C, shows the potential for integrating measurable SDG targets and indicators into a comprehensive planning, accounting, and

reporting process. Nevertheless, coercive and normative pressures appear to exert more influence, shaping practice development.

8.2.3 RQ3 – *What challenges do the ROEs face, and how do they influence the integration of the national SDGs into ROEs' SAR practices?*

Challenges arise from conflicting expectations within internal organisations and among external pressures (Meyer & Rowan, 1977). Further, achieving the SDGs necessitates strong collaboration within organisations and among organisations and interrelated institutions to align their perspectives to reduce conflicting expectations. The results of this study show that, internally, conflicting expectations exist in ROEs A-E between top management and the teams executing SDG-supporting programs, as well as with employees, often due to insufficient knowledge. Conflicting expectations were particularly observed in ROEs B-D, particularly from top management, who perceive SDG-supporting programs as economically unfavourable, and this may impede the ROEs in forming effective practices for meaningful SDG achievements.

In a broader context, conflicting expectations were also seen between CD teams and the community's perspectives on SDG programs and SF teams and customers of SF products due to insufficient product infrastructure. These findings highlight a lack of collaboration among interconnected institutions, emphasising the need for adequate institutional arrangements to support the implementation of SDG-supported programs.

These findings suggest that the inadequate guidance and enforcement from institutions providing coercive and normative pressures, combined with internal and external challenges, have hindered holistic SDG practice development in the studied ROEs, prompting a decoupling strategy. Indeed, there is a discrepancy between their formal statements expressing a strong commitment to impactful SDGs disclosed in the reports and their actual efforts to develop comprehensive practices across the three stages revealed in this research. Section 8.3 presents practical and policy implications from these findings that could improve practice development in this context.

8.3 Research implications

The findings of this study have several practical and policy implications for the ROEs and the institutions that significantly influence the practices. The implications are elaborated on below.

8.3.1 Practical implications

The research results have significant implications for the Indonesian ROEs studied, particularly in the context of Indonesian PSOs. ROEs, as Local PSOs, play a pivotal role in advancing SDG implementation, given the SDGs' focus on local development (Guarini et al., 2022) and the notable SDG challenges in their operational areas (Bappenas, 2019). Since regional governments are crucial stakeholders for the ROEs, serving as both regulators and shareholders, it is imperative for ROEs to actively support government initiatives to accelerate SDGs by demonstrating tangible contributions within their core operations. However, this study highlights a deficiency in integrating SDGs into the operations of the studied ROEs, emphasising the need for enhancements in their current practices and corresponding behaviour change. Mere mapping of CSR activities to SDGs is insufficient for meaningful SDG contribution. Embedding SDGs into strategic planning, integrating them into accounting and reporting, and involving key stakeholders like local governments are essential. SDG reporting should not be separate from the planning and accounting stages.

To improve the practices, the findings suggest ROEs could improve their practice element development as follows:

1. ROEs should augment their practical knowledge, extending beyond technical skills to encompass attitudes and perspectives regarding the significance of integrating SDGs into business operations. Initiating a shift towards holistic perspectives, spanning integrated practices in planning, accounting, and reporting is imperative and must be commenced from top management—the organisational actors steering the organisation's direction (Schatzki, 2002; Lodhia, 2015; Lodhia et al., 2022). This shift in understanding, particularly among organisational actors, would have the potential to permeate the entire organisation through knowledge development activities such as workshops and seminars. Adequate knowledge development and robust top-level enforcement can enhance human resource capacity—a key challenge in planning, accounting, and reporting SDG-related

programs in the studied ROEs. Sustaining practical knowledge requires ongoing efforts to transfer practical knowledge.

2. With a shift in organisational perspectives, understanding strategies through establishing internal rules and regulations to enforce readiness for adopting practices becomes more accessible. Establishing internal rules and regulations should be aligned with the holistic understanding adopted from various government regulations or guidelines specifically related to SDG implementation. The internal rules and regulations should be continuously maintained by updating recent regulations and guidelines.

3. The ROEs could improve teleoaffectivity by establishing effective organisational systems (Schatzki, 2001) that translate understanding and regulations into concrete policies and operational approaches (Adams, 2017). These systems, comprising teleological orders reinforced by established internal regulations, compel individuals to adhere to acceptable actions in projects and activities aimed at achieving SDGs through sustainable operations. This would ensure meaningful contributions to SDG attainment in Indonesia (Adams, 2017; Laine et al., 2021). Current procedures primarily focus on retrospectively aligning activities with SDGs during reporting, hindering the holistic integration of ROE business operations with the SDG agenda.

These practical implications underscore the foundational role of shifting current understanding interrelated with the arrangements for establishing internal rules and teleoaffectivity. The process commences with organisational actors' shifting perspectives, strongly influenced by institutional pressures to formulate orders to arrange integrated practices (Schatzki, 2002). The following Subsection further elaborates on the policy implications of the findings related to institutional pressures, which could drive the shift of understanding of SAR practices in integrating SDGs into business operations.

8.3.2 Policy implications

This study reveals that institutional pressure, specifically coercive pressure through government regulations and mandates, is the primary driver influencing practice element development and normative pressure via GRI Standards. These pressures impact the understanding of organisational actors responsible for establishing orders in practice element development. However, current coercive and normative pressures do not emanate from clear

guidelines, and there is a lack of enforcement for the holistic integration of SDGs into business operations. Indeed, the ROEs are not strongly compelled to embed SDGs into planning, accounting, and reporting to demonstrate commitment and provide accountable and transparent information to stakeholders.

Although the Indonesian government expects accountability for SDG contributions in ROE reports, as highlighted by the Interviewee from Bappenas (see Section 5.4), the findings highlight inadequate monitoring from oversight institutions overseeing SDG implementation at these ROEs. For instance, during monitoring, these institutions failed to identify that ROEs A and B neglected to update their internal regulations to plan comprehensively, account for, and report on their CD programs aligned with SDGs. Furthermore, the Indonesian FSA merely compelled ROEs D-E to include a narrative linking their SF to SDGs in reports without enforcing the integration of SDGs into SF programs from the planning stage. Additionally, although the FSA imposed SF products released by ROEs D-E, there are no institutional arrangements among related government institutions to support infrastructure development for SF products. Surprisingly, oversight institutions directly overseeing the ROEs' business activities have regulations focusing on limited SDG integration programs that are not aligned with the top-level regulation, Presidential Decree 59/2017, which mandates SDG integration into business operations.

Bowen et al. (2017) propose that SDG achievement necessitates robust collaborations and enforcement of consistent institutional arrangements at global, national and organisational levels. Consistency requires alignment in vision and perspectives embedded into their mandates to mitigate conflicting expectations between institutional pressures and the organisation. Such alignment aims to address challenges hindering SDG integration practice development at the organisational level, as observed in the studied ROEs. Thus, improving consistent policies for institutional arrangements for SDG implementation is crucial, particularly in Indonesia's multi-level governance context (Sari et al., 2022), as the achievement necessitates strong collaboration among institutions at different levels.

Enhancing coherent SDG policy implementation across multi-level governance (Sari et al., 2022) minimises challenges arising from diverse government expectations, facilitating effective organisational-level practice development (Meyer & Rowan, 1977). Therefore, the oversight institutions should align their guidance with the top-level regulation to enforce more

comprehensive guidance for holistic SDG integration, enforcing the understanding, organisational regulations and instructive systems of ROEs to shape their practices. The enforcement should also consider contextual factors (Tilt, 2016). For instance, advanced reporting countries, such as Indonesia, face challenges related to insufficient support and resources across related institutions, necessitating collaboration to assist internal practices to establish sustainability reporting as an institutional norm (Dissanayake et al., 2020).

The enforcement should be followed by other mechanisms (Ike et al., 2019), which could include substantial penalties and legally binding contracts with the government (Amran & Haniffa, 2011), but this requires robust collaborative institutional support. For instance, if the Financial Services Authority (FSA) mandates Indonesian banks to provide green credit for electric motorcycles, it should ensure that other institutions responsible for installing public battery charging infrastructure for these motorcycles have fulfilled their public commitments. It is admitted that achieving this collaborative institutional commitment at the macro level for effective SDG implementation in Indonesia is challenging, as also highlighted by the Interviewee from Bappenas (see Section 5.4).

Enforcement mechanisms can also involve advocating for performance audit mechanisms to ensure PSOs' accountability of their SDG contributions (Sari et al., 2022). As observed in an Italian local-level PSO case study (Annesi et al., 2021), active citizen engagement can drive institutional shifts and formalisation of sustainability strategies in municipal decision-making practices. For ROEs with over 50% local government ownership, shareholder engagement may include appointing regional government representatives to the board of directors, offering a viable means of overseeing the integration of SDGs into business processes (Argento et al., 2019).

Another essential policy implication involves adopting reporting guidelines that advocate holistic reporting integrated into planning and accounting practices. SDG guidelines should extend beyond mere reporting purposes and guide comprehensive practice development for SDG integration into business processes (Guthrie et al., 2020; van der Waal & Thijssens, 2021). Emphasising a robust alignment framework, these guidelines should direct corporations in fulfilling SDGs, ensuring meaningful integration across planning, accounting, and reporting. Importantly, they should shape the shift in organisational understanding, moving beyond reporting purposes to foster holistic SDG integration into business operations by utilising SDGs

as a focused vision (Hajer et al., 2015). According to empirical studies, SDG reporting standards play a pivotal role in influencing the shift in understanding within existing reporting practices (Subramaniam et al., 2023; Qian et al., 2020; Joseph et al., 2014). In the Indonesian context, NCSR, which significantly assists Indonesian ROEs regarding holistic SDG integration disclosure development, can promote this understanding (see Section 5.4). They could guide ROEs to select specific SDG standards for disclosure development, using SDGs as the framework to drive the ROEs' sustainable operations. Additionally, introducing an SDG reporting award to recognise and appreciate disclosed SDG contributions in reports could serve as a viable option to advocate for the shift towards holistic SDG integration practices at the organisational level (Joseph et al., 2014). Introducing an SDG reporting award in Malaysia has proven effective in encouraging holistic SDG integration at the organisational level (Joseph et al., 2014). Given the similar contexts of developing countries, this approach could potentially work in Indonesia as well.

These practice and policy implications rest on dynamic and robust relationships between practice element development and institutional pressures manifesting in organisational practices. Internally, the managerial capacity of local-level PSO decision-makers, along with their perspectives and understanding, is pivotal for aligning SDGs with stakeholder expectations and establishing theoretical frameworks and practices within public management decision-making (Ball et al., 2014; Lodhia et al., 2022; Guarini et al., 2022). Institutionally, enforced collaboration among institutions is vital for impactful SDG implementation at the organisational level, requiring well-established institutional arrangements through regulations, guidelines, and infrastructures (Bowen et al., 2017). Consistency of the aims of regulations, guidelines, and arrangements among institutional arrangements for practice development within organisations is crucial to minimise challenges, given that SDGs demand collective actions at organisational, national, and global levels for planning, implementing, monitoring, and reporting the agenda (Stafford-Smith et al., 2017).

8.4 Contributions of the study

Prior research encourages the utilisation of SAR practice development to enhance transparency and accountability in implementing the SDGs at the organisational level, particularly within local PSOs (Bebbington & Unerman, 2018; Fusco & Ricci, 2019; Kaur & Lodhia, 2019; Bebbington & Unerman, 2020). These organisations play a vital role in SDG achievement,

given that 65% of the goals focus on local development (Guarini et al., 2022), especially in developing countries facing numerous SDG-related challenges (Belal, 2008; Qian et al., 2021; Tilt et al., 2020). The successful implementation of SDGs at the local level is considered pivotal for broader success at national and global scales (Bebbington & Unerman, 2018; Bebbington & Unerman, 2020; Guarini et al., 2022).

Given the global nature of SDGs, the findings of this study offer important lessons empirically and theoretically to existing SDG implementation at international level, particularly in other developing countries with similar context. The findings offer implications that have theoretical and naturalistic generalisations for both academia and practice (Parker & Northcott, 2016). Empirically, this study offers evidence of how theoretical concepts are applied in practice (Parker & Northcott, 2016), emphasising the interconnected nature of practice development and institutional pressures and challenges. The findings underscore that to improve the practices, it is imperative to recognise that practice development at organisational level is not an isolated process. They provide valuable insights into the current state of SDG integration at the organisational level to support national SDGs in local level PSOs in developing countries, identifying areas for improvement to accelerate SDG achievement. The findings highlight that it is crucial to advance institutional pressures regarding SDG integration in planning, accounting, and reporting to improve the practice at organisational level. Strengthened and consistent enforcement of these pressures positively influences practice development, facilitating meaningful SDG achievement at the organisational level.

Additionally, this study offers naturalistic generalisations applicable in practical and policy contexts, transferable to similar PSOs in other developing nations (Parker & Northcott, 2016). Theoretically, academia and practice can utilise the adapted SAR framework to understand the processes in developing practices of SDG integration across three stages more comprehensively. Combining institutional and practice theories also provides insights into how institutional pressures shape SAR practices within ROEs. This theoretical framework deepens the understanding of organisational motivations and mechanisms for SDG incorporation, advancing generalisations beyond this study original boundaries within Indonesia context, contributing to the broader discourse on SDG implementation implications for practice and policy at international level. The following subsections elaborate on the literature, theory and methodological contributions more specifically.

8.4.1 Contribution to the literature and theory

ROEs, as part of local-level PSOs, are pivotal for SDG implementation, reflecting the decentralised nature of sustainable development (Annesi et al., 2021; Guarini et al., 2022). Additionally, due to their hybridity, enforcing them to engage with diverse stakeholders with conflicting goals places high expectations on ROEs to extensively disclose SDG achievement in their sustainability reports (Guthrie & Martin-Sardesai, 2020; Garde-Sanchez et al., 2018; Grossi et al., 2015). ROEs operate amidst numerous local SDG-related issues and thus, there is a demand for attention to value creation in local sustainable development through the services that they provide. To meet the expectations of SDG contributions, ROEs need SAR as a tool to describe in their report the public values that they provide through SDG implementation, involving discussions on planning, realisation, measurement, and reporting (Guthrie & Martin-Sardesai, 2020).

This study addresses a gap in the field of SAR studies within the PSO context. While previous research predominantly focuses on the 'what and how' of sustainability reporting in PSOs (Fusco & Ricci, 2019), a knowledge gap exists in understanding the reasons behind insufficient disclosures in PSO reports, the development of practices leading to inadequate disclosures, and the impact of institutional pressures and challenges on this development (Argento et al., 2019; Fusco & Ricci, 2019). Current studies emphasise the connection between institutional pressures and sustainability reporting, highlighting that PSOs structure their reporting based on organisational perspectives shaped by dominant institutional pressures, including coercive, normative, and mimetic influences (Ball, 2005; Domingues et al., 2017; Lodhia et al., 2020). However, a comprehensive exploration of the linkages between institutional pressures influencing practice development and shaping disclosures is lacking (Garde-Sanchez et al., 2018; Awuah et al., 2023).

The findings of this thesis offer empirical evidence to the literature on contextual factors influencing SDG implementation in developing countries (Tilt et al., 2020; Tauringana, 2020), particularly in the countries with multi-level governance systems, such as Indonesia (Sari et al., 2022). Coherent guidelines and enforcement among different institutions are identified as crucial for effective practice development at the organisational level. The research provides a comprehensive empirical understanding of the dynamic development of practice elements shaping SAR practices in planning, accounting, and reporting for impactful SDG achievement.

Additionally, this study contributes to theory by linking two fundamental theories, Practice Theory and Institutional Theory, to investigate how institutional pressures influence practice development and shape the practices for meaningful SDG contributions in reports (Argento et al., 2019). Combining theories is inadequately explored in existing literature (Awuah et al., 2023). This is the first study that combines Practice Theory and Institutional Theory to elucidate dynamic relationships between organisational-level practices and institutional pressures and challenges in local PSOs in Indonesia, highlighting how these specific contexts influence their efficacy in achieving impactful SDGs. The linkage of these theories enables this research to comprehensively understand that in the context of local-level PSOs, coercive pressures—especially government mandates and regulations—significantly shape the understanding of organisational actors, driving the formulation of orders for developing SDG integration practices. However, when regulations are weak or inconsistent across different institutional levels, and there is a lack of positive management perspectives on sustainability practices, organisations may employ decoupling strategies in practice development, thereby failing to establish a fundamental change in business operations conducive to meaningful SDG achievement. The integration of these theories highlights that practice development is intricately linked to institutional pressures, particularly within PSOs, where coercive pressures play a significant role. To improve practices, it is imperative to recognise that practice development is not an independent process. Instead, improvements in the pressures across institutions are essential, requiring strengthened and consistent enforcement, which, in turn, positively influences practice development.

8.4.2 Contribution to methodology

Despite SAR's significance in assisting ROEs in creating public values through SDG implementation (Guthrie & Martin-Sardesai, 2020), there is a gap in SAR studies exploring how local-level PSOs integrate SDGs into their business operations (Ball & Grubnic, 2007; Dumay et al., 2010; Lodhia et al., 2020; Fusco & Ricci, 2019; Bebbington & Unerman, 2018; 2020). Limited evidence exists, particularly from case studies, for exploring SAR practices in local PSOs for SDG implementation (Argento et al., 2019; Annesi et al., 2021; Gherardi et al., 2021). Where PSO studies exist, they generally utilise a single case study method and often focus on developed countries with limited attention to integrated practices using SAR for SDG integration in business operations. Only a few have applied a multiple case study approach and

conducted interviews to understand holistic SDG integration in local-level PSOs in developing countries (Fusco & Ricci, 2019).

This study makes a small methodological contribution by extending the SAR framework Schaltegger & Wagner (2006) developed to integrate the SDG context (see Figure 2.1). The adapted framework was used to guide the analysis and further modified into Themes in Tables 4.2 and 4.5 by utilising the *a priori* and emerging approaches to examine SDG integration practices in the report analysis and case study. This adapted SAR for SDG framework provides distinctive perspectives to the various existing SDG frameworks and guidelines that can be transferable to future research exploring SDG reporting. It underlines comprehensive guidance for integrating SDGs in planning, accounting, and reporting within organisations. For example, the themes and subthemes of sustainability accounting for SDGs, as derived from Figures 2.1 and 2.2, provide a valuable framework for future research. They offer insights into how organisations should design accounting systems to achieve significant progress on SDGs. Specifically, the accounting system outlined in Figure 2.2 facilitates a thorough analysis of how organisations should transform data into actionable information aligned with SDG targets and indicators, enabling management and stakeholders in assessing SDG implementation, evaluating performance, maintaining internal control, reporting, and planning future strategies. The adapted framework can comprehensively enable future investigations exploring how SDGs can serve as primary drivers, facilitating fundamental changes in business operations for meaningful SDG achievement that should be disclosed in the reports to ensure accountability and transparency.

Overall, this study contributes empirically, theoretically and methodologically that offer theoretical and naturalistic generalisations (Parker & Northcott, 2016). The contributions extend this study original boundaries within Indonesia context to the broader discourse on SDG implementation implications for practice and policy at international level.

8.5 Research limitations and future research directions

As with all research, this study is subject to limitations. Evidence was collected through online interviews and document analysis in two stages. Due to time constraints and limited access, top-level management interviews were not possible, although invitations had been sent. As highlighted in the adapted SAR Framework, top-level management plays a crucial role in

developing SDG integration practices across the three stages. Insights obtained through interviews with them are essential for understanding how they guide practice development. However, as a substitute for direct interviews, this research utilised the Board directors' statements in annual/sustainability reports to examine their perspectives on SDG integration into business operations and how they plan, account for, and report the integration. Inconsistencies between these statements and the provided SDG disclosures led to the conclusion that while there is an initial understanding of the significance of SDG integration into business processes, translating it into practice poses challenges that the participants also mentioned. Nevertheless, future research is encouraged to incorporate interviews with organisational actors, particularly top-level management, who are most influenced by institutional pressures in shaping their understanding and formulating orders to develop practice elements.

The ROEs studied were exclusively located in the western part of Indonesia, limiting insights into SDG integration practices in diverse contexts with different SDG issues. However, the five ROEs selected represent leading practices with contextually rich cases analysed in Stage 1. Interviews with Bappenas and NCSR, two organisations actively involved in SDG reporting practices, provide valuable insights, allowing further investigation into the studied cases and triangulating some of the interviews and reporting data. While this research focused on five ROEs, future studies with larger sample sizes could enhance the explanatory power of the research framework. Additionally, this research utilises the SAR framework, Practice Theory, and Institutional Theory, focusing on government ownership and company age as key variables in highlighting the contextual background of the ROEs' practice development. Future research might consider including other factors, such as total assets, to provide a more comprehensive context in exploring the practice development. Another aspect that warrants consideration in future research is the role of good governance in practice development. Issues regarding governance can lead to internal challenges, as highlighted in this research, potentially causing decoupling practices. Further investigation is necessary to comprehensively explore this issue and its holistic implications for improving practices.

Additionally, this research utilised interview and document analysis to understand the practice development. Future research is suggested to incorporate surveys alongside interviews and document analysis, which would also provide a comprehensive understanding of the practices.

Future studies could incorporate observations to gauge the development of practices in planning, accounting, and reporting of SDG integration into business operations. Observations can reveal the presence of decoupling (Meyer & Rowan, 1977) that might go unnoticed in interviews and documentary evidence. Additionally, comparative studies across different developing countries can explore how PSOs in diverse contexts develop their practices of SDG integration into business operations, shedding light on the pressures and challenges encountered.

Finally, this research diverged from utilising existing SDG frameworks (e.g., KPMG, GRI, and Integrated Reporting), opting instead for adapting the framework developed by Schaltegger & Wagner (2006). This choice was driven by the framework's ability to comprehensively delineate essential practices within organisations suitable for this research context, guiding integrated planning, accounting, and reporting for fundamental changes using SDGs. The adapted framework and the developed themes for content analysis (Table 4.2) and case study interviews (Table 4.5) serve as valuable resources for future research. These adaptable themes can be extended to diverse contextual settings and hold potential for adoption and expansion in various contexts, including other public sector organisations (PSOs) or corporations.

8.6 Conclusion

This study emphasises SAR's role in assisting ROEs, pivotal in expediting SDG achievement, to integrate SDGs into their business operations. The findings reveal how ROEs could leverage effective SAR practices to create meaningful SDG achievements by developing planning, accounting, and reporting practices, even though the studied ROEs did not fully align with the suggested framework.

The identified gaps provide insights into practical and policy implications for ROEs, regulators, and standard setters. Improving institutional arrangements through government mandates, guidelines, and frameworks is crucial to improving practice development at organisational levels. The study highlights the strong relationship between institutional pressures and practice development by combining Practice Theory and Institutional Theory, a linkage not thoroughly explored in prior studies.

In summary, achieving SDGs necessitates collaboration across organisational, national, and global levels, especially with just six years remaining. Local PSOs, specifically Indonesia's

ROEs, play a pivotal role in this context. Given the emphasis on local sustainable development in most SDG targets and the challenges prevalent in their operating areas, ROEs are crucial SDG contributors through their business operations. Acknowledging this, the Indonesian government mandates ROEs to plan, account for, and report their SDG contributions, facilitating effective SAR implementation for SDG acceleration.

This study is crucial as it sheds light on how ROEs, with their pivotal role in SDG achievement, plan, account, and report their contributions in articulating their SDG commitment to contribute substantially to SDG achievement at national and global levels. The findings not only emphasise internal practices showcasing their commitment but also provide comprehensive insights into how institutional pressures and challenges impact internal practice development. It highlights that organisational practice development operates in tandem with institutional forces and challenges, offering practical and policy implications. Due to a strong link between practice development, institutional pressures, and challenges shaping the SAR practices, institutional pressures should have consistent guidelines, regulations, arrangements and infrastructures to enable effective practice development at the organisational level to make impactful SDG contributions. This demonstrates effective collaborative actions among institutions and organisations to manifest their SD commitment to a fundamental change for impactful SDG achievement.

References

Abeysekera, I. (2022). A framework for sustainability reporting. *Sustainability Accounting, Management and Policy Journal, 13*(6), pp. 1386-1409. doi:10.1108/sampj-08-2021-0316.

Adams, C. A. (2017). *The Sustainable Development Goals, integrated thinking and the integrated report* 978-1-909883-41-3). I. a. ICAS.

Adams, C. A., & Larrinaga, C. (2007). Engaging with organisations in pursuit of improved sustainability accounting and performance. *Accounting, Auditing & Accountability Journal, 20*(3), pp. 333-355. doi:10.1108/09513570710748535.

Adams, C. A., & Larrinaga, C. (2019). Progress: engaging with organisations in pursuit of improved sustainability accounting and performance. *Accounting, Auditing & Accountability Journal, 32*(8), pp. 2367-2394. doi:10.1108/aaaj-03-2018-3399.

Argento, D., Grossi, G., Persson, K., & Vingren, T. (2019). Sustainability disclosures of hybrid organizations: Swedish state-owned enterprises. *Meditari Accountancy Research, 27*(4), 505-533. doi:10.1108/MEDAR-07-2018-0362

Ahrens, T., & Chapman, C. S. (2007). Management accounting as practice. *Accounting, Organizations and Society, 32*(1-2), pp. 1-27. doi: 10.1016/j.aos.2006.09.013.

Amran, A., & Haniffa, R. (2011). Evidence in development of sustainability reporting: a case of a developing country. *Business Strategy and the Environment, 20*(3), pp. 141-156. doi:10.1002/bse.672.

Annesi, N., Battaglia, M., Gragnani, P., & Iraldo, F. (2021). Integrating the 2030 Agenda at the municipal level: multilevel pressures and institutional shift. *Land Use Policy, 105.* doi:10.1016/j.landusepol.2021.105424.

Avrampou, A., Skouloudis, A., Iliopoulos, G., & Khan, N. (2019). Advancing the Sustainable Development Goals: Evidence from leading European banks. *Sustainable Development, 27*, pp. 743-757. doi:10.1002/sd.1938.

Awuah, B., Yazdifar, H., & Elbardan, H. (2023). Corporate reporting on the Sustainable Development Goals: a structured literature review and research agenda. *Journal of Accounting & Organizational Change*. doi:10.1108/jaoc-10-2022-0155.

Bailey, J. (2008). First steps in qualitative data analysis: transcribing. *Family practice*, *25*(2), pp.127-131. doi:10.1093/fampra/cmn003.

Ball, A. (2005). Environmental accounting and change in UK local government. *Accounting, Auditing & Accountability Journal, 18*(3), pp. 346-373. doi:10.1108/09513570510600738.

Ball, A., & Bebbington, J. (2008). Editorial: Accounting and Reporting for Sustainable Development in Public Service Organizations. *Public Money & Management, 28*(6), pp. 323-326. doi:10.1111/j.1467-9302.2008.00662.x.

Ball, A., & Craig, R. (2010). Using neo-institutionalism to advance social and environmental accounting. *Critical Perspectives on Accounting, 21*(4), pp. 283-293. doi:10.1016/j.cpa.2008.11.006.

Ball, A., & Grubnic, S. (2007). Sustainability accounting and accountability in the public sector. In D. Gibassier, and Jeffrey Unerman (Ed.), *Sustainability Accounting and Accountability.* (pp. 243-265): Routledge.

Ball, A., Grubnic, S., & Birchall, J. (2014). Sustainability accounting and accountability in the public sector. In J. Bebbington, J. Unerman & B. O'Dwyer (Eds.), *Sustainability accounting and accountability* (2nd Edition ed.). London: Routledge.

Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The qualitative report, 13*(4), pp.544-559. http://www.nova.edu/ssss/QR/QR13-4/baxter.pdf

Bebbington, J., & Gray, R. (2001). An account of sustainability: failure, success and a reconceptualization. *Critical Perspectives on Accounting, 12*(5), pp. 557-587. doi:10.1006/cpac.2000.0450.

Bebbington, J., Kirk, E. A., & Larrinaga, C. (2012). The production of normativity: A comparison of reporting regimes in Spain and the UK. *Accounting, Organizations and Society, 37*(2), pp. 78-94. doi:10.1016/j.aos.2012.01.001

Bebbington, J., & Unerman, J. (2018). Achieving the United Nations Sustainable Development Goals-An enabling role for accounting research. *Accounting, Auditing & Accountability Journal, 31*(1), pp. 2-24. doi:10.1108/aaaj-05-2017-2929.

Bebbington, J., & Unerman, J. (2020). Advancing research into accounting and the UN sustainable development goals. *Accounting, Auditing & Accountability Journal.* 33(7), pp.1657-1670. doi: 10.1108/AAAJ-05-2020-4556

Bebbington, J., Higgins, C., & Frame, B. (2009). Initiating sustainable development reporting: evidence from New Zealand. *Accounting, Auditing & Accountability Journal, 22*(4), pp. 588-625. doi: 10.1108/09513570910955452.

Belal, A. R. (2008). *Corporate social responsibility reporting in developing countries:the case of Bangladesh* Hampshire, England: Ashgate.

Belal, A. R., Kabir, M. R., Cooper, S., Dey, P., Khan, N. A., Rahman, T., & Ali, M. (2010). Corporate environmental and climate change disclosures: empirical evidence from Bangladesh. *Research in Accounting in Emerging Economies, 10*, pp. 147-169. doi:10.1108/S1479-3563(2010)0000010011.

Bello, A., & Maidin, A. J. (2018). Sustainable development initiatives at the local government level in Malaysia. In Routledge Handbook of Sustainable Development in Asia (pp. 449-467). Routledge.

Beyne, J., Visser, W., & Allam, I. (2021). Sustainability Reporting in the Antwerp Port Ecosystem, Belgium: Understanding the Relationship Between Reporting on the Sustainable Development Goals and Integrated Thinking. *Frontiers in Sustainability, 2*, p. 689739. doi:10.3389/frsus.2021.689739.

Biermann, F., Kanie, N., & Kim, R. E. (2017). Global governance by goal-setting: the novel approach of the UN Sustainable Development Goals. *Current Opinion in Environmental Sustainability, 26-27*, pp. 26-31. doi:10.1016/j.cosust.2017.01.010.

Bleich, E., & Pekkanen, R. (2013). How to report interview data. *Interview research in political science*, *1*, pp. 84-105. doi: org/10.7591/9780801467974-007

Boeije, H. (2002). A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality and quantity*, *36*, pp. 391-409. doi: 10.1023/A:1020909529486

Borelli, T. (Producer). (2017, 22 March 2020). Unilever and the failure of corporate social responsibility. Retrieved from https://www.forbes.com/sites/econostats/2017/03/15/unilever-and-the-failure-of-corporate-social-responsibility/#707197d9498d.

Bowen, K. J., Cradock-Henry, N. A., Koch, F., Patterson, J., Häyhä, T., Vogt, J., & Barbi, F. (2017). Implementing the "Sustainable Development Goals": towards addressing three key governance challenges—collective action, trade-offs, and accountability. *Current Opinion in Environmental Sustainability, 26-27*, pp. 90-96. doi:10.1016/j.cosust.2017.05.002.

Boxenbaum, E., & Jonsson, S. (2017). Isomorphism, diffusion and decoupling: Concept evolution and theoretical challenges. *The Sage handbook of organizational institutionalism*, *2*, pp. 77-101.

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative research in sport, exercise and health*, *11*(4), pp. 589-597. doi: 10.1080/2159676X.2019.1628806.

Breuer, A., & Leininger, J. (2021). Horizontal accountability for SDG implementation: A comparative cross-national analysis of emerging national accountability regimes. *Sustainability*, *13*(13), p. 7002. doi: 10.3390/su13137002.

Broadbent, J., & Gurthrie, J. (1992). Change in public sector: A review of recent alternative accounting research. *Accounting, Auditing & Accountability Journal*, *5*(2), pp. 3-31. doi: 10.1108/09513579210011835.

Bryson, J. M. (2004). What to do when stakeholders matter. *Public Management Review, 6*(1), pp. 21-53. doi:10.1080/14719030410001675722.

Buhr, N., Gray, R., & Milne, M. J. (2014). Histories, rationales, voluntary standards and future prospects for sustainability reporting. *Sustainability accounting and accountability,* pp. 51-71.

Burritt, R., & Welch, S. (1997). Accountability for environmental performance of the Australian Commonwealth public sector. *Accounting, Auditing & Accountability Journal, 10*(4), pp. 532-561. doi:10.1108/09513579710367494.

Burritt, R., & Schaltegger, S. (2010). Sustainability accounting and reporting: fad or trend? *Accounting, Auditing & Accountability Journal, 23*(7), pp. 829-846. doi:10.1108/09513571011080144.

Busco, C., Frigo, M. L., Quattrone, P., & Riccaboni, A. (2013). *Integrated reporting. Concepts and cases that redefine corporate accountability.* pp.3-18. doi: 10.1007/978-3-319-02168-3_1.

Cahaya, F. R., Porter, S., Tower, G., & Brown, A. (2015). The Indonesian Government's coercive pressure on labour disclosures: Conflicting interests or government ambivalence? *Sustainability Accounting, Management and Policy Journal, 6*(4), pp. 475-497. doi: 10.1108/SAMPJ-09-2014-0051.

Caiado, R., Filho, W. L., Quelhas, O. L. G., Nascimento, L. d. M., & Ávila, L. V. (2018). A literature-based review on potentials and constraints in the implementation of the sustainable development goals. *Journal of Cleaner Production, 198*, pp. 1276-1288. doi:10.1016/j.jclepro.2018.07.102.

Calabrese, A., Costa, R., Gastaldi, M., Ghiron, N. L., & Montalvan, R. A. V. (2021). Implications for Sustainable Development Goals: A framework to assess company disclosure in sustainability reporting. *Journal of Cleaner Production, 319*, p.128624. doi: 10.1016/j.jclepro.2021.128624.

Caputo, F., Ligorio, L., & Pizzi, S. (2021). The contribution of higher education institutions to the SDGs—An evaluation of sustainability reporting practices. *Administrative Sciences*, *11*(3), p. 97.doi: 10.3390/admsci11030097

Cardillo, E., & Longo, M. C. (2020). Managerial reporting tools for social sustainability: insights from a local government experience. *Sustainability, 12*(9).doi:10.3390/su12093675.

Cope, D. G. (2014). Methods and meanings: credibility and trustworthiness of qualitative research. In *Oncology nursing forum, 41(1).* p.89. doi: 10.1188/14.ONF.89-91.

Corbin, J. M., and Strauss A., (2008). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory.* Sage Publications.

Cormier, D., & Gordon, I. M. (2001). An examination of social and environmental reporting strategies. *Accounting, Auditing & Accountability Journal, 14*(5), pp. 587-617. doi:10.1108/EUM0000000006264.

Correa, C., Laine, M., & Larrinaga, C. (2023). Taking the world seriously: Autonomy, reflexivity and engagement research in social and environmental accounting. *Critical Perspectives on Accounting. 97.* p.102554. doi:10.1016/j.cpa.2023.102554.

Creswell, J. W., & Báez, J. C. (2020). *30 essential skills for the qualitative researcher*. Sage Publications.

Curtó-Pagès, F., Ortega-Rivera, E., Castellón-Durán, M., & Jané-Llopis, E. (2021). Coming in from the cold: a longitudinal analysis of SDG reporting practices by Spanish listed companies since the approval of the 2030 agenda. *Sustainability, 13*(*3*). p.1178. doi:10.3390/su13031178.

Cutter, S. I., & Zadeh, A. I. (2015). Pool knowledge to stem losses from disasters. *Nature, 522.* pp. 277-279.doi:10.1038/5222277a.

Datta, U.K., (2017), "A model for achieving sustainable development goals (SDGs) by establishing fund raising local government enterprises (lges)", *Management Development*, Vol. 31, No. 1, pp. 1-32.

de Oliveira Bellini, E. C., Rodrigues, R. N., & Lagioia, U. C. T. (2019). Public Sector (Un) Sustainability: a study of GRI adherence and sustainability reporting disclosure standards in Public Institutions and State-Owned Companies of the Public Agency Sector. *Cuadernos de Contabilidad, 20*(49), pp.1-28. doi:10.11144/Javeriana.cc20-49.psss.

de Villiers, C., & Alexander, D. (2014). The institutionalisation of corporate social responsibility reporting. *The British Accounting Review, 46*(2), pp.198-212. doi: 10.1016/j.bar.2014.03.001.

Deegan, C. (2002). Introduction: the legitimising effect of social and environmental disclosures - a theoretical foundation. *Accounting, Auditing & Accountability Journal, 15*(3), pp. 282-311. doi:10.1108/09513570210435852.

Dempsey, N., Bramley, G., Power, S., & Brown, C. (2011). The social dimension of sustainable development: defining urban social sustainability. *Sustainable Development, 19*(5), pp. 289-300. doi:10.1002/sd.417.

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited - institutional isomorphism and collective rationality in organisational fields. *American Sociological Review, 48*(2), pp. 147-160. doi: 0.1515/9780691229270-005.

Dissanayake, D., Kuruppu, S., Qian, W., & Tilt, C. A. (2020). Barriers for sustainability reporting: evidence from Indo-Pacific region. *Meditari Accountancy Research, 29*(2), pp. 264-293. doi:10.1108/medar-01-2020-0703.

Domingues, A. R., Lozano, R., Ceulemans, K., & Ramos, T. B. (2017). Sustainability reporting in public sector organisations: Exploring the relation between the reporting process and organisational change management for sustainability. *Journal of Environmental Management, 192*, pp. 292-301. doi:10.1016/j.jenvman.2017.01.074.

Dumay, J., Guthrie, J., & Farneti, F. (2010). Gri Sustainability Reporting Guidelines For Public And Third Sector Organizations. *Public Management Review, 12*(4), pp. 531-548. doi:10.1080/14719037.2010.496266.

Elalfy, A., Weber, O., & Geobey, S. (2021). The Sustainable Development Goals (SDGs): a rising tide lifts all boats? Global reporting implications in a post SDGs world. *Journal of Applied Accounting Research, 22*(3), pp. 557-575. doi:10.1108/jaar-06-2020-0116.

ElMassaha, S., & Mohieldin, M. (2020). Digital transformation and localizing the Sustainable Development Goals (SDGs). *Ecological Economics, 169.* doi:10.1016/j.ecolecon.2018.106490.

Emma, G. M., & Jennifer, M.-F. (2021). Is SDG reporting substantial or symbolic? an examination of controversial and environmentally sensitive industries. *Journal of Cleaner Production, Vol. 298.* doi:10.1016/j.jclepro.2021.126781.

Erin, O. A., Bamigboye, O. A., & Oyewo, B. (2021). Evaluation and analysis of SDG reporting: evidence from Africa. *Journal of Accounting & Organizational Change, 18*(3), pp. 369-396. doi:10.1108/jaoc-02-2020-0025.

Faisal, F., Achmad, T., Ratmono, D., & Listyani, M. (2016, 4-6 September 2016). *Corporate social environmental responsibility disclosure of Indonesian public listed companies.* The 15th International Conference on Corporate Social Responsibility and 6th Organisational Governance Conference, Melbourne.

Farooq, M. B., & De Villiers, C. (2017). Telephonic qualitative research interviews: When to consider them and how to do them. *Meditari Accountancy Research, 25*(2), pp. 291-316. doi:10.1108/MEDAR-10-2016-0083.

Friedman, M. (2007). The social responsibility of business is to increase its profits. In H. M. Zimmerli W.C., Richter K. (Ed.), *Corporate Ethics and Corporate Governance*. Berlin, Heidelberg: Springer.

Fusco, F., & Ricci, P. (2019). What is the stock of the situation? a bibliometric analysis on social and environmental accounting research in public sector. *International Journal of Public Sector Management, 32*(1), pp. 21-41. doi:10.1108/ijpsm-05-2017-0134.

Garde-Sanchez, R., López-Pérez, M. V., & López-Hernández, A. M. (2018). Current trends in research on social responsibility in State-Owned Enterprises: a review of the literature from 2000 to 2017. *Sustainability, 10(7),*p.2403. doi:10.3390/su10072403.

Gherardi, L., Linsalata, A. M., Gagliardo, E. D., & Orelli, R. L. (2021). Accountability and

Reporting for Sustainability and Public Value: Challenges in the Public Sector. *Sustainability, 13*(3). doi:10.3390/su13031097.

Given, L. M. (Ed.). (2008). *The Sage encyclopedia of qualitative research methods*. Sage publications.

Global Reporting Initiative. (2010). *GRI Reporting in Government Agencies*. Amsterdam. The Netherlands: GRI.

Global Reporting Initiative. (2018). Integrating the SDGs into corporate reporting: a practical guide: GRI and UN Global Compact.

Global Reporting Initiative. (2020). *Consolidated set of GRI sustainability reporting standards 2020*: GRI.

Gneiting, U., & Mhlanga, R. (2021). The partner myth: analysing the limitations of private sector contributions to the Sustainable Development Goals. *Development in Practice, 31*(7), pp. 920-926. doi:10.1080/09614524.2021.1938512.

Goswami, K., & Lodhia, S. (2014). Sustainability disclosure patterns of South Australian local councils: a case study. *Public Money & Management, 34*(4), pp. 273-280. doi:10.1080/09540962.2014.920200.

Gray, R., & Bebbington, J. (2000). Environmental accounting, managerialism and sustainability: Is the planet safe in the hands of business and accounting? Advances in Environmental Accounting & Management, 1. *1*, pp. 1-44. doi:10.1016/S1479-3598(00)01004-9.

Greco, G., Sciulli, N., & D'Onza, G. (2015). The influence of stakeholder engagement on sustainability reporting: evidence from Italian local councils. *Public Management Review, 17*(4), pp. 465-488.doi: 10.3390/su13137002.

Greiling, D., Traxler, A. A., & Stötzer, S. (2015). Sustainability reporting in the Austrian, German and Swiss public sector. *International Journal of Public Sector Management, 28*(4/5), pp. 404-428. doi:10.1108/ijpsm-04-2015-0064.

Grossi, G., Papenfuß, U., & Tremblay, M.-S. (2015). Corporate governance and accountability of State-Owned Enterprises: relevance for science and society and interdisciplinary research perspectives. *International Journal of Public Sector Management, 28*(4/5), pp. 274-285. doi:10.1108/IJPSM-09-2015-0166.

Grossi, G., & Thomasson, A. (2015). Bridging the accountability gap in hybrid organizations: the case of Copenhagen Malmö Port. *International Review of Administrative Sciences, 81*(3), pp. 604-620. doi: 10.1177/0020852314548151.

Guarini, E., Mori, E., & CeCAP, E. Z. (2022). Localizing the Sustainable Development Goals: a managerial perspective. *Journal of Public Budgeting, Accounting & Financial*

Management, 34(5), pp. 583-601. doi:10.1108/JPBAFM-02-2021-0031.

Gunawan, J. (2013). Determinant factors of corporate social disclosures in Indonesia. *Issues in Social and Environmental Accounting, 7*(2), pp.113-134.doi: 10.22164/isea.v7i2.78.

Gunawan, J., & Tin, S. (2019). The development of corporate social responsibility in accounting research: evidence from Indonesia. *Social Responsibility Journal, 15(5),* pp. 671-688. doi:10.1108/srj-03-2018-0076.

Gunawan, J., Permatasari, P., & Tilt, C. A. (2020). Sustainable development goal disclosures: Do they support responsible consumption and production? *Journal of Cleaner Production, 24(6).*p.118989. doi:10.1016/j.jclepro.2018.118989.

Gunawan, J., Permatasari, P., & Fauzi, H. (2022). The evolution of sustainability reporting practices in Indonesia. *Journal of Cleaner Production, 358.*p. 131798. doi:10.1016/j.jclepro.2022.131798.

Guthrie, J., & Farneti, F. (2008). GRI sustainability reporting by Australian public sector organizations. *Public Money & Management, 28*(6), pp. 361-366. doi:10.1111/j.1467-9302.2008.00670.x.

Guthrie, J., & Martin-Sardesai, A. (2020). Contemporary challenges in public sector reporting. In F. Manes-Rossi & R. L. Orelli (Eds.), *New Trends in Public Sector Reporting* (pp. pp. 1-14): Springer.

Guthrie, J., Manes Rossi, F., Orelli, R. L., & Nicolò, G. (2020). Investigating risk disclosures in Italian integrated reports. *Meditari Accountancy Research, 28*(6), pp. 1149-1178. doi:10.1108/medar-10-2019-0596.

Hahn, R., & Kühnen, M. (2013). Determinants of sustainability reporting: A review of results, trends, theory, and opportunities in an expanding field of research. *Journal of cleaner production, 59*, pp.5-21. doi:10.1016/j.jclepro.2013.07.005.

Hajer, M., Nilsson, M., Raworth, K., Bakker, P., Berkhout, F., De Boer, Y., ... & Kok, M. (2015). Beyond cockpit-ism: Four insights to enhance the transformative potential of the sustainable development goals. *Sustainability*, *7*(2), pp.1651-1660. doi:10.3390/su7021651.

Hancock, D. R., & Algozzine, B. (2006). *Doing case study research. A practical guide for beginning researchers* New York: Teachers College Press.

Haywood, L. K., & Boihang, M. (2021). Business and the SDGs: Examining the early disclosure of the SDGs in annual reports. Development Southern Africa, *38(2)*, pp. 175-188. doi:10.1080/0376835X.2020.1818548.

Herzig, C., Viere, T., Burritt, R., & Schaltegger, S. (2006). Understanding and supporting management decision making: South East Asian case studies on Environmental Management Accounting. In S. Schaltegger, M. Bennett & R. Burritt (Eds.),

Sustainability Accounting and Reporting, 21, Dordrecht, The Netherlands.: Springer.

Higgins, C., & Larrinaga, C. (2014). Sustainability reporting: Insights from institutional theory. In J. Bebbington, J. Unerman & B. O'Dwyer (Eds.), *Sustainabiliity Accounting and Accountability* (pp. 273-285). New York: Routledge.

Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qual Health Res, 15*(9), pp. 1277-1288. doi:10.1177/1049732305276687. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/16204405.

Ike, M., Donovan, J. D., Topple, C., & Masli, E. K. (2019). The process of selecting and prioritising corporate sustainability issues: Insights for achieving the Sustainable Development Goals. *Journal of Cleaner Production, 236.* p.117661. doi:10.1016/j.jclepro.2018.117661.

Institute of Indonesia Chartered Accountants (IICA). (2018). Peran Profesi Akuntan Menuju SDGs 2030. Retrieved from http://kongres.iaiglobal.or.id/Tentang/Sambutan

Izzo, M. F., Ciaburri, M., & Tiscini, R. (2020). The challenge of sustainable development goal reporting: The first evidence from Italian listed companies. *Sustainability, 12*(8), p. 3494. doi: 10.3390/su12083494.

Jackson, K., & Bazeley, P. (2019). *Qualitative data analysis with NVivo*. Sage.

Jayasooria, D. (2016). Sustainable Development Goals and Social Work: Opportunities and Challenges for Social Work Practice in Malaysia. *Journal of Human Rights and Social Work, 1*(1), pp. 19-29. doi:10.1007/s41134-016-0007-y.

Jepperson, R. L. (1991). Institutions, institutional effect and instituional effect. In W. Powel & P. DiMaggion (Eds.), *The new insitutionalisation in organisational analysis*. Chicago: University of Chicago Press.

Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature machine intelligence, 1*(9), pp. 389-399. doi:10.1038/s42256-019-0088-2.

Joseph, C., Gunawan, J., Sawani, Y., Rahmat, M., Noyem, J. A., & Darus, F. (2016). A comparative study of anti-corruption practice disclosure among Malaysian and Indonesian Corporate Social Responsibility (CSR) best practice companies.(Report). *Journal of Cleaner Production, 112*(*P4*), p. 2896. doi:10.1016/j.jclepro.2015.10.091 Retrieved from https://www.sciencedirect.com/science/article/pii/S095965261501563 2?via%3Dihub.

Joseph, C., Gunawan, J., Madi, N., Janggu, T., Rahmat, M., & Mohamed, N. (2019). Realising sustainable development goals via online integrity framework disclosure: Evidence from Malaysian and Indonesian local authorities.(Report). *Journal of Cleaner Production, 215,* p 112. doi:10.1016/j.jclepro.2019.01.057 Retrieved from

https://www.sciencedirect.com/science/article/pii/S095965261930068X?via%3Dihub.

Joseph, C., Pilcher, R., & Taplin, R. (2014). Malaysian local government internet sustainability reporting. *Pacific Accounting Review, 26*(1/2), pp.75-93. doi:10.1108/PAR-07-2013-0071.

Kassim, C. K. H. C. K., Ahmad, S., Nasir, N. E. M., Nazif, W. M., Nori, W. M., & Arifin, N. N. M. (2019). Environmental reporting by the Malaysian local governments. *Meditari Accountancy Research, 27*(4), pp. 633-651. doi:10.1108/MEDAR-02-2019-0444.

Kaur, A., & Lodhia, S. (2018). Stakeholder engagement in sustainability accounting and reporting. *Accounting, Auditing & Accountability Journal, 31*(1), pp. 338-368. doi:10.1108/aaaj-12-2014-1901.

Kaur, A., & Lodhia, S. (2019). Sustainability accounting, accountability and reporting in the public sector. *Meditari Accountancy Research, 27*(4), pp. 498-504. doi:10.1108/MEDAR-08-2019-510 Retrieved from https://find.library.unisa.edu.au/primo-explore/fulldisplay?vid=UNISA&search_scope=All_Resources&docid=UNISA_ALMA51178528200001831.

Kolk, A., Walhain, S., & Van de Wateringen, S. (2001). Environmental reporting by the Fortune Global 250: exploring the influence of nationality and sector. *Business strategy and the environment, 10*(1), pp. 15-28. doi:10.1002/1099-0836(200101/02)10:1<15::AID-BSE275>3.0.CO;2-Y.

KPMG. (2020). *The time has come: The KPMG survey of sustainability reporting*.

Krippendoroff, K. H. (2004). *Content analysis- an introducton to its methodology* (2 ed.) United States of America: Sage Publications.

Kuswantoro, H., Sholihin, M., & Djajadikerta, H. G. (2023). Exploring the implementation of sustainable development goals: a comparison between private and state-owned enterprises in Indonesia. *Environment, Development and Sustainability, 25(25),* pp. 10799–10819. doi: 10.1007/s10668-022-02505-1.

Kvale, S. (1996). *InterViews. An introduction to qualitative research interviewing*: Sage Publications Inc.

Laine, M., Tregidga, H., & Unerman, J. (2021). *Sustainability accounting and accountability*. Routledge.

Laskar, N., & Maji, S. (2017). Corporate Social Responsibility Performance and Firm Performance: A Cross Country Analysis from Asia. *IPE Journal of Management, 7*(*1),* pp. 138-148.

Lauwo, S. G., Azure, J. D.-C., & Hopper, T. (2022). Accountability and governance in

implementing the Sustainable Development Goals in a developing country context: evidence from Tanzania. *Accounting, Auditing & Accountability Journal, 35*(6), pp. 1431-1461. doi:10.1108/aaaj-10-2019-4220.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.

Lodhia, S. (2004). Environmental accounting for South Pacific Island nations: a possible mechanism for encouraging sustainable development by the corporate sector *Fijian Studies 2*(1). pp. 114-141. doi:10.3316/INFORMIT.708966905017272.

Lodhia, S. (2015). Exploring the transition to integrated reporting through a practice lens: an australian customer owned bank perspective. *Journal of Business Ethics, 129*(3), pp. 585-598. doi:10.1007/s10551-014-2194-8.

Lodhia, S. (2017). The development of carbon management as a strategic practice: an Australian study. *International Journal of Critical Accounting, 9*(5), pp. 481-493. doi:10.1504/IJCA.2017.090586.

Lodhia, S., & Sharma, U. (2019). Sustainability accounting and reporting: recent perspectives and an agenda for further research. *Pacific Accounting Review, 31*(3), pp. 309-312. doi:10.1108/par-02-2019-121.

Lodhia, S., Jacobs, K., & Park, Y. J. (2012). Driving Public Sector Environmental Reporting. *Public Management Review, 14*(5), pp. 631-647. doi:10.1080/14719037.2011.642565.

Lodhia, S., Kaur, A., & Kuruppu, S. (2022). The disclosure of sustainable development goals (SDGs) by the top 50 Australian companies: substantive or symbolic legitimation? *Meditari Accountancy Research*.31(6), pp.1578-1605. doi:10.1108/MEDAR-05-2021-1297.

Lodhia, S., Kaur, A., & Williams, B. (2020). Integrated reporting in the public sector. In D. Villers & W. Maroun (Eds.), *The routledge book of integrated reporting*. New York: Routledge.

Maas, K., Schaltegger, S., & Crutzen, N. (2016). Integrating corporate sustainability assessment, management accounting, control, and reporting. *Journal of Cleaner Production, 136*, pp. 237-248. doi:10.1016/j.jclepro.2016.05.008.

Maine, J., Florin Samuelsson, E., & Umans, T. (2020). Ambidextrous sustainability, organisational structure, and performance in hybrid organisations. In *Academy of Management Proceedings, 2020(*1), p. 11378. doi:10.5465/AMBPP.2020.11378abstract.

Marquis, C., & Qian, C. (2014). Corporate social responsibility reporting in China: symbol or substance? *Organization Science, 25*(1), pp. 127-148. doi:10.1287/orsc.2013.0837.

Menteri Perencanaan Pembangunan Nasional. (2018). *Peraturan Bappenas nomor 7/2018, tentang koordinasi, perencanaan, pemantauan, evaluasi, dan pelaporan pelaksanaan tujuan berkelanjutan/TPB/SDGs*. Jakarta: Kementerian Perencanaan Pembangunan

Nasional.

Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: formal structure as myth and ceremony. *American Journal of Sociology, 83*(2), pp. 340-363. doi:10.1086/226550.

Mhlanga, R., Gneiting, U., & Agarwal, N. (2018). *Walking the talk: Assessing companies' progress from SDG rhetoric to action*. Cowley, Oxford.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Sage.

Milne, M. J., & Adler, R. W. (1999). Exploring the reliability of social and environmental disclosures content analysis. *Accounting, Auditing & Accountability Journal, 12*(2), pp. 237-256. doi:10.1108/09513579910270138/full/html.

Ministry of National Development Planning. (2019). Dashboard SDGs Indonesia. Retrieved Date Accessed, 2020 from available at: https://sdgs.bappenas.go.id/dashboard/.

Ministry of National Development Planning. (2019). *Voluntary national reviews (VNR)* Jakarta: Bappenas. https://sustainabledevelopment.un.org/content/documents/23803INDONESIA_Final_Cetak_VNR_2019_Indonesia_Rev2.pdf.

Ministry of State-owned Enterprises (SOE) (2021). Social and environmental responsibility program of state-owned enterprises, Per-05/MBU/04. Jakarta: Kementerian BUMN.

Monkelbaan, J. (2019). *Governance for the Sustainable Development Goals exploring an integrative framework of theories, tools, and competencies* Switzerland: Springer. New York: Springer.

National Centre for Sustainability Reporting (NCSR). (2017). Winner of SRA 2017. Retrieved from https://www.ncsr-id.org/2018/04/16/winner-of-sra-2017/

National Centre for Sustainability Reporting (NCSR). (2019). List of Rating ASRRAT 2019. Retrieved from https://www.ncsr-id.org/2019/11/28/list-of-rating-asia-sustainability-reporting-rating-asrrat-2019/

Nicolò, G., Zanellato, G., & Tiron-Tudor, A. (2020). Integrated Reporting and European State-Owned Enterprises: A Disclosure Analysis Pre and Post 2014/95/EU. *Sustainability, 12*(5). P.1908.doi:10.3390/su12051908.

O'Dwyer, B. (2004). Qualitative data analysis: illuminating a process for transforming a 'messy'but 'attractive''nuisance'. In *The real-life guide to accounting research* (pp. 391-407). Elsevier. doi:10.1016/B978-008043972-3/50025-6.

Ordonez-Ponce, E., & Khare, A. (2021). GRI 300 as a measurement tool for the United Nations sustainable development goals: Assessing the impact of car makers on

sustainability. *Journal of Environmental Planning and Management, 64*(1), pp. 47-75. doi: 10.1080/09640568.2020.1746906.

Osborne, S. P. (2010). Delivering public services: time for a new theory? *Public Management Review, 12*(1), pp. 1-10. doi:10.1080/14719030903495232.

Otoritas Jasa Keuangan. (2014). Roadmap keuangan berkelanjutan 2015-2019. Jakarta: OJK.

Otoritas Jasa Keuangan. (2018). Pedoman teknis bagi bank terkait implementasi POJK nomor 51/POJK.03/2017 tentang penerapan keuangan berkelanjutan bagi lembaga keuangan, emiten dan perusahaan public. Jakarta: Departemen penelitian dan pengaturan perbankan OJK.

Otoritas Jasa Keuangan. (2020). Roadmap keuanngan berkelanjutan tahap II 2021-2025. Jakarta: OJK.

Paddison, L. (Producer). (2015, 20 March 2020). From VW to Brazil's mining disaster: 5 corporate scandals that defined 2015. *Reflections and predictions 2016. Guardian sustainable business*. Retrieved from https://www.theguardian.com/sustainable-business/2015/dec/30/vw-exxon-lobbying-brazil-mining-tragedy-toshiba-corporate-scandals-greenwashing-climate-change.

Palys, T., & Atchison, C. (2012). Qualitative research in the digital era: Obstacles and opportunities. *International Journal of Qualitative Methods*, *11*(4), p.352-367. doi:10.1177/160940691201100404

Parker, L. D., & Northcott, D. (2016). Qualitative generalising in accounting research: concepts and strategies. *Accounting, Auditing & Accountability Journal, 29*(6). pp.1100-1131.doi:10.1108/AAAJ-04-2015-2026.

Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice* California: Sage.

Peraturan Otoritas Jasa Keuangan nomor 51/POJK.03/2017 tentang penerapan keuangan berkelanjutan bagi lembaga keuangan, emiten dan perusahaan publik, OJK (2017).

Peraturan Pemerintah Indonesia: Tanggung jawab sosial dan lingkungan Perseroan Terbatas, 47, Ministry of Law and Human Rights Republic of Indonesia (2012).

Peraturan Pemerintah Indonesia, nomor 54 tahun 2017 tentang Badan Usaha Milik Daerah, Ministry of Law and Human Rights Republic of Indonesia (2017).

Peraturan Presiden Republik Indonesia, nomor 59 tahun 2017 tetang pelaksanaan pencapaian tujuan pembangunan berkelanjutan, 59, Ministry of Law and Human Rights of Republic Indonesia (2017).

Pham, A. T. (2022). Investigating Factors Affecting ESL Students in Translation in Higher Education. In *Proceedings of the 7th International Conference on Distance Education and Learning*, (pp. 273-278). doi:10.1145/3543321.3543366.

Poddar, A., Narula, S. A., & Zutshi, A. (2019). A study of corporate social responsibility practices of the top Bombay Stock Exchange 500 companies in India and their alignment with the Sustainable Development Goals. *Corporate Social Responsibility and Environmental Management, 26* (6), pp. 1184-1205. doi:10.1002/csr.1741.

Poole, M., & Folger J. P., (1981). A method for establishing the representational validity of interaction coding systems: do we see what they see?. *Human communication research*, *8* (1), pp.26-42. doi:10.1111/j.1468-2958.1981.tb00654.x.

Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review*.

PricewaterhouseCoopers. (2019). *Creating a strategy for a better world*.

Program Kemitraan Badan Usaha Milik Negara Dengan Usaha Kecil Dan Program Bina Lingkungan, 05, Ministry of Stated-Owned Enterprises Republic of Indonesia (2007).

Pucker, K. P. (2021). Sustainability reporting. We are confusing output with impact. *Harvard Business Review, 99* (3), pp.134-144.

Puroila, J., & Mäkelä, H. (2019). Matter of opinion. Exploring the socio-political nature of materiality disclosures in sustainability reporting *Accounting, Auditing & Accountability Journal, 32*(4), pp. 1043-1072. doi:10.1108/aaaj-11-2016-2788.

Qian, W., Tilt, C. A., & Belal, A. (2021). Social and environmental accounting in developing countries: contextual challenges and insights. *Accounting, Auditing & Accountability Journal, 34*(5), pp. 1021-1050. doi:10.1108/aaaj-03-2021-5172.

Qian, W., Tilt, C. A., Dissanayake, D., & Kuruppu, S. (2020). Motivations and impacts of sustainability reporting in the Indo-Pacific region: normative and instrumental stakeholder approaches. *Business Strategy and the Environment, 29*(8), pp. 3370-3384. doi:10.1002/bse.2577.

Rinaldi, L., Unerman, J., & Tilt, C. (2014). The role of stakeholder engagement and dialogue within the sustainability accounting and reporting process. In J. Bebbington, J. Unerman & B. O'Dwyer (Eds.), *Sustainability accounting and accountability* (2nd edition ed., pp. 86-107). London: Routledge.

Ringham, K., & Miles, S. (2018). The boundary of corporate social responsibility reporting: the case of the airline industry. *Journal of Sustainable Tourism*, *26*(7), pp.1043-1062. doi: 10.1080/09669582.2017.1423317.

Rosati, F., & Faria, L. G. D. (2019). Addressing the SDGs in sustainability reports: The relationship with institutional factors. *Journal of Cleaner Production, 215*, pp. 1312-1326. doi:10.1016/j.jclepro.2017.12.107.

Ruiz-Lozano, M., De Vicente-Lama, M., Tirado-Valencia, P., & Cordobes-Madueno, M. (2022). The disclosure of the materiality process in sustainability reporting by Spanish state-owned enterprises. *Accounting, Auditing & Accountability Journal*, *35*(2), pp.385-412. doi:10.1108/AAAJ-08-2018-3629/full/html

Sachs, J. D. (2012). From Millennium Development Goals to Sustainable Development Goals. *The Lancet, 379*(9832), pp. 2206-2211. doi:10.1016/s0140-6736(12)60685-0.

Safari, M., & Areeb, A. (2020, October). A qualitative analysis of GRI principles for defining sustainability report quality: an Australian case from the preparers' perspective. In *Accounting Forum, 44* (4), pp. 344-375. Routledge.

Said, R., Zainuddin, Y. H., & Haro, H. (2009). The relationship between corporate social responsibility disclosure and corporate governance characteristics in Malaysian public listed companies. *Social Responsibility Journal, 5*(2), pp. 212-226. doi:10.1108/17471110910964496.

Salmons, J., (2015). *Qualitative online interviews. Strategies, design and skills*. Sage Publications.

Sari, D. A., Margules, C., Lim, H. S., Sayer, J. A., Boedhihartono, A. K., Macgregor, C. J., . . . Poon, E. (2022). Performance Auditing to Assess the Implementation of the Sustainable Development Goals (SDGs) in Indonesia. *Sustainability, 14*(19), p.12772. doi:10.3390/su141912772.

Schaltegger, S., & Burritt, R. (2006). Corporate sustainability accounting a catchphrase for compliant corporations or a business decision support for sustainability leaders? *Sustainability Accounting and Reporting*, *21*, pp. 37-59. The Netherland: Springer.

Schaltegger, S., & Wagner, M. (2006). Managing sustainability performance measurement and reporting in an integrated manner. Sustainability accounting as the link between the sustainability balanced scorecard and sustainability reporting. In S. Schaltegger, M. Bennett & R. Burritt (Eds.), *Sustainability Accounting and Reporting*, *21*. Dordrecht The Netherlands.Springer.

Schaltegger, S., & Wagner, M. (2017). *Managing the business case for sustainability - the integration of social, environmental and economic performance* New York: Routledge.

Schaltegger, S., Bennett, M., & Burritt, R. (2006). Sustainability accounting and reporting: development, linkages and reflection - an Introduction In S. Schaltegger, M. Bennett & R. Burritt (Eds.), *Sustainability Accounting and Reporting*, *21*. Dordrecht, The Netherlands.

Schatzki, T. R. (1997). Practices and actions a Wittgensteinian critique of Bourdieu and Giddens. *Philosophy of the Social Sciences, 27*(3), pp. 283-308. doi:10.1177/004839319702700301.

Schatzki, T. (2001). Introduction: practice theory. *The practice turn in contemporary theory.* London: Routledge.

Schatzki, T. R. (2002). *The site of the social: A philosophical account of the constitution of social life and change*. Penn State University Press.

Schatzki, T. R. (2005). Peripheral vision: the sites of organizations. *Organization Studies, 26*(3), pp. 465-484. doi:10.1177/0170840605050876.

Schatzki, T. R. (2006). On organizations as they happen. *Organization Studies, 27*(12), pp. 1863-1873. doi:10.1177/0170840606071942.

Schatzki, T. (2016). Practice theory as flat ontology. Practice theory and research: Exploring the dynamics of social life, 28-42.

Schatzki, T. (2016). Sayings, texts and discursive formations. In *The nexus of practices* (pp. 138-152). Routledge.

Schmidt, R. (2016). Reflexive knowledge in practices. In *The Nexus of Practices* (pp. 153-166). Routledge.

Sciulli, N. (2009). Sustainability reporting by local councils in coastal regions: an Australian study. *Asian Journal of Finance & Accounting 1*(1), pp. 76-86.

Scott, W. R. (1987). Institutional Theory W. Richard Scott. *Administrative Science Quarterly, 32*, pp.493-511.

Scott, W. R. (2013). *Institutions and organizations: Ideas, interests, and identities*. Sage publications.

Silva, S. (2021). Corporate contributions to the Sustainable Development Goals: An empirical analysis informed by legitimacy theory. *Journal of Cleaner Production, 292*, p.125962. doi:10.1016/j.jclepro.2021.125962.

Silverman, D. (2013). *Doing qualitative research* (4 ed.) London: Sage.

Sobkowiak, M., Cuckston, T., & Thomson, I. (2020). Framing sustainable development challenges: accounting for SDG-15 in the UK. *Accounting, Auditing & Accountability Journal, 33*(7), pp. 1671-1703. doi:10.1108/aaaj-01-2019-3810.

Stafford-Smith, M., Griggs, D., Gaffney, O., Ullah, F., Reyers, B., Kanie, N., . . . O'Connell, D. (2017). Integration: the key to implementing the Sustainable Development Goals. *Sustain Sci, 12*(6), pp. 911-919. doi:10.1007/s11625-016-0383-3 Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/30147763.

Stake, R. E. (1995). *The art of case study research*. Sage.

Statistics Indonesia. (2020). *Financial statistics of state-owned enterprises and regional-owned enterprises*. Indonesia.

Stevens, C., & Kanie, N. (2016). The transformative potential of the Sustainable Development Goals (SDGs). *International Environmental Agreements: Politics, Law and Economics, 16*(3), pp. 393-396. doi:10.1007/s10784-016-9324-y.

Sukoharsono, E. G. (2009). Analysis of Sustainable Development 2008 report of PT Holcim indonesia Tbk Based on Indicator Protocols of Global Reporting Initiative and Key Performance Indicators of Cement Sustainability Initiative. *The International Journal of Accounting and Business Society*, *17*(1), pp.1-33.

Sutopo, B., Kot, S., Adiati, A. K., & Ardila, L. N. (2018). Sustainability Reporting and value relevance of financial statements. *Sustainability*, *10*(3), p.678.

Sutrisno, A., Nguyen, N. T., & Tangen, D. (2014). Incorporating translation in qualitative studies: Two case studies in education. *International Journal of Qualitative Studies in Education*, *27*(10), pp.1337-1353.

Subramaniam, N., Akbar, S., Situ, H., Ji, S., & Parikh, N. (2023). Sustainable development goal reporting: Contrasting effects of institutional and organisational factors. *Journal of Cleaner Production, 411*. p.137339. doi:10.1016/j.jclepro.2023.137339.

Tauringana, V. (2020). Sustainability reporting challenges in developing countries: towards management perceptions research evidence-based practices. *Journal of Accounting in Emerging Economies, 11*(2), pp. 194-215. doi:10.1108/jaee-01-2020-0007.

Tellis, W. (1997). Introduction to case study. *The qualitative report*, *3*(2), pp.1-14.

Temple, B., & Young, A. (2004). Qualitative research and translation dilemmas. *Qualitative research*, *4*(2), pp.161-178. doi:10.1177/1468794104044.

Tetteh, L. A., Agyenim-Boateng, C., & Simpson, S. N. Y. (2024). Institutional pressures and accountability processes in pursuit of sustainable development goals: Insights from Ghanaian indigenous oil companies. *Corporate Social Responsibility and Environmental Management*, *31*(1), pp.89-107. doi:10.1002/csr.2554.

Thijssens, T., Bollen, L., & Hassink, H. (2016). Managing sustainability reporting: many ways to publish exemplary reports. *Journal of Cleaner Production, 136*, pp. 86-101. doi:10.1016/j.jclepro.2016.01.098.

Tilley, S. A. (2003). "Challenging" research practices: Turning a critical lens on the work of transcription. *Qualitative inquiry*, *9*(5), pp.750-773. doi:10.1177/10778004032552.

Tilt, C. A. (2016). Corporate social responsibility research: the importance of context. *International Journal of Corporate Social Responsibility 1*(2). Pp.1-9. doi:10.1186/s40991-016-0003-7.

Tilt, C. A. (2018). Making social and environmental accounting research relevant in developing countries: a matter of context? *Social and Environmental Accountability Journal, 38,* pp. 145-150. doi:10.1080/0969160X.2017.1489296.

Tilt, C. A., Qian, W., Kuruppu, S., & Dissanayake, D. (2020). The state of business sustainability reporting in sub-Saharan Africa: an agenda for policy and practice. *Sustainability Accounting, Management and Policy Journal, 12*(2), pp. 267-296. doi:10.1108/SAMPJ-06-2019-0248.

Tjahjadi, B., Soewarno, N., & Mustikaningtiyas, F. (2021). Good corporate governance and corporate sustainability performance in Indonesia: a triple bottom line approach. *Heliyon*, *7*(3)doi:10.1016/j.heliyon.2021.e06453.

Tobin, G. A., & Begley, C. M. (2004). Methodological rigour within a qualitative framework. *Journal of advanced nursing*, *48*(4), pp.388-396. doi:10.1111/j.1365-2648.2004.03207.x.

Undang-Undang Republik Indonesia, Nomor 22 tahun 2001 tentang minyak dan gas bumi, 22, Ministry of Secretary of Republic Indonesia (2001).

Undang-Undang Republik Indonesia, nomor 32 tahun 2009 tentang perlindungan dan pengelolaan lingkungan hidup, 32, Ministry of Law and Human Rights of Republic Indonesia (2009).

United Nations Development Programme. (2019). *The-Sustainable-Development-Goals-Report-2019.*

United Nations Conference on Trade and Development. (2023) *Review of practical implementation of and recent developments in sustainability reporting requirements*. Paper presented at the Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting, Abu Dhabi.

United Nations Department of Economic and Social Affairs. (2019). *The Sustainable Development Goals report 2019*. New York, NY.

United Nations Development Programme. (2014). *Governance for Sustainable Development Integrating: governance in the Post-2015 Development Framework*. New York, USA.

United Nations Development Programme. (2020). *Human Development Report 2020: the next frontier-human development and the Anthropocene*. New York, USA.

United Nations. (2015). *The Millennium Development Goals Report*. New York, USA.

Utama, S. (2011). An evaluation of support infrastructures for corporate responsibility reporting in Indonesia. *Asian Business & Management, 10*(3), pp. 405-424. doi:10.1057/abm.2011.10.

Vaio, A. D., & Varriale, L. (2020). SDGs and airport sustainable performance: evidence from

Italy on organisational, accounting and reporting practices through financial and non-financial disclosure. *Journal of Cleaner Production, 249.* p.119431. doi:10.1016/j.jclepro.2018.119431.

van Der Waal, J. W. H., & Thijssens, T. (2020). Corporate involvement in Sustainable Development Goals: exploring the territory. *Journal of Cleaner Production, 252*.p.119625. doi:10.1016/j.jclepro.2018.119625.

Watson, M. (2016). Placing power in practice theory. In A. Hui, T. R. Schatzki & E. Shove (Eds.), *The nexus of practices*. Oxon: Routledge.

Weber, R. (1990). *Basic content analysis* Iowa City: Sage Publications.

Whittington, R. (2006). Completing the practice turn in strategy research. *Organization Studies, 27*(5), pp. 613-634. doi:10.1177/0170840606064101.

World Business Council for Sustainable Development. (2018). *Business and the SDGs: a survey of WBCSD members and Global Network partners.*

Worldbank. (1992). *Governance and development*. Washington DC.

Worldbank. (2020). Having maintained political stability, Indonesia is one of East Asia Pacific's most vibrant democracies, emerging as a confident middle-income country. Retrieved Date from https://www.worldbank.org/en/country/indonesia/overview.

Wu, Y., Schuster, M., Chen, Z., Le, Q. V., Norouzi, M., Macherey, W., ... & Dean, J. (2016). Google's neural machine translation system: Bridging the gap between human and machine translation. *arXiv preprint arXiv:1609.08144*.

Xiao, H. (2006). Corporate environmental accounting and reporting in China: Current status and the future. In S. Schaltegger, M. Bennett & R. Burritt (Eds.), *Sustainability Accounting and Reporting* (Vol. 21, pp. 457-471). Netherland: Springer.

Xue, L., Weng, L., & Yu, H. (2018). Addressing policy challenges in implementing Sustainable Development Goals through an adaptive governance approach: A view from transitional China. *Sustainable Development, 26*(2), pp. 150-158. doi:10.1002/sd.1726.

Yin, R. K. (2002). *Case study research: Design and method* (3 ed.) California: Sage Publications.

Yin, R. K. (2018). *Case study research and applications. Design and methods* (6 ed.) London: Sage.

Zeghal, D., & Ahmed, S. A. (1990). Comparison of social responsibility information disclosure media used by Canadian Firm. *Accounting, Auditing & Accountability Journal*, pp. 38-53. doi: 0.1108/09513579010136343.

Zhao, N., & Patten, D. M. (2016). An exploratory analysis of managerial perceptions of social

and environmental reporting in China: evidence from state-owned enterprises in Beijing. *Sustainability Accounting, Management and Policy Journal, 7* (1), pp. 80-98. doi:10.1108/SAMPJ-10-2014-0063.

Zyznarska-Dworczak, B. (2020). Sustainability Accounting—Cognitive and Conceptual Approach. *Sustainability, 12*(23), p.9936. doi:10.3390/su12239936.

Appendices

Appendix A – Example of invitation letter for participant

Adelaide, 12/10/2022
Perihal : Mohon kesediaan untuk diwawancarai
Best practices [ROE C] in embedding SDGs into business operation
Lampiran: 1 Paket

Yth.
Vice President Corporate Secretary
[ROE C]

Perkenalkan nama saya, Moni Muskanan, mahasiswa *Ph.D in Accounting* di University of South Australia. Saya sedang melakukan penelitian S-3 saya terkait *Embedding SDGs into business operation Case Study: ROE-ROE di Indonesia*.

Topik penelitian saya terkait dengan bagaimana ROE-ROE di Indonesia mengintegrasikan SDGs dalam bisnis operasi mereka. Saya sudah mengumpulkan dan menganalisa SDGs-related practice disclosures dalam *Annual/Sustainability Reports* dari ROE-ROE di Indonesia. Dari hasil assessment pada tahap awal, saya menemukan bahwa [ROE C] telah melakukan *best practices* dalam mengintegrasikan SDGs dalam bisnis operasinya.

Saya menuliskan surat ini untuk memohon kiranya kesediaan [ROE C] untuk bersedia diwawancarai terkait keberhasilan dalam mengintegrasikan SDGs pada aktivitas usaha PT Jakpro. Secara spesifik, topik wawancaranya terkait dengan *best practices* yang sudah dilakukan [ROE C] dalam mengintegrasikan SDGs dalam bisnis operasi, yaitu dari tahapan perencanaan, implementasi dan pelaporan. Topik lainnya terkait dengan tantangan-tantangan yang dihadapi dan faktor-faktor yang memotivasi [ROE C] untuk mengintegrasikan SDGs dalam aktivitas operasi perusahaan.

Besar harapan saya untuk boleh mewawancarai Ibu Nadia selaku *the vice president-corporate secretary* dan pihak terkait lainnya, misalkan pengelola CSR program dibawah kewenangan Ibu, yang telah berkontribusi atas capaian ini. Hasil wawancara ini akan berkontribusi dalam menghasilkan model terbaik yang dianalisa dari *best practices* yang sudah dilakukan oleh [ROE C]. Model ini akan dipublikasikan di jurnal internasional agar dapat dijadikan contoh oleh ROE lainnya dalam proses mengintegrasikan SDGs dalam bisnis operasi mereka untuk berkontribusi pada pencapain SDGs nasional.

Sebelumnya saya ucapkan terimakasih atas kerjasama dan bantuan Ibu Nadia.

Hormat Saya,

Moni Wehelmina Muskanan
PhD Candidate, UniSA Business, University of South Australia
Way Lee Building| WL 2-43| City West Campus
Adelaide SA 5000, Australia

Appendix B – Participant information sheet

Participant Information Sheet

Title	Sustainability Accounting and Reporting (SAR) practices in achieving the Sustainable Development Goals (SDGs) *A case study on Regional-Owned Enterprises (ROEs) in Indonesia*
Researcher	Moni Wehelmina Muskanan
Supervisors	Professor Carol Tilt, Dr Kathy Rao, Dr Rob Whait.

Introduction

The SDGs aim to address social issues, protect the environment, and create economic prosperity that to achieve these goals requires collaborative work among governments, corporations, and civil society. One of the essential tools than can be used by the organisations to manage their sustainable activities is sustainability accounting and reporting (SAR). It enables the organisation to manage their sustainability activities and report their SDGs performance to present their SDGs contributions to their stakeholders. Private sector organisations have utilized SAR in managing and reporting SDGs, yet there is limited evidence that show how SAR is utilized by PSOs in managing and reporting their SDGs at the organisational level. In fact, compared to their private sector counterparts, public sector organisations (PSOs) have stronger motivations to transform and lead society to achieve SDGs.

What is the purpose of this research?

This research aims to explore how and why Indonesian regional-owned enterprises (ROEs) utilize SAR to practically integrate SDGs into their policies and actions, and to disclose them in their sustainability reports in a way that shows their contribution to the nation's SDGs. It also investigates the drivers and the challenges faced by the ROEs in the development process.

What does participation in this research involve?

You are offered to participate in a semi-structured interview. Due to covid-19 restrictions, you will be interviewed through zoom platform. I will provide you an interview guide (please see the attachment) that consists of some open-ended questions to introduce the general questions that we will discuss in the interview. I will send you the zoom invitation link before the interview takes place.

Before starting the interview, you will be asked a permission to record and transcribe the conversation. Subsequently, I will send you the transcripts and the summary of the interview as a part of verification process. Finally, when I have finished this research project, I will email you the research findings.

What are the possible benefits of taking part?

Your participation will be beneficial to attain this research's aims. This research will investigate and analyse your shared information related to your practical understanding and implementation of SAR development practices at your organisations. The results of this investigation, your SAR development practices, the drivers and the challenges can be learned and applied by other organisations to improve their existing SAR development practices.

What are the possible risks and disadvantages of taking part?

There are no foreseeable risks and disadvantages of taking part in this project. Your identity including your organisation's identity and any given information in the interview will remain anonymous in all stages of this research and related publications. All the collected and analysed data will be password protected and securely stored in the University of South Australia (UniSA) research data storage. However, if the topics discussed trigger mental or emotional discomfort, you could contact the research team or the UniSA Business Negligible Risk Committee of the University of South Australia (the contact details are provided below).

Do I have to take part in this research project?

Participation in any form of this research project is voluntary. If you do not wish to take part, you do not have to. If you decide that you can take part and later change your mind, you are free to withdraw at any stage from this project and you do not need to provide any reason. However, you need to notify the researcher before withdrawal. Once you leave the research project, I will not collect additional personal information from you. With your permission any personal information already collected will be retained to provide additional inputs to the findings of this research project

What will happen to the information about me?

Your anonymity and confidentiality will be maintained in all stages of this research and related publications. I will set up a code (e.g., staff no. 1 from company 1, staff no. 2 from company 1) in each document including transcripts, data analysis files, research report and publications. Thus, your identity and your organisation's identity will remain confidential. Moreover, all information that may could identify you will be removed. All collected recordings and documents, interview transcripts, analysed data, and the report will be stored in the University of South Australia secure cloud and physical storage. All the electronic files and paper documents will be disposed automatically after a period of five years as per the university policy.

What if something goes wrong?

You will get a notification if something goes wrong. Alternatively, if you have any questions, comments, concerns or queries, please contact the UniSA Business Negligible Risk Committee of the University of South Australia at BIS-Research@unisa.edu.au.

What happens when the research project ends?

At the end of the final stage, this research project will be transformed into a thesis submitted for my PhD degree and developed into journal publications. In addition, a summary of the research findings will be sent to your email.

Who is organising and funding the research?

There is no funding for this project.

Who has reviewed the research project?

Before starting this project, the UniSA Business Negligible Risk Committee of the University of South Australia has reviewed and approved the ethical aspects of this research. This stage is mandatory as required by the Australian government specified in the National Statement on Ethical Conduct in Human Research (2007 - updated 2018). It aims to protect the interests of people including the participants who participate in this type of human research project.

Further information and who to contact

You may contact the research contact person below if you require further information related to this research project or any concerns relevant to your involvement in this project.

Research contact person

Name	Moni Wehelmina Muskanan
Position	Doctoral student, UniSA Business School
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Name	Dr. Kathy Rao
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Name	Dr. Rob Whait
Position	Senior Lecturer (Accounting), UniSA Business
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Email	Rob.Whait@unisa.edu.au

If you have any queries related to ethical concerns, such as your rights as a participant, you may contact the UniSA Business Negligible Risk Committee of the University of South Australia at BIS-Research@unisa.edu.au.

Appendix C – Example of participant consent form

NEGLIGIBLE RISK RESEARCH CONSENT FORM

Full Project title **:** Sustainability Accounting and Reporting (SAR) practices in achieving the Sustainable Development Goals (SDGs) - A case study on Regional-Owned Enterprises (ROEs) in Indonesia

Date **:** 02/04/2021

Researchers' names **:** Moni Wehelmina Muskanan, Prof. Carol Tilt, Dr Kathy Rao and Dr Rob Whait

Contact details

Email **:** moni_wehelmina.muskanan@mymail.unisa.edu.au,

Carol.Tilt@unisa.edu.au

Kathy.Rao@unisa.edu.au

Rob.Whait @unisa.edu.au

Telephone **:** +61433612817

In signing this form, I confirm that:

- I have read the Participant Information Sheet and the nature and purpose of the research project has been explained to me. I understand and agree to take part.
- I understand the purpose of the research project and my involvement in it.
- I understand that I may withdraw from the research project at any stage and that this will not affect my status now or in the future.
- I understand that I will be audio recorded during the interview. I may request that the recording be paused at any stage during the interview" to the consent form
- I understand that while information gained during the study may be published, I will not be identified, and my personal results will remain confidential.
- I understand that the data collected will be stored securely at the University of South Australia for a period of seven years and destroyed in accordance with the UniSA "Ownership and Data

Retention Policy" and the "Australian Code for the Responsible Conduct of Research". Digital files will be password protected and accessible only by researchers and staff involved in the project.

- If you have any ethical concerns about the project or questions about your rights as a participant, please contact the UniSA Business Negligible Risk Committee of the University of South Australia at BIS-Research@unisa.edu.au

Name of participant: […]

Community Development Manager – CSR Department

[ROE A]

Signed: ……. **Date 05/09/2022**

I have provided information about the research to the research participants and believe that he/she/they understand what is involved.

Name of Researcher: Moni W. Muskanan, Professor Carol Tilt, Dr Kathy Rao and Dr Rob Whait

Signed [redacted] **Date**: 05/09/2022

This study has been approved by the University of South Australia's UniSA Business Negligible Research Ethics Committee. **The Approval Number is 029-2021.**

Appendix D – List of questions in Bahasa Indonesia

Wawancara ini bersifat semi-formal. Pertanyaan-pertanyaan berikut hanya merupakan panduan. Pertanyaan-pertanyaan ini akan disesuaikan dengan kondisi yang relevan pada perusahaan bapak/ibu dan juga bidang kerja bapak/ibu. Wawancara akan berlangsung sekitar 10-15 menit.

Wawancara dapat dilaksanakan dengan dua pendekatan: 1). Melalui telepon; 2). Melalui zoom.

Saya akan menelpon bapak/ibu *at your convenient time.* Untuk zoom meeting, saya akan menyiapkan zoom linknya. Mohon dikonfirmasi pilihan pendekatan wawancara yang nyaman untuk Bapak/Ibu. Dengan senang hati, saya akan menyesuaikan dengan pilihan bapak/ibu.

Daftar Pertanyaan:

Pimpinan yang bertanggung jawab dalam SDG related activities:

1. Kebijakan-kebijakan apa yang sudah dibangun dalam merencanakan proses integrasi SDGs dalam bisnis operasi perusahaan?
2. Kebijakan-kebijakan apa terkait dengan pengimplementasian program dan aktivitas sehubungan dengan SDGs sesuai dengan yang telah direncanakan?
3. Kebijakan-kebijakan apa terkait dengan srategi operasional perusahaan untuk mengukur capaian dari aktivitas dari program dan aktivitas yang sudah direncanakan dan diimplementasikan?
4. Bagaimana perusahaan melaporkan capaian dari program dan aktivitas kepada stakeholder?
5. Faktor-faktor apa saja yang memotivasi perusahaan untuk mengintegrasikan SDGs dalam bisnis operasi?
6. Tantangan-tantangan apa saja yang perusahaan hadapi dalam mengintegrasikan SDGs dalam bisnis operasi?
7. Apakah ada isu-isu lain yang ingin Bapak/Ibu tambahkan terkait proses mengintegrasikan SDGs dalam bisnis operasi dari sisi kebijakan manajerial perusahaan?

Bagian Staf operasional pada divisi perencanaan, akuntansi dan pelaporan

(*Akan ditanyakan sesuai dengan bidang kerja bapak/ibu).*

1. Apa tanggungjawab Bapak/Ibu terkait mengintegrasikan SDGs dalam bisnis operasi pada tahap perencanaan/akuntansi/pelaporan?
2. Langkah-langkah apa yang bapak/ibu sudah lakukan dalam proses perencanaan/implementasi program dan aktivitas / pelaporan kinerja terkait dengan mengintegrasikan SDGs dalam bisnis operasi perusahaan?
3. Apa saja metode atau system yang bapak/ibu gunakan untuk merencanakan/mengimplementasikan /mengukur capaian pelaksanaan program dan aktivitas terkait SDGs?
4. Metode atau pendekatan yang bapak/ibu laksanakan untuk mengkomunikasikan program, aktivitas dan capaiannya kepada stakeholders?
5. Apa saja motivasi bapak/ibu untuk mendukung perusahaan untuk mengintegrasikan SDGs dalam bisnis operasi perusahaan?
6. Apa saja tantangan-tantangan pada bidang kerja bapak/ibu terkait dalam mengintegrasikan SDGs dalam bisnis operasi perusahaan?
7. Apakah ada isu-isu lain yang ingin Bapak/Ibu tambahkan terkait proses mengintegrasikan SDGs dalam bisnis operasi perusahaan Bapak/Ibu?

Appendix E– List of eligible 24 ROEs in Stage 1.

ROEs[5]	Categorised Industries
ROE 1	Financial and insurance activities
ROE 2	Financial and insurance activities
ROE 3	Financial and insurance activities
ROE 4	Financial and insurance activities
ROE 5	Financial and insurance activities
ROE 6	Financial and insurance activities
ROE 7	Financial and insurance activities
ROE 8	Financial and insurance activities
ROE 9	Financial and insurance activities
ROE 10	Financial and insurance activities
ROE 11	Financial and insurance activities
ROE 12	Financial and insurance activities
ROE 13	Financial and insurance activities
ROE 14	Financial and insurance activities
ROE 15	Financial and insurance activities
ROE 16	Financial and insurance activities
ROE 17	Financial and insurance activities
ROE 18	Financial and insurance activities
ROE 19	Construction
ROE 20	Real estate activities
ROE 21	Real estate activities
ROE 22	Water supply, sewerage, waste management, and remediation activities
ROE 23	Accommodation and food service activities; information and communication
ROE 24	Construction

[5] The names of the ROEs are restricted from disclosure to ensure confidentiality and data protection.