



**SUSTAINABILITY REPORTING
IN PUBLIC SECTOR AND THE
ROLE OF SAIS**

INTOSAI WGEA 2023-2025

SAI Thailand and SAI Indonesia

INTOSAI WGEA 2023-2025: Sustainability Reporting Project

Co-leaders: SAI Thailand and SAI Indonesia

CONTENTS

ABBREVIATIONS.....	2
EXECUTIVE SUMMARY	3
CHAPTER 1 Introduction	4
1.1 Purpose of This Paper	4
1.2 Project Scope and Methodology	6
CHAPTER 2 Sustainability Reporting in Public Sector	8
2.1 Concept of Public Sector Sustainability Reporting	8
2.2 Scope of Public Sector Sustainability Reporting	9
2.3 Importance and Benefits of Public Sector Sustainability Reporting	10
2.4 Relevant Actors and Their Roles	13
CHAPTER 3: Global Standards and Frameworks for Sustainability Reporting	17
3.1 Differences Between Public and Private Sectors	17
3.2 Current Standards for Sustainability Reports Related to Public Sector	18
CHAPTER 4 Analysis of the Survey Results	24
4.1 Current Practices of Sustainability Reporting Implementation in Public Sector	24
4.2 Perspective Regarding Implementation of Sustainability Reporting in Public Sector	28
4.3 Key Challenges in Public Sector Sustainability Reporting	31
4.4 Role of SAI in Public Sector Sustainability Reporting	33
CHAPTER 5: Sustainability Reporting by SAIs	37
5.1 Why SAIs should take the lead in sustainability reporting	37
5.2 How to Conduct Sustainability Reporting	40
5.3 Checklist Before Starting Sustainability Reporting: Pre-Reporting Checklist for SAIs	42
5.4 Components of Sustainability Reporting for SAIs	44
CHAPTER 6: The Role of SAI in Sustainability Reporting Assurance	47
6.1 Why SAIs Should Provide Assurance for Sustainability Reports of Public Sector Entities	47
6.2 How to Conduct the Assurance of Sustainability Reporting: The Steps	49
6.3 Checklist for Conducting Assurance on Sustainability Reports	51
6.4 Template for Reporting Findings from Sustainability Report Assurance	52
CONCLUSION AND POLICY RECOMMENDATIONS	58
REFERENCES	62

ABBREVIATIONS

ACCA	: The Association of Chartered Certified Accountants
CDP	: The Carbon Disclosure Project
CIPFA	: The Chartered Institute of Public Finance and Accountancy
CSRD	: The Corporate Sustainability Reporting Directive
CSRA	: Certified Sustainability Reporting Assurer
ESG	: Environmental, Social, and Governance
EU	: European Union
FCA	: Financial Conduct Authority
GFANZ	: Glasgow Financial Alliance for Net Zero
GRI	: Global Reporting Initiative
HMT	: His Majesty's Treasury
IFRS	: International Financial Reporting Standards
IIRC	: International Integrated Reporting Council
INTOSAI	: The International Organization of Supreme Audit Institutions
IPSASB	: The International Public Sector Accounting Standards Board
ISSB	: The International Sustainability Standards Board
ITA	: Integrity and Transparency Assessment
LLP	: Limited Liability Partnerships
NACC	: The National Anti-Corruption Commission
SAI	: Supreme Audit Institution
SASB	: Sustainability Accounting Standards Board
SDGs	: Sustainable Development Goals
SECP	: Securities and Exchange Commission of Pakistan
SECR	: Streamlined Energy and Carbon Reporting
SET	: Stock Exchange of Thailand
TCFD	: Task Force on Climate-related Financial Disclosures
TDRI	: Thailand Development Research Institute
TPT	: Transition Plan Taskforce
WGEA	: Working Group on Environmental Auditing
XRB	: External Reporting Board

EXECUTIVE SUMMARY

This paper examines the role of sustainability reporting within the public sector, highlighting its significance in fostering transparency and accountability. The analysis begins with an explanation of sustainability reporting in public sector, focusing particularly on the role of Supreme Audit Institutions (SAIs). The paper then moves into a detailed discussion of sustainability reporting in the public sector and outlining the roles of various actors involved in the process.

Subsequent chapters of the paper provide a comparative analysis of global standards and frameworks for sustainability reporting, particularly differentiating between public and private sector practices. It also presents survey results to offer insights into current implementation practices, challenges, and perspectives within the public sector. The leadership role of SAIs is further examined, with a focus on how they can effectively conduct sustainability reporting and provide assurance for public sector sustainability reports. The paper concludes with policy recommendations, advocating for stronger frameworks, capacity building, and international collaboration to enhance the overall impact of sustainability reporting in the public sector.

CHAPTER 1 Introduction

Sustainability reporting refers to the process through which organizations disclose information about their environmental, social, and governance (ESG) performance and impact. It involves measuring, tracking, and communicating sustainability-related efforts, goals, and progress to stakeholders, including investors, consumers, and the general public. In recent years, sustainability reporting has gained significant traction. Businesses across industries have increasingly adopted sustainability reporting practices to disclose their environmental, social, and governance (ESG) performance. Driven by investor demands, regulatory requirements, and consumer expectations, companies recognize that integrating sustainability into their reporting frameworks enhances corporate accountability and long-term value creation. This trend has influenced the public sector, where governments and institutions are now embracing similar transparency measures to demonstrate their commitment to sustainability.

In recent years, the importance of sustainability reporting within the public sector has been underscored by a confluence of factors. One of the primary drivers is the escalating awareness of global environmental challenges, such as climate change, biodiversity loss, and resource depletion. Governments worldwide are increasingly recognizing their role in addressing these pressing issues and are turning to sustainability reporting as a means to track and communicate their efforts towards environmental stewardship and mitigation of negative impacts. Citizens, civil society organizations, and other stakeholders are demanding greater transparency and disclosure regarding the social and environmental consequences of governmental policies and activities. Sustainability reporting serves as a mechanism to meet these expectations.

Furthermore, as governments grapple with fiscal challenges and seek to ensure the effective allocation of resources, understanding and managing environmental and social risks becomes integral to sound financial management. Sustainability reporting provides a framework for assessing and disclosing these risks, enabling governments to make informed decisions that safeguard both financial stability and the well-being of current and future generations.

1.1 Purpose of This Paper

- **Current State of Public Sector Sustainability Reporting**

The key purpose of this paper is to provide a comprehensive understanding of the significance and current state of sustainability reporting. It will explore the various frameworks, standards, and practices that underpin sustainability reporting in the public sector, offering insights into the key trends, developments, and challenges shaping this domain.

- **Role of SAIs in Sustainability Reporting in the Public Sector**

SAIs contribute significantly to enhancing the credibility and reliability of sustainability information by assuring sustainability disclosures (INTOSAI WGEA, 2013). SAIs play a key role in driving developments in sustainability reporting practices within the public sector

(Johannesburg Accords, 2011). SAIs also identify weaknesses and deficiencies in reporting processes, governance structures, and data quality, prompting governments to implement corrective measures and enhance their reporting capabilities.

By highlighting both the opportunities and challenges associated with this role, this paper seeks to underscore the importance of SAIs in advancing sustainability objectives within governmental organizations and fostering greater trust and confidence among stakeholders.

- **Challenges Faced by the Public Sector and SAIs Regarding Sustainability Reporting Preparation and Assurance**

One of the primary challenges for public sector entities is the **limited resources** hindering their ability to invest in the necessary infrastructure, tools, and expertise required for robust sustainability reporting.

Furthermore, many governmental organizations lack the specialized knowledge and skills required to collect, analyse, and report sustainability data effectively.

Moreover, **the complexity of data collection and measurement** presents a challenge for public sector entities engaged in sustainability reporting. Unlike financial data, which can be relatively standardized and easily quantifiable, sustainability indicators often encompass a wide range of qualitative and quantitative metrics across environmental, social, and economic dimensions.

Additionally, **the absence of standardized reporting frameworks tailored to the public sector context** complicates sustainability reporting efforts. While various international frameworks and standards exist for sustainability reporting in the private sector, few are specifically designed to accommodate the unique characteristics and challenges of governmental organizations. This lack of tailored guidance may lead to inconsistencies and discrepancies in reporting practices across different governmental entities.

Similarly, SAIs encounter their own set of challenges in auditing sustainability information within the public sector. **The lack of specific audit methodologies tailored to audit related to sustainability reporting** poses a challenge, as existing audit frameworks may not adequately address the risks and complexities associated with sustainability reporting. Moreover, SAIs may face challenges in accessing reliable data from governmental entities, particularly in cases where data collection processes are fragmented or poorly documented.

Furthermore, ensuring **the availability of audit professionals with specialized skills in sustainability-related matters** presents a considerable challenge for SAIs. Given the interdisciplinary nature of sustainability reporting, auditors require a diverse skill set encompassing knowledge of environmental science, social dynamics, economic principles, and governance frameworks.

By examining these challenges, this paper seeks to provide valuable insights into the barriers impeding progress in public sector sustainability reporting and the strategies for overcoming them. Through a thorough understanding of these challenges, governmental entities and SAIs can develop initiatives to enhance the effectiveness and credibility of sustainability reporting practices within the public sector.

- **Additional Objectives**

The additional objectives include exploring the potential benefits of sustainability reporting for governmental organizations, examining the role of stakeholders in driving sustainability initiatives within the public sector, and evaluating emerging trends and best practices in the field of sustainability reporting within the public sector.

1.2 Project Methodology



Survey to SAIs

The survey aimed to gather insights into the current practices, challenges, and opportunities related to sustainability reporting within the public sector.

Literature Review

A literature review was conducted to contextualize the study within the existing body of knowledge on sustainability reporting and SAIs' role therein. The review encompassed academic journals, government reports, policy documents, and industry publications related to sustainability reporting practices, governmental auditing standards, y.

Consultation with Experts

consultations were held with experts in the fields of sustainability reporting, governmental auditing, and public sector governance. Experts were identified based on their academic credentials, professional experience, and involvement in relevant research or policy initiatives. Consultations were conducted through interviews and focus group discussions

The experts were:

1. Khalid Hamid, International Director, CIPFA
2. Asst. Prof. Chol Bunnag, Director of SDG Move, under the Faculty of Economics, Thammasat University
3. Dr. Charika Channuntapipat, Research Fellow, Thailand Development Research Institute (TDRI), Specialization: Assurance for sustainability reporting
4. Tjokorda Gde Budi Kusuma, Board of Director, Institute of Certified Sustainability Practitioners

Case Studies from Stakeholders

Case studies were solicited from governmental entities, SAIs, civil society organizations, and other relevant stakeholders, showcasing diverse approaches, experiences, and lessons learned in sustainability reporting. SAIs were selected based on their geographical representation and reputation in the field of public sector auditing. The case studies are detailed in boxes.

CHAPTER 2 Sustainability Reporting in Public Sector

According to the Association of Chartered Certified Accountants (ACCA) in 2023, sustainability reporting is defined as the practice where organizations report on their influence on sustainable development. This practice has become increasingly significant, with sustainability reporting encompassing efforts to document environmental and sustainability matters, either through separate reports or integrated within annual financial reports (INTOSAI WGEA, 2013).

Public sector sustainability reporting is essential not only for transparency but also for meeting the informational needs of stakeholders within the public sector. Furthermore, it serves as a catalyst for positive change, aligning the interests of stakeholders with sustainable development goals. It is crucial for this reporting to actively support national governments in fulfilling their obligations to global sustainability agreements and their own national objectives (Adams, 2023).

2.1 Concept of Public Sector Sustainability Reporting

As outlined by the Global Reporting Initiative (GRI) in 2022, double materiality is a key concept in sustainability reporting that considers both financial and impact materiality.. While financial materiality focuses on the significance of financial information for investors and stakeholders in decision-making processes, impact materiality encompass the broader societal and environmental impacts of an organization's activities.



Figure 1. Double Materiality Concept (Adopted from GRI, 2022)

In the context of public sector entities, assessing materiality solely through financial lenses may overlook crucial aspects of their performance and impact. Impact materiality better aligns with the multifaceted nature of public sector entities, enabling a more comprehensive evaluation of their significance and contribution to sustainable development goals and societal well-being (Adams, 2023).

Moreover, material information is important as it serves the diverse needs of various stakeholders, including the general public, national governments, supreme audit institutions (SAIs), financial institutions, civil society organizations, and business/industry associations (Adams, 2023).

Key components of material information that are crucial for meeting the needs of these stakeholders according to Adams (2023), include:

- 1) **Impact:** Information on the impact of public sector activities on society, the economy, and the environment is fundamental. This includes both positive and negative outcomes, such as social benefits, environmental conservation, economic growth, and any adverse effects on communities or ecosystems.
- 2) **State of the Environment:** Information about the current state of the economy, society, and environment under the organization's jurisdiction is vital.
- 3) **Outcomes/Effectiveness:** Stakeholders require information on the extent to which government initiatives have delivered desired outcomes, improved social welfare, and addressed pressing societal challenges.
- 4) **Value Creation:** Reporting on value creation involves quantifying the social, economic, and environmental benefits generated by government activities, investments, and policies.
- 5) **Financial Accountability/Value for Money:** This includes transparently disclosing financial performance, budget allocations, expenditure patterns, and cost-effectiveness measures to provide assurance to stakeholders regarding the prudent use of public resources.

2.2 Scope of Public Sector Sustainability Reporting

Sustainability reporting helps governments to track progress towards sustainability goals, identify areas for improvement, and engage with stakeholders to develop effective strategies for addressing pressing environmental and social challenges.

Adams (2023) highlights four types of public sector sustainability measurement, which are the expansion of sustainability measurement identified by GRI (2004) including:

- Operational impacts;
- Policy effectiveness;
- The state of economic, environmental, and social conditions in areas under their jurisdiction; and
- Strategies to create value.

Adams (2023) also indicates four themes for the content of public sector sustainability reporting. The report covers the following:

- The **management approach** to stakeholder inclusiveness, recognizing significant impacts, risks, and opportunities, setting objectives, formulating policy, and identifying material issues;

- The **risks and opportunities**, along with their impacts on **strategy** to generate value for the organization, stakeholders, financiers, public-private partnerships, and society;
- The **performance and targets**;
- **Governance** supervision of management's approach, strategy (including policy effectiveness and programme outcomes) and sustainability performance and targets.

Case study: The City of Toronto's Annual Environmental, Social and Governance (ESG) Report

Toronto has taken a pioneering step in Canadian governance by releasing an annual ESG report, marking a significant commitment to transparency and performance evaluation across these three areas. As a city, Toronto aims to lead by example, emphasizing its dedication to making positive impacts on key ESG priorities through innovation, transparency, and steadfast commitment. The report underscores the city's focus on identifying and addressing ESG-related opportunities and risks within strategic priorities, sustainable finance, and socioeconomic outcomes, thus demonstrating its proactive approach towards sustainable development and responsible governance.

The report offers insights into the City of Toronto's performance, focusing on its core operations excluding agency and corporation subsidiaries. It outlines strategic priorities, key performance indicators, and highlights ESG factors pertinent to Toronto and other Canadian municipalities. It serves as a valuable complement to the Annual Report, providing a comprehensive overview of the city's sustainability efforts alongside traditional financial and operational results. The report is published for all City of Toronto stakeholders, which include but are not limited to, current and prospective residents, investors, employees, suppliers, other orders of government, peer municipalities, regulators and community organizations.

The structure and content of the report is developed using regulations, standards, methodologies and frameworks as a reference based on their relevance and usability, which include Sustainability Accounting Standards Board standards (SASB), MSCI ESG Government Ratings Methodology, Moody's ESG Scoring Framework, Global Reporting Initiative (GRI), International Integrated Reporting Council (IIRC), Integrated Reporting Framework, and United Nations Sustainable Development Goals (SDGs).

(City of Toronto, 2024)

2.3 Importance and Benefits of Public Sector Sustainability Reporting

By systematically documenting environmental, social, and economic impacts, sustainability reporting enables government entities to assess their performance, identify areas for improvement, and align strategies with broader sustainability goals. Moreover, sustainability reporting facilitates risk management by identifying emerging challenges and opportunities, thereby enhancing resilience and long-term viability.

Importance and benefits of public sector sustainability reporting can be clustered into two main aspects:

- **Efficient and Effective Public Resource Allocation to Their Intended Destinations**

ACCA (2023) highlighted the significant influence of the public sector due to its extensive public spending and debt issuance, driving both economic growth and societal outcomes,

directly influencing the efficiency and effectiveness of resource allocation toward national and global goals.

Accurate sustainability reporting emerges as a pivotal tool for the public sector to demonstrate its impact on sustainable development and fulfil its accountability obligations. Sustainability reporting facilitates the identification of commendable progress areas and those requiring additional efforts or corrective actions.

Ensuring the effective allocation of resources necessitates a concerted effort to minimize losses resulting from various factors such as waste, corruption, inefficiencies, and suboptimal decision-making. It's essential to recognize that corruption poses a significant threat to the effectiveness of policies aimed at promoting sustainability. Failure to establish effective controls over policy can lead to dual consequences: undermining the achievement of climate and sustainability objectives and creating opportunities for corruption, particularly where funding is allocated for sustainability efforts. Therefore, combating corrupt practices is paramount to uphold the integrity of sustainability endeavours and ensure the efficacy of policies in driving positive environmental and social outcomes. Moreover, Sustainability Reporting and Organisational Change Management for Sustainability mutually strengthen each other. Sustainability reporting serves as an initial step for strategizing organizational shifts toward sustainability, while the process of organizational change for sustainability enhances the reporting procedure (Lozano et al., 2016).

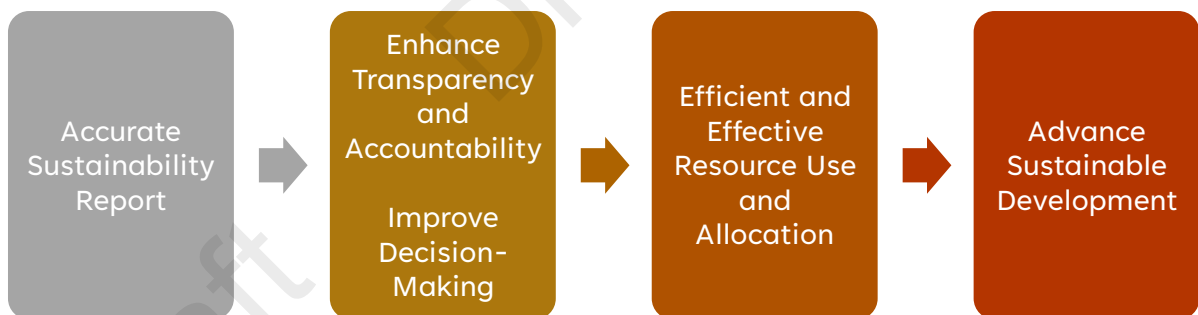


Figure 2. How Sustainability Reporting Enhances Resource Allocation Leading to The Achievement of Sustainable Development

Moreover, by engaging in thorough sustainability reporting processes, governments can proactively identify and address both physical risks (such as extreme weather events, sea-level rise, and biodiversity loss) and transition risks (such as regulatory changes, shifts in market preferences, and technological advancements) that their country may face (World Bank, 2021). Furthermore, sustainability reporting enhances market stability and investor confidence, encouraging sustainable investments and fostering long-term economic resilience.

Overall, effective reporting empowers governments to make informed decisions and take proactive measures to navigate the challenges and seize the opportunities presented by climate change and environmental degradation.

- **Attract Capital Investment**

In recent years, there has been a notable increase in demand from investors, particularly those purchasing sovereign bonds, for comprehensive information regarding climate, nature, and broader Environmental, Social, and Governance (ESG) factors (World Bank, 2021). Moreover, investor flows, including foreign direct investment, have become a significant source of capital for many countries. As a result, governments and other borrowing entities are facing increasing scrutiny from investors and stakeholders regarding their environmental and social practices. Meeting these demands by providing robust sustainability reporting positions governments and borrowing entities to attract investment and support for sustainable development initiatives.

Financial institutions worldwide are progressively dedicating efforts towards aligning their practices with the goals of the Paris Agreement, primarily through making commitments and pledges (Wissenburg et al. 2021). These commitments often entail divesting from fossil fuels, investing in sustainable energy projects, and integrating climate risk assessments into investment strategies. For example, Glasgow Financial Alliance for Net Zero (GFANZ) has committed private capital exceeding \$130 trillion for transitioning the economy towards net zero. These pledges, originating from more than 450 companies spanning 45 nations, have the potential to provide the estimated \$100 trillion in financing required for achieving net zero emissions within the next three decades. (GFANZ, 2021).

Aotearoa New Zealand Climate Standards

The Government of New Zealand has taken significant steps towards addressing climate change by enacting legislation that mandates climate-related disclosures for certain large financial market participants (including approximately 20 public sector entities). This requirement specifically targets large publicly listed companies to disclose information pertaining to climate-related risks and opportunities.

The disclosure obligations are aligned with climate standards set by the External Reporting Board (XRB), which are informed by recommendations from the Task Force on Climate-related Financial Disclosures (TCFD), following extensive public consultation. These climate standards, structured around four key thematic areas - governance, strategy, risk management, and metrics and targets - serve as the foundation for reporting on climate-related aspects of organizational operations. Emphasizing international best practices in climate-related financial reporting, the Aotearoa New Zealand Climate Standards aim to enhance transparency and accountability, enabling stakeholders to make informed decisions and facilitating the allocation of capital towards activities that promote a transition to a low-emissions, climate-resilient future in New Zealand.

The ultimate goal of the Aotearoa New Zealand Climate Standards is to facilitate the directing of capital toward endeavours that align with transitioning to a future characterized by lower emissions and resilience to climate change. By establishing these standards, the aim is to encourage investments in projects and initiatives that contribute positively to mitigating climate change and adapting to its effects, thus fostering a sustainable and environmentally conscious economy in New Zealand

(Ministry for the Environment of New Zealand, 2023)

2.4 Relevant Actors and their Roles

World Economic Forum (2019) emphasizes that improving collaboration, communication, and alignment at the system level is essential to leverage the multitude of existing ESG initiatives for maximum positive impact. By thoroughly examining the current landscape of sustainability reporting initiatives, stakeholders can identify areas where cooperation and convergence are most needed and where they can yield the greatest benefits. Through enhanced coordination and alignment of efforts, stakeholders can more effectively address complex sustainability challenges, driving meaningful progress towards a more sustainable and equitable future.

Actors that are involved in public sector sustainability reporting can be outlined as follows:

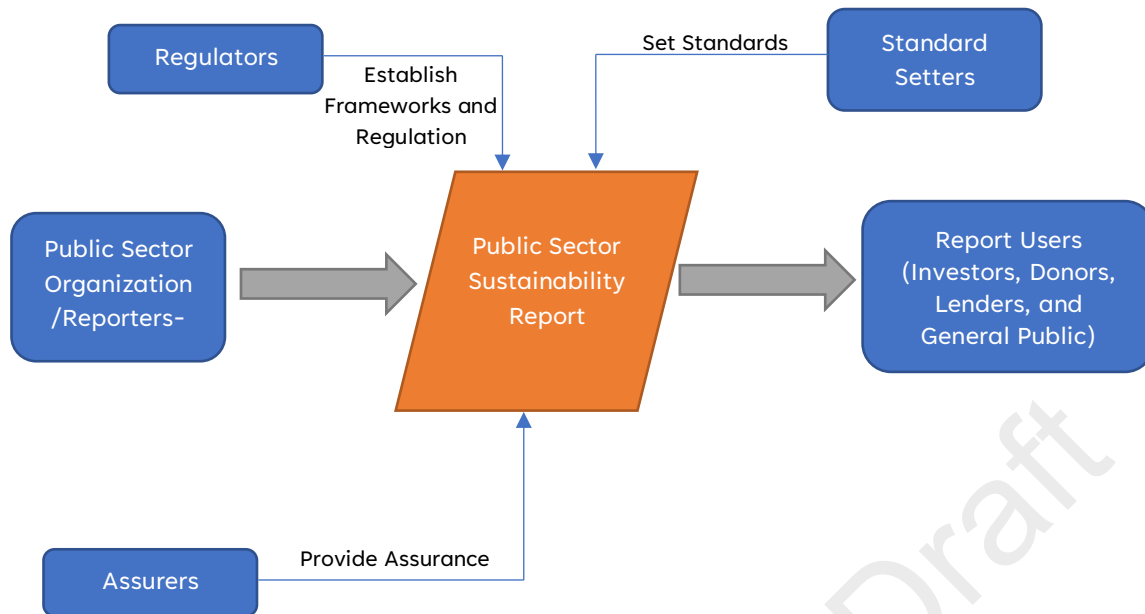


Figure 3. Relevant Actors of Public Sector Sustainability Reporting

1) Regulators

Regulators are assuming a more prominent role in reshaping how entities report their activities and allocate investments, with a growing emphasis on ESG factors (World Economic Forum, 2019). Through policy mandates, reporting standards, disclosure requirements, and a combination of incentives and penalties, regulators are compelling organizations to integrate ESG considerations into their operations and decision-making processes.

In certain scenarios, a single public sector entity may serve both as a **regulator**, establishing reporting frameworks for various sectors, and as a **reporter** within the public sector, utilizing the same framework it has set. However, this dual role can potentially lead to conflicts of interest, particularly when the governing authorities, such as sovereign governments, set requirements that may not offer an objective view of performance (CIPFA, no date). Instead, these requirements might create a more favourable reporting environment, allowing entities to showcase their positive aspects while concealing any shortcomings in sustainability performance.

To mitigate this risk, CIPFA also suggests ensuring a clear separation of these roles. One approach is to adopt international guidance or standards as a basis for local regulations, which can provide a more impartial and globally accepted framework for reporting. Since jurisdiction-level reporting for economic and accounting information often follows international arrangements, aligning sustainability reporting with a similar model can enhance credibility and comparability across regions. It's essential to understand the distinctions between entity-level and jurisdiction-level reporting and the concept of accountability within each context to develop an effective framework that promotes transparency and integrity in sustainability reporting practices.

2) Standard Setters

Despite the prevalence of ESG investing, investors across various sectors remain apprehensive about the reliability and accuracy of ESG information provided by corporations and other issuers (Bloomberg, 2019). This scepticism has been fuelled by a longstanding desire among investors for standardized reporting frameworks. A 2020 survey conducted by Blackrock underscored this concern, with the majority of respondents identifying the inadequate quality or availability of ESG data and analytics as the primary obstacle to more widespread adoption of sustainable investing (Blackrock, 2020). Therefore, international standards bodies have significantly ramped up their efforts to refine and update reporting frameworks and methodologies (World Bank, 2021). These initiatives are aimed at addressing the current challenges surrounding ESG reporting, such as the lack of uniformity, transparency, and comparability across different organizations.

In the public sector, these standards would enable governments to provide clear and comprehensive disclosures regarding the long-term impacts of their interventions on ESG issues (IPSASB, 2022)..

3) Assurers

Establishing robust internal controls within organizations is essential for ensuring the accuracy and reliability of sustainability disclosures. External audits conducted by independent auditors provide stakeholders with an unbiased assessment of the reliability and accuracy of the disclosed information (ACCA, 2023).

SAIs wield significant influence in promoting sustainable development and enhancing its reporting. SAIs achieve this by conducting objective, thorough, and practical analyses of various facets of government operations, including the management, implementation, and monitoring of programs, laws, regulations, and sustainability targets reported in sustainability reports (INTOSAI WGEA, 2019). Through their audits, SAIs help identify inefficiencies, shortcomings, and areas for improvement in government practices related to sustainable development.

Suntharanurak (2024) suggested that the engagement of SAIs in assuring sustainability reporting yields numerous advantages. First, it significantly boosts public trust and confidence in the credibility and reliability of sustainability disclosures. Second, their involvement ensures greater accountability within organizations, as the scrutiny of SAIs encourages transparency and integrity in reporting practices. Moreover, some SAIs may assist organizations in preparing for regulatory requirements by offering insights into compliance with governmental mandates related to sustainability reporting. By leveraging the expertise of SAIs, organizations can proactively address potential gaps or deficiencies in their reporting processes.

4) Donors and Lenders

Investors (donors and lenders) increasingly acknowledge the imperative for a global economic transformation towards a more sustainable model that minimizes its ecological footprint, responds to existing environmental changes, and actively participates in carbon sequestration efforts while also restoring and reconnecting fragmented ecosystems (World Bank, 2021). This recognition stems from the understanding that traditional economic activities have contributed to environmental degradation and climate change, necessitating a shift towards more responsible and regenerative practices. To effectively address these challenges and achieve long-term sustainability goals, global financial flows must align with these broader objectives. This alignment requires redirecting investments towards initiatives and projects that prioritize environmental stewardship, climate resilience, and ecosystem restoration, thereby facilitating the transition to a more sustainable and resilient global economy.

By directing investments towards projects that demonstrate strong ESG performance, investors can incentivize sustainable practices while simultaneously divesting from activities that have adverse environmental impacts. Sustainability reporting serves as a crucial mechanism in this process by providing transparent and standardized information about ESG performance, risk exposure, and impact on the environment (World Bank, 2021). Investors rely on this data to make informed decisions about where to allocate capital, favouring projects with robust sustainability practices and avoiding those with inadequate disclosure or poor environmental records.

CHAPTER 3: Global Standards and Frameworks for Sustainability Reporting

Initially, sustainability reporting was led by the private sector to create sustainability disclosure guidelines that would provide a uniform baseline of information on opportunities and risks of sustainability to investors and other capital market players. Since the public sector creates large impacts on the lives of citizens through their regulatory and decision-making, implementation of sustainability reporting in public sector is very relevant.

Several standards and frameworks have been developed to guide organizations in preparing and communicating sustainability reports. The public sector should have their standards tailored to suit government activities, policies, and services.

3.1 Differences Between Public and Private Sectors

Private sector frameworks prioritize corporate responsibility, investor appeal, and market-driven metrics, while public sector standards focus on transparency, accountability, and government mandates to serve citizens' interests and ensure efficient resource allocation. Some key distinctions between both sectors are as follow:

Table 1. Differences of Sustainability Reporting Frameworks Between Private and Public Sectors

	Private sector	Public sector
Purposes	<ul style="list-style-type: none"> - Enhancing corporate reputation - Meeting investor expectations - Managing risk and driving innovation to improve business operations - Measuring and assessing the impact of business on society and the planet 	<ul style="list-style-type: none"> - Enhancing accountability and transparency - Engaging citizens and stakeholders - Supporting policy and decision-making
Scope and Focus	Focus on the impacts of the organization based on financial materiality	Focus on the impacts of the public goods and services and demonstrating accountability for social, economic, and environmental impacts
Stakeholders	Investors, customers, employees, suppliers, industry associations, etc.	Citizens, government agencies, CSOs, and international communities, donors and financiers, etc.

Scope and Focus:

- **Private sector** sustainability reporting frameworks focus on the impacts of the organization based on financial materiality. Its focus typically covers a wide range of topics, including environmental impact, labour practices, human rights, supply chain management, diversity and inclusion, product responsibility, and community engagement. The framework offers industry-specific guidance to address the unique sustainability challenges faced by different sectors, materiality, and stakeholder expectations.
- **Public sector** sustainability reporting frameworks often adapt existing frameworks to address their specific public service missions and stakeholder needs. Unlike the private sector, they prioritize issues related to public service delivery, infrastructure development, environmental conservation, social equity, economic development, and good governance. Reporting may focus on key government functions, such as education, healthcare, transportation, environmental protection, and social welfare programs which may be different from the private sector in terms of the nature of work, scales, and longevity (IPSASB, 2022).

Stakeholder Engagement:

- **Private sector** engages with a diverse but specific set of stakeholders, including investors, customers, employees, suppliers, and industry associations, to identify material issues, set goals, and report on sustainability performance.
- **Public sector** organizations engage with citizens, government agencies, civil society organizations, and international stakeholders to gather input, address concerns, and demonstrate accountability in sustainability reporting. As the public sector has broader impacts on all sustainability issues due to the regulations, laws, or public policy, it is more challenging to report the information in response to specific jurisdiction requirements concerning multi-stakeholders (IFAC, 2021).

Overall, there may be some overlap in the principles and frameworks used in private and public sector sustainability reporting. However, the differences in purposes, regulatory context, scope, and stakeholders result in distinct approaches and priorities for each sector. Therefore, the current standards and frameworks of sustainability reports for the private sector should be adapted before use by the public sector (CIPFA, 2021).

3.2 Current Standards and Frameworks for Sustainability Reports Related to Public Sector

Presently, numerous sustainability reporting standards exist, allowing organizations to select those most suited to their contexts. While many of these standards are prevalent in the private sector, they are rarely adopted voluntarily in the public sector. However, with the increasing prevalence of sustainability reporting in public sectors, tailored standards have emerged to cater to their specific requirements. Some of the most widely recognized ones are as follow:

1) Global Reporting Initiative (GRI)

The GRI is one of the most widely used sustainability reporting frameworks globally. The GRI Standards are regularly updated to reflect evolving best practices. At present, G4 is the latest version of GRI guidelines. It can be used in the public sector as a framework for reporting on aspects such as public service delivery, environmental management, social inclusion, governance transparency, and stakeholder engagement.

GRI initiated a pilot project called 'Public Agency Sector Supplement' in March 2005 to complement GRI's Sustainability Reporting Guidelines. The Supplement aimed to identify performance indicators for aspects that are important in the public agency sector, building on the Guidelines (GRI, 2004). It allows the government entities to report three types of information: Organizational Performance, Public Policies and Implementation Measures, and Context or State of Environment (Bellini et al., 2019).

However, there is little evidence that the Public Agency Sector Supplement was officially adopted or implemented by the public entities (Farneti and Guthrie, 2009). This is because the supplement does not consider the complicated nature of the public sector leading to its fragmented use (INTOSAI WGEA, 2013). For example, Australian public organizations that used G3 Guidelines and GRI Sector Supplement for Public Agencies disclosed only a few GRI indicators in their annual reports according to the study by Guthrie and Farneti (2008). Similarly, Farneti and Siboni (2011) compared 17 reports of the Italian government varied between 1995 and 2006 with the GRI Guidelines and found that their guidelines are identical to the GRI only in a few aspects. Moreover, the study by Greiling et. al (2015) showed that public sector organizations in Austria, Switzerland, and Germany that applied these guidelines found significant gaps on social, environmental, and economic information compared to the GRI supplement guidelines. Another example is the eThekweni municipality's State of the Environment (SOE) report in South Africa which also faced the challenges of including some indicators in the GRI Guidelines due to its unique environmental sustainability scenario (Antoni and Hurt, 2006). Bellini et al. (2019) examined 177 public agencies including Public Institutions and State-Owned Companies that had published sustainability reports in the GRI Database between 1999-2018. They concluded that the use of Public Agency Sector Supplement had worsened over time and only 1.8% of the sustainability reports had been published by the public sector using GRI Guidelines.

There are several reasons why the Public Agency Sector Supplement is not widely adopted. One key issue is that it is too generic and does not apply to all public agencies. Another factor is that non-financial reporting is still voluntary and not yet fully developed, leading to low implementation by public agencies (Stigter, 2012).

In summary, although the GRI Guidelines provide a comprehensive and flexible system for the private sector to report sustainability performance, the future role of the GRI

Public Agency Sector Supplement remains uncertain. Public entities often rely on alternative approaches or utilize the GRI principles in conjunction with other frameworks relevant to their specific context.

2) **The International Sustainability Standards Board (ISSB) standard**

ISSB is an independent standard-setting body within the IFRS Foundation, primarily geared towards the private sector. It was established in response to the increasing demand for global sustainability standards that provide high-quality, comprehensive disclosures focused on the needs of investors and financial markets. It operates under the oversight of the IFRS Foundation and collaborates with various global stakeholders to ensure the development of standards that meet the evolving needs of the sustainability reporting landscape (IFRS, 2022).

In June 2023, ISSB issued the **IFRS S2 Climate-related Disclosures** (IFRS, 2023). This standard is effective for annual reporting periods beginning on or after January 1, 2024, with earlier application permitted if the **IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information** is also applied. The objective of IFRS S2 is to require entities to disclose information about their climate-related risks and opportunities that is useful for users of general-purpose financial reports in making decisions related to providing resources to the entity. IFRS S2 mandates the disclosure of information about climate-related risks and opportunities that could impact an entity's cash flows, access to finance, or cost of capital over the short, medium, or long term. This standard integrates recommendations from the Task Force on Climate-related Financial Disclosures (TCFD) and incorporates industry-based disclosure requirements from SASB Standards.

3) **International Public Sector Accounting Standards Board (IPSASB) standard**

The IPSASB plays a crucial role in developing sustainability reporting standards for the public sector potentially influencing the future landscape and offering more focused guidance compared to the GRI supplement. IPSASB, with 25 years of experience in standard setting, is advancing public sector sustainability reporting to address critical issues like climate change and environmental, social, and governance concerns.

In 2024, The International Public Sector Accounting Standards Board (IPSASB) introduced its first Sustainability Reporting Standards Exposure Draft (SRS ED) 1, Climate-related Disclosures, which outlines disclosure requirements for public sector entities. These requirements focus on reporting (i) the climate-related risks and opportunities affecting their operations and (ii) the outcomes of climate-related public policy initiatives. This information is intended to assist primary users of general-purpose financial reports in making informed decisions and holding entities accountable. By aligning with international sustainability standards while addressing the distinct needs of public sector stakeholders, these proposals aim to provide consistent, comparable, and reliable data.

This transparency supports improved decision-making, strengthens accountability, and helps maintain access to critical funding sources, including capital markets.

The IPSASB standards apply to public sector entities that meet three main criteria: they are responsible for providing services (such as goods, services, and policy advice) to serve the public or redistribute income and wealth; they primarily fund their activities through taxes, government transfers, social contributions, debt, or service fees; and they are not driven by profit-making objectives. This broad scope covers various public sector organizations, including national, regional, state/provincial, and local governments; government ministries, departments, programs, boards, commissions, and agencies; public sector social security funds, trusts, and statutory authorities; as well as international governmental bodies.

The standard is built on frameworks like the IFRS S2 and GRI Standard but adapts to a broader role of the public sector as a regulator because it can impact the environment, society, and economy not only by its own operations, but also its public policy activities. This initiative is expected to make a great impact on the movement of the public sector in sustainability reporting.

4) The Carbon Disclosure Project (CDP) Guidance

CDP Guidance refers to the support and instructions provided by CDP to companies, cities, states, and regions throughout their environmental disclosure process. This regulatory disclosure includes detailed information on how to respond to requests from investors and customers, the format and content required for disclosure, scoring methodologies, and access to a suite of guidance materials and webinars. All disclosures are voluntary and cover both financial and non-financial disclosures (CDP, 2022a). CDP's guidance covers various aspects such as climate change, forests, and water security questionnaires to be filled out online on the CDP website. Additionally, CDP's guidance emphasizes the importance of maintaining independence and high-quality information standards in scoring methodologies (CDP, 2022b).

For the public sector, CDP provides a platform for public authorities to disclose environmental information in response to stakeholder requests. It helps the public authorities to achieve environmental impacts and understand risks and opportunities compared to other entities. Moreover, CDP collaborates with policymakers, regulators, and governments through its **Government Partnerships program** to analyse the impact of non-state actors, drive meaningful action, and support the development of policies around mandatory environmental disclosure. This collaboration includes bespoke projects designed to meet specific government requirements and local contexts, aligning with global frameworks and standards to achieve environmental goals effectively. The project also integrates the ISSB climate disclosure standard in 2024 and aligns with TCFD recommendations in 2018 (CDP, 2024).

Table 2 The Standards and Frameworks of Public Sector Sustainability Reporting

Standard /Framework	Description	Key Features	Challenges
Global Reporting Initiative (GRI)	One of the most widely used sustainability reporting frameworks globally, providing guidelines for reporting on economic, environmental, and social performances.	<ul style="list-style-type: none"> - Guidelines for economic, environmental, and social performance - Regular updates reflecting best practices - G4 as the latest version - Pilot project 'Public Agency Sector Supplement' initiated in 2005 	<ul style="list-style-type: none"> - Limited adoption by public entities - Fragmented use due to the complex nature of the public sector
International Sustainability Standards Board (ISSB)	An independent standard-setting body within the IFRS Foundation focused on global sustainability standards for investors and financial markets.	<ul style="list-style-type: none"> - IFRS S2 Climate-related Disclosures - Effective from January 1, 2024 - Integration of TCFD recommendations and SASB Standards 	<ul style="list-style-type: none"> - Requires disclosure on climate-related risks and opportunities impacting cash flows, finance access, or capital cost
International Public Sector Accounting Standards Board (IPSASB)	Focuses on developing sustainability reporting standards specifically for the public sector.	<ul style="list-style-type: none"> - Launched the IPSASB SRS Exposure Draft 1, Climate-related Disclosures in 2024 - Proposes Sustainability Task Force and Climate-related Topic Working Group 	<ul style="list-style-type: none"> - Still in the development phase - Needs for public sector-specific sustainability reporting guidance
Carbon Disclosure Project (CDP)	Provides a platform for companies, cities, states, and regions to disclose environmental information.	<ul style="list-style-type: none"> - Voluntary disclosures on climate change, forests, and water security - Detailed guidance on response format and content - Scoring methodologies and access to guidance materials 	<ul style="list-style-type: none"> - Requires high-quality information standards - Involves significant data collection and reporting efforts

In addition to the aforementioned standards and frameworks, several other notable standards and initiatives play a crucial role in public sector sustainability reporting. These include the **Partnership for Carbon Accounting Financials (PCAF)**, which provides methodologies for measuring and disclosing financed emissions; the **Taskforce on Nature-related Financial Disclosures (TNFD)**, which focuses on assessing and reporting nature-related risks and opportunities; and the **Principles for Responsible Investment (PRI)**, which guide organizations in integrating ESG factors into investment decisions. Furthermore, the **United Nations Global Compact** encourages organizations to align their strategies with universal sustainability principles, while the **Greenhouse Gas (GHG) Protocol** offers standardized frameworks for measuring and managing greenhouse gas emissions. Additionally, **International Organization for Standardization (ISO)** has published IWA 48:2024 - Framework for implementing environmental, social and governance (ESG) principles, for embedding ESG within the culture of an organization.

In summary, there are several standards and frameworks regarding to the sustainability report in public sector. Although most of the standards are initially designed for private entities, the public sector also requires specific sustainability reporting standards. They need

to consider their specific context, stakeholder expectations, and material sustainability issues relevant to their operations and responsibilities.



Figure 4. Public Sector Sustainability Reporting Frameworks and Standards

CHAPTER 4 Analysis of the Survey Results

The current state of sustainability reporting in the public sector is marked by a patchwork of approaches, varying levels of maturity, and disparate standards. While some pioneering entities have embraced comprehensive reporting frameworks, others are just beginning to acknowledge the importance of sustainability disclosures. This diversity reflects not only differing levels of institutional capacity but also the complex interplay of political, economic, and social factors shaping each jurisdiction's approach to sustainability governance.

A survey of the INTOSAI members was conducted in 2023 regarding the development of sustainability reporting in the public sector. Based on the cumulative responses from 55 SAIs, the overall finding is that there is growing commitment in the public sector to enhance transparency, accountability, and performance in the context of sustainable development.

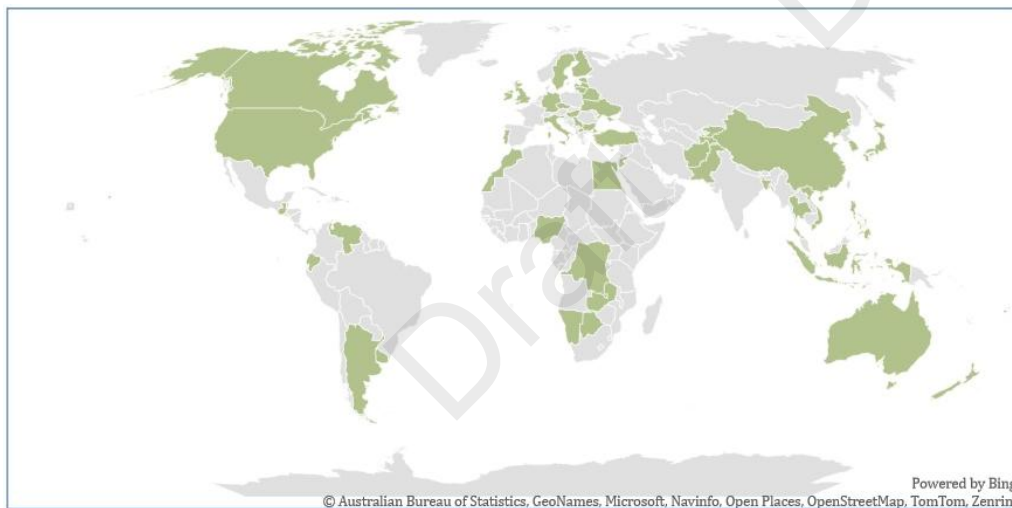


Figure 5. Respondents of the Survey

4.1 Current Practices of Sustainability Reporting Implementation in the Public Sector

According to responses gathered from 55 SAIs, it was found that a significant proportion of countries have instituted sustainability reporting requirements, albeit with notable variations across sectors. Among the SAIs surveyed, approximately 45% (25 SAIs) reported that their respective countries have established sustainability reporting mandates for the private sector.

Conversely, the survey revealed that sustainability reporting requirements for the public sector are less prevalent, with only 22% (12 SAIs) indicating that such obligations exist within their countries. This discrepancy may suggest differing priorities or challenges in implementing sustainability measures within governmental entities compared to private enterprises. Furthermore, the survey underscored that 33% of the respondents' countries (18 SAIs) have yet to implement any formal sustainability reporting requirements. This highlights that the progress of sustainability reporting development in the private sector is further ahead of the public sector as expected.

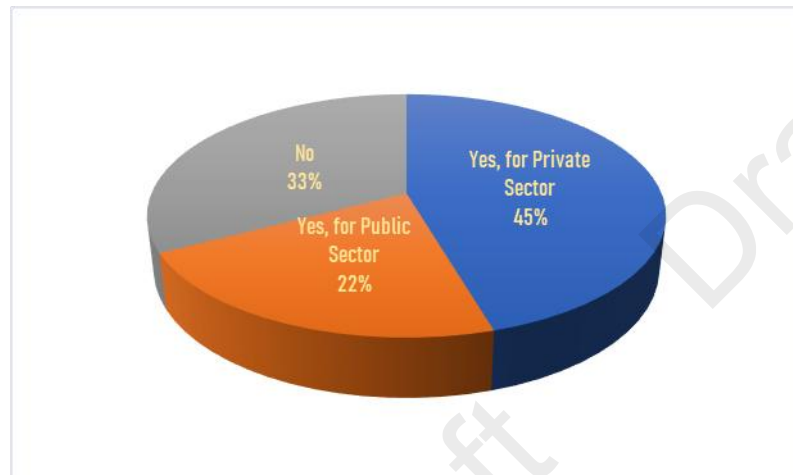


Figure 6. Survey Result on Sustainability Reporting Requirements

In the public sector, the majority of sustainability reporting requirements primarily centre on climate-related and environmental concerns, integral components of broader sustainability initiatives. For instance, the U.S. Government Accountability Office (GAO) highlighted an Executive Order mandating the development of climate adaptation plans, emission reduction strategies, and reports on climate-related financial risks. Similarly, in Argentina, governmental obligations under environmental legislation entail the annual preparation of a comprehensive report on the country's environmental status, which is then presented to the National Congress.

Within the private sector, many SAIs identified the Global Reporting Initiative (GRI) standard as a prevalent framework for sustainability reporting in their respective nations. Additionally, the Corporate Sustainability Reporting Directive (CSRD) is emerging as a significant legislative instrument within the European Union (EU). The recently enacted Directive 2022/2464 outlines comprehensive regulations for corporate reporting on sustainability, with detailed guidelines under development at the EU level, awaiting adoption at the national level. However, in February 2025, the EU Commission suggested loosening some of the requirements especially for smaller companies as part of the so-called simplification package.

Outside the EU, several countries have also implemented sustainability legislation. For example, Pakistan has the Code of Corporate Governance Guideline (2017) established by the Securities and Exchange Commission of Pakistan (SECP), while the Stock Exchange of Thailand (SET) has introduced the '56-1 One Report form' as part of its Sustainability Reporting Guide for listed companies. These initiatives collectively underscore a global trend towards greater transparency and accountability in ESG practices across both public and private sectors.

Example: The Framework Act on Sustainable Development of the Republic of Korea

Article 15 of the Act requires Central and local governments in the Republic of Korea to develop and disseminate sustainable development indicators at the national and local level, which should be aligned with the Sustainable Development Goals. The National Council and/or local council are then required to assess the state of the economy, society, and environment every two years in accordance with the mentioned sustainable development indicators.

Article 16 of the Act requires the National Council to prepare a national report on sustainable development every two years by consolidating the results of sustainability assessment as well as the result of the examination of the status of national action plan implementation. The report should be published after being reported to the President. Similarly, local governments are subject to the same reporting requirements, reinforcing the commitment to transparency and accountability at both national and local levels.

(The Framework Act on Sustainable Development, Republic of Korea, 2022)

Additionally, the survey also inquired about sustainability according to the respective national legislation. Based on answers from six SAIs, it was concluded that sustainability, as derived from the information provided, signifies a holistic and responsible approach to development. It involves balancing present needs with the imperative to preserve resources for the benefit of future generations. The concept extends beyond national boundaries, with international frameworks contributing to a collective commitment to sustainable practices. The complicated nature of sustainability is reflected in considerations for economic, social, and environmental aspects, as well as specific goals and actions outlined in government strategies and legislation.

Regarding standards/frameworks for sustainability reporting in the public sector, according to responses collected from 52 SAIs, a significant majority of 63% (33 SAIs) indicated that their respective countries lack established standards or frameworks for sustainability reporting within the public sector. In contrast, only 37% (19 SAIs) reported the presence of such standards. For instance, New Zealand has implemented climate reporting standards for large companies in emphasizing disclosures related to greenhouse gas (GHG) emissions (see box about Aotearoa New Zealand Climate Standards in Chapter 2). Furthermore In Finland, the State Treasury recommends that government agencies, institutions, and ministries provide annual reports on their sustainability endeavours built around the SDGs. Other SAIs including SAI Slovakia, SAI Portugal, SAI Republic of Korea, and SAI Ukraine also highlighted the existence of national monitoring systems specifically designed to track the implementation progress of SDGs.

However, among the subset of countries with sustainability reporting standards/frameworks in place, only half of the respondents indicated the inclusion of assurance mechanisms. This suggests that while some countries have taken steps to establish reporting frameworks, ensuring the credibility and reliability of reported information remains a challenge in many instances.

The responsibility for issuing sustainability reports is diverse and may involve environmental ministries, economic development ministries, national commissions, executive offices, and other relevant entities. It is important to refer to specific laws, regulations, and instructions in each country to determine the exact organizations tasked with reporting on sustainability. Common themes include the evaluation of sustainability across economic, social, and environmental dimensions, as well as the inclusion of specific results, assessments, and policy directions. Additionally, in some cases, there is oversight or scrutiny by relevant boards or commissions before the reports are officially issued. It's crucial to refer to the specific laws, regulations, and guidelines in each context to understand the precise content expectations for sustainability reports.

Example: Sustainability Reporting Landscape in the UK

In UK, the requirements for sustainability reporting are evolving rapidly. In the private sector, the requirements include:

- a. Task Force on Climate Related Financial Disclosure (TCFD), relevant for publicly quoted companies, large private companies, and large limited liability partnerships (LLP). "Large" is defined as companies/LLPs with more than 500 employees and more than £500m turnover.⁽¹⁾
- b. Financial Conduct Authority Climate Related Disclosure Requirements, relevant for premium listed companies, issuers of standard listed shares and global depository receipts, asset managers, life insurers and FCA-regulated pension providers.⁽²⁾
- c. Streamlined Energy and Carbon Reporting (SECR), relevant for quoted companies, large companies, and large LLPs.⁽³⁾
- d. Companies Act '06, which requires large companies to include information relating to relevant environment and social policies, performance and risk in Strategic and Director reports.⁽⁴⁾
- e. The planned Sustainability Disclosure Reporting Framework, which will incorporate UK Sustainability Reporting Standards based on IFRS S1 and S2 as well as the Transition Plan Taskforce (TPT) Disclosure Framework, which is due for consultation in 2025.⁽⁵⁾

Whereas the requirements for public sector include:

- a. HM Treasury (HMT) Sustainability Reporting Guidance.⁽⁶⁾
- b. HMT TCFD-aligned disclosure guidance (introduced in a three-year phased approach over 2023-26). This applies to all government departments and to large entities, and requires disclosures on an organisation's governance, strategy, risk management, and metrics and targets.⁽⁷⁾

⁽¹⁾ [Climate-related financial disclosures for companies and limited liability partnerships \(LLPs\)](#)

⁽²⁾ [Climate-related reporting requirements](#).

⁽³⁾ [Environmental reporting guidelines: including Streamlined Energy and Carbon Reporting requirements](#)

⁽⁴⁾ [Companies Act 2006 sections 172 and 414](#) (updated in 2022 – see note 1)

⁽⁵⁾ [UK Sustainability Reporting Standards](#)

⁽⁶⁾ [Sustainability Reporting Guidance 2024-25](#)

⁽⁷⁾ [TCFD-aligned disclosure guidance for public sector annual reports](#)

4.2. Perspective Regarding Implementation of Sustainability Reporting in Public Sector

The survey also explores the views of SAls on the implementation of public sector sustainability reporting. Here are the results.

Table 3. The perspectives of SAls regarding implementation of sustainability reporting in public sector

Category	Statements	Average Score (1: Strongly Disagree, 5: Strongly Agree)	Analysis
Policy	Public sector entities should disclose sustainability information	4.5	The score suggests a strong consensus among respondents that public sector entities should be transparent about their sustainability practices. This may indicate a growing recognition of the importance of sustainability in public administration.
	Whole-of-government should disclose sustainability information	4.4	Respondents think that sustainability disclosures should be for the whole of government, not just some of them.
Disclosed Information	Public sector sustainability reports should include information on greenhouse gas emissions (climate disclosure)	4.4	The score reflects a consensus that climate disclosure is an integral part of public sector sustainability reporting, indicating a shared recognition of the significance of addressing climate-related issues.
	Public sector sustainability reports should include information on environmental matters (waste, water, etc.)	4.5	Respondents consider a broader range of environmental matters, beyond just climate-related issues, as important. This suggests a comprehensive view of sustainability that includes various aspects of environmental responsibility.
	Public sector sustainability reports should include information on all (environmental, social and economic) dimensions of	4.4	The score indicates a strong belief that sustainability reporting should cover the triple bottom line, including not only environmental aspects but also social and economic dimensions.

Category	Statements	Average Score (1: Strongly Disagree, 5: Strongly Agree)	Analysis
	sustainable development		
	Public sector sustainability reports should include information about potential impact of legislative actions	4.1	Although still considered important, the score may indicate that respondents see the potential impact of legislative actions as less critical compared to other aspects of sustainability reporting.
Assurance	Public sector sustainability reports should be subject to independent assurance	4.1	Although still considered important, the score may indicate that independent assurance is less critical compared to other aspects of sustainability reporting.
	SAIs should provide assurance for public sector sustainability reports	3.8	The score indicates some variability in opinions regarding the role of Supreme Audit Institutions (SAIs) in assuring sustainability reports. The relatively low score maybe linked to the challenges that faced by SAIs in providing assurance for sustainability reports. The details of the challenges are discussed further in this chapter.
	SAIs should report on their own sustainability performance	4.2	The score suggests a consensus that SAIs should be transparent about their own sustainability practices, aligning with the broader trend of transparency and accountability.
	Assurance requirements for sustainability reports in the public sector should be same as required for financial reporting	3.7	The score implies some divergence in opinions on whether assurance requirements for sustainability reports should be as stringent as those for financial reporting. This may reflect differing views on the nature and significance of sustainability disclosures compared to financial disclosures.

Table 3 reflects the roles of SAIs that are expanding beyond traditional financial auditing to include broader aspects of governance, risk management, and sustainability.

Based on the 50 SAIs who responded, the research team analysed the reflections from SAIs into three perspectives. The first perspective pertains to the role of SAIs in preparing reports

on their own sustainability performance. The other suggests that SAIs should provide assurance for public sector sustainability reports.

1. SAIs Should Report on Their Own Sustainability Performance

SAIs hold public sector entities accountable for their performance and compliance. By reporting on their own sustainability practices, SAIs demonstrate leadership and commitment to the same standards they expect from others, enhancing their credibility and authority.

- Public reporting on their sustainability efforts helps SAIs maintain transparency in their operations.
- This also sets a benchmark for accountability that other public institutions might follow.
- By measuring and reporting on their own sustainability, SAIs can better manage their environmental footprint, social impacts, and governance practices.
- SAIs can influence policy and operational changes that contribute to national and international sustainability goals, such as the Sustainable Development Goals (SDGs).

2. SAIs Should Provide Assurance for Public Sector Sustainability Reports

Assurance by SAIs helps ensure that sustainability reports produced by public sector entities are accurate, reliable, and free from material misstatement.

- The process of preparing for an external assurance by an SAI encourages public entities to improve their data collection, reporting processes, and sustainability practices.
- SAIs providing assurance can help enforce compliance with relevant laws, regulations, and standards regarding sustainability. This role is particularly critical as many countries are now integrating sustainability and climate-related mandates into their legal frameworks.
- Assurance from a respected SAI adds credibility to a sustainability report, giving stakeholders, including the public, investors, and regulatory bodies, confidence in the information provided.

Although assurance should be a role of SAIs, the results show that SAIs gave lower score to this part meaning they may face difficulties in performing assurance whether in terms of resources or their limited capacities. Therefore, SAIs should also focus on strengthen their capabilities, e.g., training and capacity bulding.

3. Equating Assurance Requirements for Sustainability and Financial Reporting

Proposing that the assurance requirements for sustainability reports in the public sector should align with those for financial reporting emphasizes the growing importance of

sustainability issues. This equivalence would help elevate the status of sustainability within organizational priorities and ensure that it receives due attention from management and oversight bodies.

4.3 Key Challenges in Public Sector Sustainability Reporting

Based on feedback collected from 45 SAIs, the challenges related to the implementation of sustainability reporting in the public sector as well as its assurance can be categorized as follows.

Lack of Awareness

12 SAIs mentioned about lack of awareness on sustainability reporting and sustainability in general as a key challenge in developing sustainability reporting. Within public sector organizations, there often exists a gap in understanding the intricacies and significance of sustainability reporting. Without a clear understanding of why sustainability reporting matters and how it can benefit the organization, employees may perceive it as an additional administrative burden rather than a strategic tool for driving positive change and enhancing organizational performance. Additionally, two SAIs specifically underscored the lack of tangible proof of benefit and action stemming from sustainability reports as a significant challenge encountered in the public sector.

Furthermore, without adequate awareness, sustainability reporting may not be integrated into the broader organizational culture and decision-making processes. When staff members do not appreciate the importance of sustainability reporting, they are less likely to prioritize it or allocate resources towards its implementation.

Data Reliability and Availability

The availability and reliability of comprehensive data availability stands as the essential foundation which any reporting initiative is built (KPMG, 2024). Without robust datasets covering various dimensions of the subject matter, reporting endeavours risk being incomplete or inaccurate, undermining their value and integrity. Trust is particularly crucial in sustainability reporting, where stakeholders seek assurance that the reported data accurately reflects the organization's performance.

According to the survey findings, nine SAIs emphasized that data availability and reliability pose significant challenges in sustainability reporting within the public sector. This underscores the critical need for comprehensive and trustworthy data to underpin reporting efforts in governmental organizations.

Legal and Regulatory

One of the significant challenges in implementing sustainability reporting within the public sector is the lack of legal requirements mandating such practices, as highlighted by ten SAIs. Without mandatory reporting requirements, public sector entities may lack the motivation to allocate the necessary resources and attention to develop robust sustainability reporting frameworks.

Legal mandates often provide a clear framework and guidelines that ensure consistency, comparability, and reliability of reported data. In their absence, public sector organizations may adopt varied approaches, leading to discrepancies in the quality and scope of sustainability reports. Furthermore, without regulatory pressure, the commitment to sustainability reporting may fluctuate with changes in leadership and priorities, undermining long-term efforts to embed sustainability into public sector operations.

Framework and Indicators

Another significant challenge in the implementation of sustainability reporting within the public sector is the lack of established reporting and assurance frameworks, as well as the absence of agreed-upon indicators for performance measurement, as noted by 20 SAIs. The absence of clear guidelines on what and how to report leads to varied practices, which hampers the comparability and coherence of sustainability reports across different organizations and jurisdictions. This inconsistency makes it challenging to aggregate data at a national or regional level to assess overall progress towards sustainability goals.

Additionally, without a common set of metrics, public sector organizations struggle to measure their progress objectively and transparently. This gap can lead to a reliance on qualitative descriptions rather than quantitative data, which are less effective for tracking improvements and making data-driven decisions.

Example: Challenge due to the definition of Sustainability in U.S. Administration

One of the challenges in conducting work related to sustainability in the U.S. is that the requirements for sustainability reporting change over time depending upon the political priorities of each administration. Each administration develops its own definition of “sustainability” and its own metrics for measuring progress.

Resources Limitation

A challenge identified by 12 SAIs in the context of public sector sustainability reporting is the lack of experience and expertise among personnel. This deficiency indicates a pressing need for capacity building within public sector organizations. Without a solid understanding of sustainability concepts and reporting methodologies, public sector employees may struggle to implement and maintain robust reporting systems, thereby impeding the organization's ability to monitor and communicate its sustainability performance comprehensively.

Furthermore, the lack of expertise in sustainability reporting can result in a dependency on external consultants, which may not be sustainable in the long term. Reliance on external parties not only increases costs but can also prevent the internal development of critical skills and knowledge. To address this challenge, there is a significant need for targeted capacity-building initiatives. These initiatives should include comprehensive training programs, workshops, and continuous professional development opportunities focused on sustainability reporting preparation and assurance. By investing in capacity building, public sector organizations can equip their staff with the necessary skills and expertise to develop, implement, and sustain effective sustainability reporting practices.

Governance

Another challenge highlighted by three supreme audit institutions (SAIs) in the realm of public sector sustainability reporting is related to governance issues, which encompass complex and time-consuming stakeholder engagement, fragmented policy and actions, bureaucratic structures, and hierarchical decision-making processes. The need to coordinate and consult with multiple parties often leads to delays and increased complexity in the reporting process. This prolonged engagement can hinder timely and effective reporting, making it difficult for public sector entities to keep pace with rapidly evolving sustainability challenges and expectations.

Different departments or agencies may operate under varying policies and priorities, leading to a lack of cohesive strategy and uniformity in sustainability initiatives. These bureaucratic hurdles often result in misaligned objectives and duplicated efforts, reducing the overall efficiency and effectiveness of sustainability programs.

These challenges highlight the diverse obstacles the public sector faces in implementing effective sustainability reporting practices. Addressing these challenges will require a coordinated effort involving policy changes, awareness campaigns, capacity building, and the development of standardized reporting frameworks.

Thailand: Expert interviews

- Charika Channuntapipat, Ph.D. (Research Fellow, Thailand Development Research Institute: TDRI) Specialization: Assurance for sustainability reporting

“When considering sustainability reporting, a substance should be considered more than a form. It can be either integrated in the annual report or a separated report, depending on the budget and human resources of the organization. The interval is not necessary to be on annual basis.”

“Keep in mind that the disclosure in public sector sustainability reporting represents just the downstream aspect. The upstream process, which involves integrating sustainability into policy-making and operational processes, is more crucial as it ensures that sustainability principles are embedded in the core functioning of public entities (Channuntapipat, 2024).”

This proactive approach ensures that sustainability is not just reported but actively practiced and prioritized in everyday decisions and actions. Public entities can create a solid foundation for sustainable development that leads to more effective and impactful outcomes.

4.4 Role of SAIs in Public Sector Sustainability Reporting

From the survey result, it is found that out of 55 SAIs that answered the survey, 45% (25 SAIs) have not conducted works related to sustainability reporting and 20% (11 SAIs) have not but planned to commence works related to sustainability reporting in public sector. Only 35% (19 SAIs) have conducted works related to sustainability reporting.

The survey results indicate that SAIs play diverse and pivotal roles in sustainability reporting within the public sector. These initiatives can be broadly categorized into several key areas, each reflecting distinct functions and contributions towards sustainability goals. These

categorizations are based on the survey data and examples of activities performed by various SAIs:

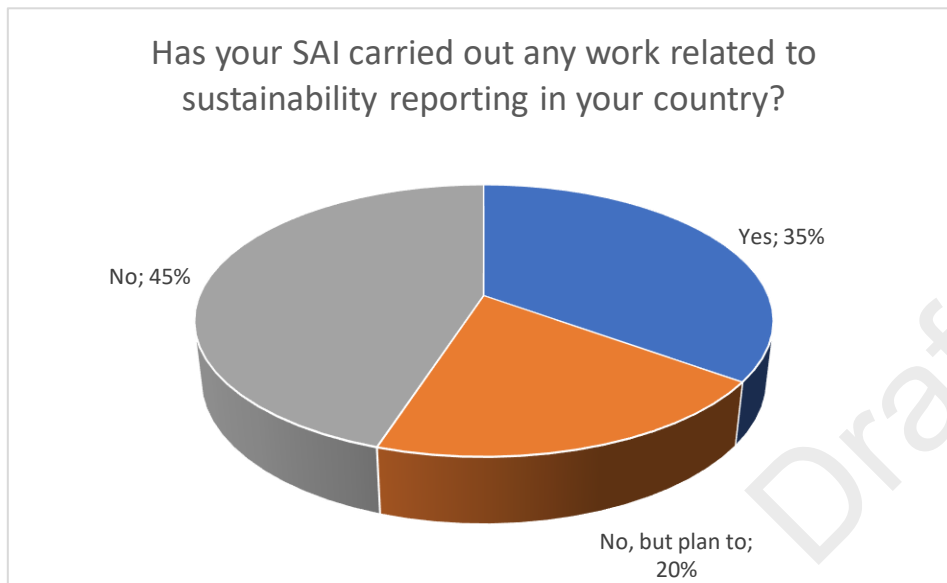


Figure 7 Survey Result on SAIs' works related to Sustainability Reporting

1. Compliance and Regulatory Audits

- Greenhouse Gas Emissions Reporting: SAIs like those in Cyprus ensure compliance with environmental legislation related to emissions.
- Review of Compliance with Sustainability Standards: SAIs often review whether public sector entities are meeting specific standards or legal requirements in sustainability.

2. Performance Audits

Performance audits play a crucial role in sustainability reporting by assessing an organization's environmental, social, and governance (ESG) impacts, ensuring alignment with the SDGs. These audits evaluate **environmental performance** through indicators like carbon emissions, energy efficiency, and waste management. They also measure **social impact**, including workforce diversity, employee well-being, and community engagement. By integrating performance audits into sustainability reports and tracking key performance indicators (KPIs), organizations can enhance efficiency and long-term sustainability progress.

- **Effectiveness of Local Government Climate Strategies:** For example, SAI New Zealand audits how local governments implement climate strategies within their long-term plans, assessing the effectiveness and efficiency of these initiatives.
- **Audits Related to the Sustainable Development Goals (SDGs):** SAIs like those in Ukraine and Botswana conduct performance audits to evaluate how well national policies and projects align with and support the achievement of specific SDGs.

- **Greenhouse Gas Emission in public sector:** National Audit Office (SAI UK) published a performance audit report in 2022 on the UK government's approach to measuring and reporting public sector greenhouse gas emission.¹ Moreover, they have also published a good practice guide on climate risk, which includes questions that Audit Committees can ask to challenge management about their approach to climate risk reporting.²

3. Financial Audits with Sustainability Dimensions

- ESG Reporting in Financial Audits: SAI Canada includes ESG considerations in its commentary on financial audits, which highlights sustainability issues that impact financial statements and reporting.
- Reporting on State-Owned Enterprises: Examining the sustainability practices and reporting of state-owned enterprises to assess their alignment with national sustainability goals and their financial impact.

4. Advisory and Developmental Roles

- Sustainability Assurance: SAIs like the UK are starting to explore and build capability for sustainability assurance.
- Creation of Working Groups on Emerging Sustainability Trends: Such as the ESG working groups in SAI Canada, which follow and respond to emerging trends in sustainability, influencing how sustainability is integrated into public auditing practices. Moreover, SAI UK are recruiting a small team to build capacity on sustainability reporting and assurance.
- Supporting the Development of Sustainability Reporting Standards in Public Sector: SAI Germany sent a member to the IPSASB, which is currently developing Sustainability Reporting Standards for the public sector.

5. Special Reports and Thematic Reviews

- Environmental Sustainability Reviews: The Portuguese Court of Auditors integrates sustainability issues such as energy efficiency, waste management, and biodiversity into its audit reports.

¹ <https://www.nao.org.uk/reports/measuring-and-reporting-public-sector-greenhouse-gas-emissions/>

² <https://www.nao.org.uk/insights/climate-change-risk-a-good-practice-guide-for-audit-and-risk-assurance-committees/>

- Thematic Audits on Environmental and Social Issues: These include focused reviews on critical areas like water resource management, gender-based violence, and other social issues linked to sustainability.
- Review of Voluntary National Review (VNR) of SDS: SAI Indonesia has conducted review of VNR 2021 of the Government of the Republic of Indonesia before the submission to the UN.

6. Publishing SAIs' Sustainability Report

Some SAIs have already published their own sustainability reports. For example, SAI Finland has published its own SDG-based sustainability reports according to the State Treasury guidelines. Moreover, SAI Indonesia has also published sustainability report in 2020 following GRI standards.

These categories reflect a crucial role of SAI in auditing and assessing sustainability-related activities within the public sector. SAIs can cover from greenhouse gas emissions to SDG implementation and reporting practices in various sectors. By categorizing their activities in this manner, we can better understand the scope of SAI contributions to sustainability reporting and the broader context of sustainable development.

CHAPTER 5: Sustainability Reporting by SAIs

One of the approaches that can be exercised by SAIs in order to make essential contribution in advancing sustainability as was emphasized at INCOSAI XXII in Abu Dhabi in 2016 is to act as models of transparency and accountability in their own operations. This chapter explores the expanded remit of SAIs in the domain of sustainability reporting, underscoring the necessity and benefits of SAIs reporting on their own sustainability performance.

This commitment to sustainability reporting is important for several reasons. *First*, it positions SAIs as leaders in the sustainability arena, enhancing their credibility and bolstering their authority as standard-setters. *Second*, it fosters transparency and builds trust among stakeholders, reinforcing the SAIs' role as accountable and responsible entities. Moreover, internally, sustainability reporting drives improvements across various dimensions of operations, from resource management to employee welfare and ethical governance. Lastly, by engaging in and advocating for comprehensive sustainability reporting, SAIs have a unique opportunity to influence broader public sector practices, contributing significantly to national and international sustainability objectives, including the Sustainable Development Goals (SDGs).

When SAIs report on their own sustainability performance, they not only fulfil an emerging mandate but also reap strategic and operational benefits. *This proactive approach significantly impacts both their internal processes and the perception of their role by the public.*

5.1 Why SAIs should take the lead in sustainability reporting

Strategic Benefit

1. Leadership by Example:

- SAIs have a key role in setting standards for accountability and transparency in public sector operations. By reporting on their own sustainability, they set a high standard for other public entities to follow, demonstrating leadership in adopting sustainable practices.
- This leadership helps instil a culture of sustainability across the government and among public sector entities, encouraging them to adopt similar practices. As highlighted by Uyar et al (2019), public sector sustainability reporting practices are influencing each other.

2. Enhanced Credibility and Authority:

- As overseers of compliance and performance, SAIs enhance their credibility when they apply the same scrutiny and commitment to their operations. Reporting on their sustainability performance shows that they practice what they address, thereby encouraging their authority when auditing other entities.

- Credibility is further enhanced when stakeholders see SAIs committing to transparent and regular disclosures about their environmental and social impacts.

Operational Benefits

1. Improved Internal Processes:

- Sustainability reporting requires a systematic review of all aspects of an organization's operations, from energy use and waste management to employee welfare and community engagement. For SAIs, this means opportunities to streamline and improve operational efficiencies.

- Implementing sustainability initiatives often leads to cost savings, for example, through reduced energy consumption or more efficient resource use.

2. Enhanced Risk Management:

- Part of sustainability reporting involves assessing and managing risks related to environmental, social, and governance factors. For SAIs, understanding these risks in their operations can lead to better management and mitigation strategies, aligning with best practices in governance.

- This proactive risk management is crucial, especially as environmental and social issues increasingly impact organizational stability and success.

3. Driving Innovation:

- The process of sustainability reporting can drive innovation within SAIs. It encourages the adoption of new technologies and practices, such as digital reporting tools or green technologies, which can improve productivity and reduce environmental impact.

- Innovation not only supports better sustainability outcomes but also enhances the overall effectiveness and relevance of the SAI in a rapidly evolving audit environment.

Impact on Public Perception

1. Building Public Trust:

- Transparency in reporting sustainability performance builds trust with the public and other stakeholders. When SAIs disclose their sustainability practices openly, they are seen as accountable and committed to public service excellence.

- This trust is fundamental for SAIs, whose effectiveness often depends on the publics and stakeholders' confidence in their actions.

2. Supporting National and International Sustainability Goals:

- By reporting on sustainability, SAIs align themselves with national and international goals, such as the SDGs. This alignment not only supports broader sustainability agendas but also positions the SAIs as key players in national efforts towards sustainable development.

- Participation in these broader goals demonstrates the SAI's commitment to global best practices and its role in addressing significant challenges beyond financial accountability.

By documenting and reporting their sustainability practices, SAIs not only enhance their internal operations and strategic positioning but also contribute to a broader understanding and implementation of sustainable practices across the public sector. This dual impact fortifies their role as leaders in governance and as advocates for sustainability, ultimately leading to a more accountable and environmentally conscious public sector.

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5.2 How to Prepare Sustainability Report

Preparing a sustainability report for SAIs involves a structured, methodical approach that spans initial planning to final review and dissemination of the report. Below is a step-by-step methodology designed to guide SAIs through the entire process of sustainability reporting effectively:

Step 1: Planning and Preparation

1. Define Objectives and Scope:

- Establish clear objectives for the sustainability report, outlining what the SAI aims to achieve through this reporting.
- Define the scope of the report, including which sustainability dimensions (environmental, social, governance) will be covered.

2. Establish Reporting Framework:

- Decide on a reporting framework that aligns with international standards (e.g., GRI, SASB, TCFD) or the national standards if there are in place to ensure consistency and comparability of the report.
- Adapt the chosen framework to fit the specific contexts and needs of the SAI.

3. Identify Stakeholders:

- Identify key stakeholders who are impacted by or interested in the SAI's sustainability practices.
- Analyze stakeholder expectations and how they will influence the reporting process.

Step 2: Data Collection and Analysis

1. Develop Data Collection Methods:

- Set up methodologies for collecting reliable and accurate data on each sustainability indicator identified in the planning phase.
- Utilize both quantitative and qualitative data sources to provide a comprehensive overview of sustainability practices.

2. Data Analysis:

- Analyze the collected data to assess the SAI's performance against the sustainability goals and standards set forth in the planning phase.
- Identify trends, challenges, and areas for improvement.

Step 3: Drafting the Report

1. Content Creation:

- Compile the data and insights into a structured report format, adhering to the selected reporting framework.
- Ensure the content is clear, comprehensive, and communicates the SAI's sustainability journey effectively.

2. Internal Review:

- Conduct internal reviews of the draft report to ensure accuracy and completeness.
- Incorporate feedback from different departments to enhance the report's quality and relevance.

Step 4: Stakeholder Engagement and Feedback

Consultation Process:

- Engage with stakeholders through consultations, workshops, or surveys to gather feedback on the draft report.
- Use stakeholder insights to refine and adjust the report, ensuring it meets their needs and expectations.

Step 5: Assurance and Verification

1. Obtain External Assurance:

- Engage independent assurance providers to review the sustainability report for accuracy, reliability, and adherence to reporting standards.
- Select an assurer with expertise in sustainability reporting to enhance credibility and transparency.

2. Internal Validation:

- Conduct internal validation processes, ensuring alignment with sustainability goals and the selected reporting framework.
- Address any discrepancies or gaps identified during the assurance process before finalizing the report.

Step 6: Finalization and Publication

1. Final Review:

- Perform a final review of the report, considering all internal and external feedback.

- Ensure that all information is accurate, transparent, and aligns with the SAI's sustainability commitments.

2. Publication:

- Publish the sustainability report in accessible formats and through various channels to reach all intended audiences.

- Consider digital formats for broader dissemination and accessibility.

Step 7: Post-Reporting Activities

1. Monitoring and Continuous Improvement:

- Set up mechanisms to monitor the impact of the report and the progress towards the sustainability goals.

- Use insights from the report and stakeholder feedback to continuously improve sustainability practices.

2. Report Follow-Up:

- Address any queries or concerns raised by stakeholders' post-publication.

- Plan and prepare for the next reporting cycle, taking into account new challenges and opportunities.

By accurately planning, engaging stakeholders, and evaluating their efforts, SAIs can effectively demonstrate their commitment to sustainability and enhance their credibility and trustworthiness in the public sector.

Before initiating the sustainability reporting process, SAIs need to undertake thorough preparation to ensure the reporting is comprehensive, accurate, and meaningful. *A pre-reporting checklist helps set a solid foundation for this complex endeavor, addressing essential logistical, strategic, and operational considerations.* This checklist that SAIs can use before starting their sustainability reporting:

5.3 Checklist Before Starting Sustainability Reporting: Pre-Reporting Checklist for SAIs

A. Strategic Planning

[] Define Reporting Goals: Clarify what the SAI aims to achieve through sustainability reporting (e.g., transparency, stakeholder engagement, internal improvements).

[] Establish Scope and Boundaries: Determine which activities, departments, and sustainability dimensions (environmental, social, governance) will be included in the report.

B. Framework and Standards Selection

[] Select a Reporting Framework: Choose an appropriate sustainability reporting framework (e.g., GRI, SASB, TCFD) that aligns with the SAI's goals and stakeholder expectations.

Compliance with Regulations: Ensure the selected framework complies with any relevant local or international sustainability reporting regulations.

C. Resource Allocation

Budgeting : Allocate sufficient budget for the sustainability reporting process, including data collection, analysis, stakeholder engagement, and publication.

Personnel: Assign a dedicated team or individual to manage the sustainability reporting process. Consider roles for data collection, report drafting, and stakeholder communications.

D. Data Management

Data Collection Methods: Plan and establish methods for collecting necessary data reliably and efficiently.

Data Quality Assurance: Set up processes to ensure the accuracy and completeness of the data to be used in the report.

E. Stakeholder Identification and Engagement

Identify Stakeholders: List all relevant stakeholders who have an interest in or are affected by the SAI's operations and sustainability practices.

Engagement Strategy: Develop a strategy for engaging stakeholders throughout the reporting process to gather insights and feedback.

F. Training and Capacity Building

Training Needs Assessment: Identify what training is necessary for team members involved in the reporting process, particularly in understanding and applying the chosen reporting framework.

Schedule Training Sessions: Organize training sessions to enhance the capabilities of the staff involved in sustainability reporting.

G. Timeline and Milestones

Develop a Timeline: Outline key dates and milestones for the reporting process, from data collection to publication.

Set Review Points: Establish points in the timeline for reviewing progress and making necessary adjustments.

H. Communication Plan

Internal Communication: Plan how to communicate the purpose and progress of the sustainability report within the organization to gain support and participation.

External Communication: Develop a strategy for communicating the final report to external stakeholders and the public.

I. Risk Assessment

[] Identify Risks: Identify potential risks associated with the sustainability reporting process, such as data breaches, misreporting, or stakeholder mismanagement.

[] Mitigation Strategies: Develop strategies to mitigate identified risks to ensure a smooth reporting process.

J. Technology and Tools

[] Assess Technological Needs: Determine if new technologies or tools are needed for data collection, analysis, or report generation.

[] Implement Technology Solutions: If necessary, acquire and set up any technologies ahead of the reporting period.

5.4 Components of Sustainability Reporting for SAIs

A well-structured sustainability report typically includes several key components that together showcase the SAI's commitment to sustainability, track its progress, and outline future goals. However, note that the reports do not need to be lengthy, but a SAI can also do something “lighter” especially if they are new to the topic. This study proposes a breakdown of these components to ensure that SAIs cover necessary aspects:

1. Executive Summary

- Purpose and Highlights: A brief overview of the report's goals and key achievements in sustainability over the reporting period.

- Key Findings and Data Points: Quick insights into major sustainability milestones and data highlights.

2. Introduction of the SAI

- Organizational Overview: Background information on the SAI, including its mission, strategic objectives, and operational scope.

- Governance Structure: Explanation of governance mechanisms that support sustainability, including roles and responsibilities of key figures and committees.

3. Sustainability Strategy and Policy

- Sustainability Vision and Policy: Detailed presentation of the SAI's sustainability vision, policy, and how these align with its overall strategic goals.

- Long-term Sustainability Goals: Description of long-term sustainability objectives and the strategies planned to achieve them.

4. Environmental Responsibility

- Resource Management: Information on the management of natural resources, including energy and water usage, and initiatives to reduce consumption.
- Emissions and Waste Management: Data on greenhouse gas emissions, waste generation, recycling efforts, and waste reduction strategies.
- Biodiversity and Environmental Stewardship: Initiatives aimed at preserving biodiversity and enhancing environmental stewardship within the SAI's operations and its wider community.

5. Social Responsibility

- Well-being and Safety of auditors & staffs: Policies and performance related to auditors and staff's health, safety, and well-being.
- Community Engagement and Impact: Overview of programs and activities aimed at benefiting the community, including volunteer work, community service, and educational programs.
- Diversity and Inclusion: Efforts and results in promoting a diverse and inclusive workplace.

6. Economic Impact

- Economic Performance: Discussion on the economic impact of the SAI, including job creation, economic contributions, and procurement practices.
- Financial Sustainability: Initiatives to ensure the financial sustainability of the SAI, such as cost-saving measures and sustainable investment practices.

7. Governance and Ethics

- Compliance and Integrity: Information on compliance with laws, regulations, and internal policies, particularly regarding ethical conduct and corruption prevention.
- Risk Management: Description of risk management processes, particularly related to sustainability issues.

8. Performance Review and Outlook

- Achievements and Challenges: Review of achievements against set sustainability goals and challenges faced during the period.
- Future Plans: Outline of future sustainability goals and initiatives, including short-term targets and long-term aspirations.

9. Stakeholder Engagement

- Engagement Practices: Methods and practices for stakeholder engagement, including how feedback is solicited and used to shape sustainability practices.
- Stakeholder Feedback: Summary of stakeholder feedback and how it has impacted the SAI's sustainability strategies and actions.

10. Assurance and Compliance

- External Verification: If applicable, details of external verification or assurance received for the sustainability report.
- Compliance with Standards: Information on compliance with international sustainability reporting standards and frameworks.

11. Appendices and Supplementary Information

- Detailed Data and Methodologies: Additional data that supports the analysis and conclusions in the report, along with a description of the methodologies used for data gathering and analysis.
- GRI and Other Indices: If using standards like GRI, a content index linking the report content to these standards.

By structuring their sustainability report around these components, SAls can ensure that they provide a transparent, comprehensive, and balanced view of their sustainability efforts. However, for those SAls who are at the beginning stage, they may not have to do full report like the proposed structure but instead consider disclosing some sustainability-related performance, depending on their capacity. At least making the first move is better than doing nothing.

CHAPTER 6: The Role of SAI in Sustainability Reporting Assurance

6.1 Why SAIs Should Provide Assurance for Sustainability Reports of Public Sector Entities

Assurance services provided by SAIs can support the integrity and value of sustainability reports produced by public sector entities. The involvement of SAIs in the assurance process provides several key benefits:

1. Increases Trust:

- *Enhanced Stakeholder Confidence*: When SAIs provide assurance on sustainability reports, it reassures stakeholders about the accuracy and reliability of the information presented..

- *Robust Reporting Processes*: Assurance also indicates that the processes used to gather, analyze, and report sustainability data adhere to high standards of quality and rigor. This assurance process helps in identifying and mitigating any discrepancies or biases in the reported data.

2. Improves Accountability:

- *Verification of Commitments*: SAIs play a key role in verifying that public sector entities are fulfilling their ESG commitments as reported..

- *Ensures Responsibility*: Through the assurance process, SAIs ensure that entities are responsible in their reporting and operations concerning sustainability practices.

Thailand: SAIs should initiate the sustainability reporting award or ranking in public sector

Expert interviews:

- Asst. Prof. Chol Bunnag (Director of SDG Move, under the Faculty of Economics, Thammasat University, Thailand)

In Thailand, there is Integrity and Transparency Assessment (ITA) against Corruption in State Agencies initiated by The National Anti-Corruption Commission (NACC). The ITA rating score is derived from both public entity self-assessments and citizen feedback. The results and rankings are publicly announced to motivate public entities to improve their performance relative to others.

It is also interesting for SAIs to take lead in initiating a sustainability rating in the public sector since they are trusted, independent institutions with a mandate to promote transparency, accountability, and good governance. These initiatives motivate public entities to prioritize and excel in their sustainability practices. Such recognition rewards best practices, encouraging other entities to follow suit. By publicly acknowledging exemplary sustainability efforts, SAIs can drive continuous improvement, promote innovation, and enhance the overall credibility and effectiveness of sustainability reporting (Bunnag, 2023)

3. Supports Compliance:

- *Adherence to Standards*: SAs ensure that the sustainability reports meet existing standards and regulatory requirements, which may vary by region or sector..

- *Fostering a Culture of Compliance*: By regularly involving SAs in the assurance of sustainability reports, a culture of compliance is fostered within the public sector..

4. Encourages Transparency:

- *Open and Informed Decision Making*: Validating sustainability reports through SA assurance promotes transparency, allowing stakeholders—including the public, government bodies, and investors—to make informed decisions based on the information provided.

Example 1: Finnish Sustainability Reporting Auditor Accreditation (Private Sector)

Certifying auditors in sustainability reporting assurance is crucial because it ensures they possess the necessary expertise and competence to evaluate complex and multifaceted sustainability data accurately. This certification also assures stakeholders that the sustainability reports are being reviewed by qualified professionals, thereby increasing trust in the reported information and supporting better decision-making and governance in the public sector.

In Finland, there is a new certification (KRT) based on the EU CSRD requirements, for those that provide assurance for sustainability reports of private companies. It is now in the Auditing Act 2015/1141, amended with 2023/1250.

It is possible to obtain the certification via two channels:

- Those who already have an audit certification, need 30 hours training. This is probably the channel to make sure there are enough auditors in the beginning phase.
- For others a separate exam, but apparently also these people need financial audit certification and at least three years' experience in auditing.
- Source: https://www.eduskunta.fi/FI/vaski/HallituksenEsitys/Documents/HE_20+2023.pdf

Example 2: Certified Sustainability Reporting Assurer (CSRA) by Institute of Certified Sustainability Practitioners

CSRA is an Indonesia-based professional certification designed for individuals who provide assurance on sustainability reports, especially in private sector. Those interested in the CSRA certificate typically possess a basic level of proficiency in assurance engagement related to sustainability or CSR reporting. The certification offers an opportunity to become a more professional assurer and develop capabilities in the following areas:

- **Examining Completeness and Compliance**: Evaluating sustainability/CSR reports to ensure they are comprehensive and adhere to relevant reporting standards and guidelines.
- **Identifying Omitted Information**: Detecting any data or information that may have been excluded from the reports, which could be essential for a full understanding of the organization's sustainability performance.
- **Providing Independent Comments**: Offering objective assessments on the targets set by the organization, the impacts of its activities, any shortcomings in the report, and recommendations for improvement.
- **Assessing and Interpreting Reported Data**: Analyzing the data and performance metrics presented in the sustainability/CSR reports to provide insights into the organization's sustainability efforts and outcomes.

Source: <https://institute-csp.org/program/certified-sustainability-reporting-assurer-csra/>

(Interview with Board of Director of Institute of Certified Sustainability Practitioners)

6.2 How to Conduct the Assurance of Sustainability Reporting: The Steps

Previously, the International Standard on Assurance Engagements (ISAE) 3000 developed by IAASB was the most commonly used assurance standard (INTOSAI WGEA, 2013). However, it covered general non-financial assurance with no specific focus on sustainability. A new standard called “The International Standard on Sustainability Assurance (ISSA) 5000”, General Requirements for Sustainability Assurance Engagements, thereby has been developed with its related updates to other IAASB standards, providing a structured framework for performing sustainability assurance engagements. ISSA 5000 offers a comprehensive and independent framework for sustainability assurance that can be applied with various frameworks such as TCFD, GRI, IR, etc. Its profession-agnostic design enables both professional accountants and non-accountant assurance practitioners to use the standard effectively, promoting consistent and reliable assurance practices across different sectors.

Table 4. The comparison between assurance standards: ISSA 5000 vs ISAE 3000

Feature	ISSA 5000	ISAE 3000
Scope	Sustainability assurance engagements	Broader range of non-financial assurance engagements, including sustainability
Focus	Sustainability information (ESG)	Non-financial information in general
Frameworks	Aligns with GRI, SASB, TCFD, etc.	Not tied to specific frameworks
Materiality and Risk	Sustainability-specific materiality and risk assessment	General materiality and risk assessment
Disclosures	Focus on disclosures related to sustainability information	Broader range of disclosures
Assurance Levels	Provides guidance on limited and reasonable assurance for sustainability information	Applicable to various assurance levels (reasonable or limited assurances) for different types of engagements

In sum, ISSA 5000 is a specialized standard tailored to the unique challenges and requirements of sustainability assurance, while ISAE 3000 is a more general standard that can be applied to a wider range of non-financial assurance engagements.

ISSA 5000 can provide a framework for SAIs to expand their mandate beyond traditional financial audits to include sustainability assurance. To conduct the assurance effectively, SAIs should follow a structured approach. Here's a detailed breakdown of each step in the process:

Planning and Scoping:

1. Define the Scope and Objectives:

- **Scope:** Determine what aspects of the sustainability report will be assured. This could include environmental data, social impact initiatives, or governance practices. The scope is typically based on the significance and perceived risks associated with the entity's sustainability disclosures.

- Objectives: Set clear objectives for the assurance process. This includes determining the level of assurance desired (e.g., reasonable or limited assurance) and any specific outcomes or areas of concern that need addressing.

2. Identify Standards and Criteria:

- Standards: Select appropriate assurance standards that will guide the assurance process. Common standards include the International Standard on Sustainability Assurance (ISSA) 5000, which provides a framework for non-financial assurance engagements.

- Criteria: Identify the criteria against which the sustainability report will be evaluated. These criteria are often based on recognized sustainability reporting frameworks like the Global Reporting Initiative (GRI) or the Sustainability Accounting Standards Board (SASB).

Evidence Gathering:

1. Review of Data, Processes, and Systems:

- Data Review: Examine the raw data used to compile the sustainability report. Verify the accuracy and completeness of the data, and check for any discrepancies or anomalies.

- Process Evaluation: Assess the processes by which the data was collected, processed, and reported. This includes reviewing internal controls, data management systems, and documentation practices.

2. Employment of Methodologies:

- Qualitative Methods: Use interviews, surveys, and reviews of documentary evidence to understand the context and implementation of sustainability practices.

- Quantitative Methods: Apply statistical techniques to analyze data trends and validate quantitative disclosures in the report.

Evaluation:

1. Assess Evidence Against Criteria:

- Compare the collected evidence against the predetermined assurance criteria to determine if the information in the sustainability report is accurate and complete.

- Evaluate the fairness of the reporting practices, ensuring that the report provides a balanced view of the entity's sustainability performance.

2. Evaluate Reporting Practices:

- Assess whether the sustainability reporting practices adhere to best practices and the chosen reporting frameworks.

- Check for consistency in reporting and transparency in the disclosure of sustainability information.

Reporting:**1. Preparation of Assurance Report:**

- Scope and Methodology: Document the scope of the assurance and the methodologies used during the process.
- Conclusion: Provide a conclusion that states whether the sustainability report is fair, accurate, and in accordance with the applied standards and criteria.

2. Recommendations and Improvements:

- Offer recommendations for how the entity can improve its sustainability reporting in future cycles.
- Highlight any areas where improvements in data collection, processing, or reporting could enhance the quality of future reports.

3. Communication to Stakeholders:

- Present the assurance report to the relevant stakeholders, including the leadership of the entity being audited and external stakeholders who rely on the sustainability report.
- Communicate findings and recommendations clearly and concisely, ensuring that all stakeholders understand the implications of the assurance results.

This systematic approach to assurance not only enhances the credibility of sustainability reports but also helps public sector entities improve their sustainability practices over time, ultimately leading to better environmental, social, and governance outcomes.

This study suggests a structured checklist to guide SAIs through the process of conducting assurance on sustainability reports, ensuring that all necessary steps and considerations are systematically addressed:

6.3 Checklist for Conducting Assurance on Sustainability Reports**1. Planning and Preparation**

- Define the scope of the assurance engagement.
- Identify the objectives of the assurance.
- Select the appropriate sustainability reporting standards and frameworks (e.g., GRI, SASB).
- Establish the level of assurance required (limited or reasonable assurance).

2. Evidence Gathering

- Verify the accuracy and completeness of the data provided in the sustainability report.
- Review documentation supporting the data and disclosures in the report.

- Conduct interviews with key personnel involved in the sustainability reporting process.
- Use both qualitative and quantitative methods for a comprehensive review.

3. Process Assessment

- Assess the processes used by the entity to collect, analyze, and disclose sustainability information.
- Evaluate the internal controls in place for managing environmental and social data.
- Check for consistency and repeatability of the reporting processes over time.

4. Standard Adherence Review

- Review the entity's adherence to relevant sustainability reporting standards.
- Ensure that the sustainability report aligns with the declared frameworks and standards.
- Verify disclosures against best practices in sustainability reporting.

5. Reporting and Communication

- Prepare a draft assurance report outlining findings, conclusions, and any recommendations for improvement.
- Present the draft report to the reporting entity for feedback.
- Finalize the assurance report and communicate the findings to relevant stakeholders.

6. Post-Assurance Follow-Up

- Schedule follow-up meetings to discuss the implementation of recommendations.
- Monitor the entity's progress in addressing the findings from the assurance process.

6.4 Template for Reporting Findings from Sustainability Report Assurance

Introduction

- Overview of the assurance engagement scope and objectives.
- Description of the standards and frameworks applied during the assurance.

Findings

1. Data Accuracy and Completeness

- Specific instances where data inaccuracies or incompleteness were identified.
- Recommendations for improving data collection and validation processes.

2. Adherence to Standards

- Areas where the entity did or did not meet the sustainability reporting standards.
- Suggestions for better alignment with reporting standards in future reports.

3. Process Effectiveness

- Evaluation of the effectiveness of processes used for sustainability reporting.
- Areas where process improvements are necessary.

4. Internal Controls

- Assessment of the strength and weaknesses of internal controls related to environmental and social data reporting.
- Recommendations for strengthening internal controls.

Conclusion

- Overall opinion on the reliability and fairness of the sustainability report.
- Summary of key recommendations for future reporting cycles.

Recommendations

- Detailed actions suggested for the entity to improve its sustainability reporting practices.
- Timeline and priorities for implementing these recommendations.

By following this checklist and using the template for reporting findings, *SAIs can provide thorough and effective assurance on sustainability reports, enhancing the credibility and usefulness of these reports for all stakeholders.* This structured approach ensures that all significant aspects of sustainability reporting are scrutinized and that the entity can make meaningful improvements based on the assurance results.

When conducting assurance on sustainability reports, SAIs often encounter several typical findings. These findings can highlight areas where the reporting entity needs to improve its practices to ensure more reliable, accurate, and transparent sustainability reporting. These are a closer look at these **common findings and the implications for the reporting entities**:

1. Data Inaccuracies

- Description: This finding occurs when there are discrepancies between the data reported and the entity's internal records or external benchmarks. This might involve errors in data collection, calculation mistakes, or misinterpretation of data.
- Implications: Data inaccuracies can undermine stakeholder trust and question the reliability of the report. They suggest potential weaknesses in internal controls or a lack of understanding of the data collection processes.

- Recommendations: Enhance training for staff on data collection and reporting protocols, improve internal data verification processes, and possibly invest in better data management systems.

2. Non-compliance with Standards

- Description: This issue arises when the sustainability report does not meet the guidelines or requirements set by applicable reporting standards such as the Global Reporting Initiative (GRI), SASB, or others relevant to the organization's sector and operational scope.

- Implications: Non-compliance may lead to reputational damage and can affect the credibility of the report. It might also indicate gaps in the organization's understanding of reporting standards or its commitment to sustainability practices.

- Recommendations: Review and realign the reporting framework with the relevant standards, conduct regular training on these standards for personnel involved in report preparation, and engage external experts for guidance if necessary.

3. Insufficient Documentation

- Description: Often, entities fail to maintain adequate documentation to support the information presented in their sustainability reports. This can include missing evidence for claimed achievements, lack of source data for metrics, or incomplete records of stakeholder engagement.

- Implications: Insufficient documentation makes it difficult to verify the reported information, reducing the report's credibility. It may also complicate internal and external audits and reviews of the report.

- Recommendations: Implement a structured documentation system, ensure all data and claims in the report are fully traceable, and maintain records systematically to support future audits and inquiries.

4. Recommendations for Improvement

- Description: As part of the assurance process, SAIs typically provide a list of recommendations aimed at addressing the issues found during the audit. These suggestions are intended to help the entity enhance the robustness and reliability of its future sustainability reports.

- Implications: Implementing these recommendations is crucial for improving the quality of the sustainability reporting process and outputs. It demonstrates the entity's commitment to transparency and continuous improvement.

- Recommendations: Develop an action plan to address each recommendation, assign responsibilities for implementation, and set timelines for review and completion.

Additionally, consider establishing a follow-up mechanism to monitor progress and effectiveness of the implemented changes.

Understanding and addressing these common findings are vital for entities committed to enhancing their sustainability reporting. For SAIs, effectively communicating these findings and their implications helps ensure that their assurance efforts lead to meaningful improvements in public sector sustainability practices.

Simulation Case Study: Assurance of Sustainability Reporting for the Coastal City Transport Authority (CCTA)

Background

The Coastal City Transport Authority (CCTA) is responsible for overseeing public transportation in a large coastal city. The CCTA has committed to sustainability practices, focusing on reducing greenhouse gas emissions, enhancing the efficiency of public transport systems, and improving social inclusiveness. CCTA publishes annual sustainability reports to demonstrate progress toward these goals.

Objective

The Supreme Audit Institution (SAI) was tasked with providing assurance for CCTA's latest sustainability report. *The objective was to verify the accuracy and completeness of the information provided, ensure compliance with international sustainability reporting standards, and evaluate the effectiveness of CCTA's sustainability initiatives.*

Scope of Assurance

The SAI defined the assurance scope to include:

- Evaluation of greenhouse gas (GHG) emissions data.
- Review of measures implemented to enhance transportation efficiency.
- Assessment of initiatives aimed at improving social inclusiveness in public transportation services.
- Compliance with the Global Reporting Initiative (GRI) standards.

Methodology

The SAI employed a combination of document reviews, on-site inspections, stakeholder interviews, and data analysis to gather evidence. The assurance process was guided by the principles adopted from ISSA 5000.

Findings

1. Data Inaccuracies

- The SAI discovered discrepancies in the reported GHG emissions data, which were found to be under-reported due to calculation errors.

- Recommendation: CCTA was advised to revise their data collection and calculation methods to ensure accuracy and to provide additional training to staff responsible for data management.

2. Non-compliance with Standards

- CCTA's report partially complied with GRI standards; however, some key performance indicators relevant to transportation services were not adequately reported.

- Recommendation: CCTA was encouraged to fully incorporate all relevant GRI indicators and provide clearer explanations of the data to ensure compliance and enhance transparency.

3. Insufficient Documentation

- Documentation supporting various sustainability initiatives, especially those related to social inclusiveness, was found to be lacking.

- Recommendation: CCTA was recommended to implement a comprehensive documentation system that captures all aspects of project planning, execution, and outcomes.

4. Effective Initiatives

- Despite some issues, the SAI noted that CCTA's initiatives to improve transportation efficiency, such as upgrading to eco-friendly buses and expanding cycling lanes, were effectively implemented and well-documented.

- Recognition: CCTA was recognized for its efforts in this area and encouraged to continue expanding these initiatives.

Assurance Report

- The assurance report provided by the SAI concluded that while CCTA's sustainability report was beneficial in showcasing their efforts and commitment to sustainability, *there were significant areas of improvement needed to ensure accuracy, reliability, and compliance.*

- The report included specific recommendations for each area of concern, along with best practice examples from other similar entities.

Conclusion

This simulation case study illustrates the critical role of SAIs in enhancing the credibility and effectiveness of sustainability reporting within the public sector. By providing detailed findings and constructive recommendations, SAIs help audit entities like CCTA improve not only their reporting practices but also the actual implementation of their sustainability initiatives. The assurance process ultimately contributes to more transparent, accountable, and effective management of sustainability practices in public sector operations.

Draft Draft Draft

CONCLUSION AND POLICY RECOMMENDATIONS

At present, it is undeniable that sustainability reporting has become very important not only in private sector but also in the public sector. In this study, we explored the current practices of SAIs on sustainability reporting, key challenges they faced, and the roles of SAIs in public sector sustainability reporting. From the survey results, we could enhance the effectiveness of SAIs in the realm of sustainability reporting and assurance. It's crucial to establish concrete policies and measures that align with their evolving responsibilities. The study proposed a structured approach to policy recommendations that categorizes which aspects SAIs should prioritize and the specific actions they can take:

1. Reporting on Their Own Sustainability Performance

Policy Actions:

- Develop Internal Reporting Frameworks: SAIs should adopt comprehensive sustainability reporting frameworks that reflect the standards expected of public sector entities.
- Interval Sustainability Reports: Mandate consistent interval sustainability reports by SAIs to demonstrate their environmental, social, and governance impacts. The interval of sustainability reporting may not need to be annual depending on the contexts of SAIs, but it should be consistent.
- Performance Benchmarks: Set clear sustainability performance benchmarks for SAIs to meet, facilitating accountability and continuous improvement.

Measures:

- Develop a report/documentation relevant to sustainability: Assign a responsible team to collect the sustainability data from related department and report them against the benchmark aligning with the framework. The sustainability reporting can be either part of the annual report or the separated report, depending on the capacity of the SAIs. For the advanced SAIs, they can start investing in systems that facilitate accurate and efficient sustainability data collection and reporting.
- Training Programs: Regular training for SAI staff on sustainability issues, reporting techniques, and best practices. Develop training/workshop among peers e.g. in the context of the INTOSAI WGEA to exchange knowledge and experiences to strengthen capacity of the staff.

2. Providing Assurance for Public Sector Sustainability Reports

Policy Actions:

- Standardization of Assurance Practices: Develop and standardize assurance methodologies specific to sustainability reporting in the public sector.

- **Mandatory Assurance Reviews:** Require that sustainability reports from public sector entities undergo an assurance review by an SAI before publication.

Measures:

- **Assurance Frameworks:** Adopt frameworks such as ISSA 5000 for sustainability assurance to ensure consistency and reliability.
- **Specialist Training:** Equip SAI auditors with specialized training on the standards and practices of sustainability reporting assurance to enhance their expertise and effectiveness.
- **Resource Allocation:** Ensure that SAIs and other assurance providers have the necessary resources, including funding and expertise, to carry out their duties effectively.

However, if SAIs have limited resources and time, they may prioritize the assurance by focusing on high-impact public sectors (e.g., energy, transportation, public finance) where sustainability reporting can provide the most value. Moreover, they can start by verifying specific aspects of sustainability reports rather than the entire report.

3. Integrating Sustainability Assurance with Financial Reporting

Policy Actions:

- **Integrated Reporting Requirements:** Mandate integrated sustainability and financial reporting for public sector entities to emphasize the interconnectedness of financial and non-financial performance.
- **Regulatory Updates:** Update existing regulations to include detailed provisions for sustainability reporting and assurance, akin to financial reporting standards.

Measures:

- **Cross-Training Auditors:** Train financial auditors in sustainability concepts and vice versa to create a versatile, interdisciplinary auditing workforce.
- **Compliance Monitoring Systems:** Develop and deploy monitoring systems that ensure ongoing compliance with both financial and sustainability reporting requirements.

4. Enhancing Transparency and Stakeholder Engagement

Policy Actions:

- **Public Access to Sustainability Reports:** Ensure that all sustainability reports audited by SAIs are publicly accessible to increase transparency.
- **Stakeholder Consultation Processes:** Formalize stakeholder consultation processes during the drafting of sustainability reports and the subsequent auditing process.

Measures:

- Online Platforms for Engagement: Utilize online platforms to facilitate interaction with stakeholders, allowing them to provide feedback on sustainability reports and audit processes.
- Regular Stakeholder Meetings: Schedule regular meetings with key stakeholders to discuss sustainability issues, reports, and audit findings.

5. Recognition and Awards

Policy Actions:

- Incentives for public entities: Offer incentives for public entities that implement sustainability report and comply with assurance requirements.
- Incentives for auditors: Offer incentives for auditors in SAIs to become professional in sustainability reporting assurance.

Measures:

- Establish Awards Programs: Create awards for exemplary sustainability reporting to recognize and celebrate public entities that excel in this area. Initiate sustainability ranking among public entities to motivate competitiveness. Give a certificate to the qualified auditors who provide assurance for sustainability report of public sector.
- Public Acknowledgment: Publicly acknowledge and showcase best practices and success stories through events, publications, and media.

6. Aligning with International Standards and Best Practices

Policy Actions:

- Adoption of International Standards: Encourage the adoption of international sustainability reporting and assurance standards like GRI, TCFD, and SASB.
- Global Cooperation: Engage in international forums and collaborations to stay updated on best practices and innovations in sustainability reporting and assurance.

Measures:

- Benchmarking and Adaptation: Regularly benchmark against leading SAIs globally to adapt and implement best practices in sustainability reporting and assurance e.g. in the context of the INTOSAI WGEA.
- International Training Exchanges: Participate in international training and exchange programs to enhance the capabilities of SAI staff in dealing with global sustainability challenges.

Moreover, this research explored in detail the roles of SAIs either implementing sustainability reporting themselves by leading by example or assuring the sustainability reports of public sector organizations. It also suggested checklists and templates for SAIs to actively start

implementing and assuring sustainability reporting to enhance accountability, transparency, and governance in the public sector. By providing credible, reliable, and standardized reports, SAIs ensure efficient resource use, compliance with regulations, and alignment with sustainability goals. This fosters public trust, detects and prevents fraud, and promotes continuous improvement in sustainability practices, ultimately contributing to better governance and sustainable development.

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REFERENCES

- ACCA, IDI, and IFAC (2023). *Preparing for Sustainability Reporting and Assurance – An Introduction for the Public Sector Globally*. ACCA
- Adams, C. A., Alhamood, A., He, X., Tian, J., Wang, L., and Wang, Y. (2022). *The Double-Materiality Concept – Application and Issues*. GRI
- Adams, C. A. (2023). *Public Sector Sustainability Reporting: Time to Set It Up*. CIPFA
- 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), 1–28. <https://doi.org/10.11144/javeriana.cc20-49.psss>
- BlackRock (2020). *Sustainability Goes Mainstream – 2020 Global Sustainability Investing Survey*. BlackRock.
- Bunnag, C. (2023, June 18). *The Roles of SAIs in Public Sector Sustainability Reporting* (C. Wongrusmeeduan, Interviewer).
- CDP. (2022a). About us - CDP. Retrieved from www.cdp.net website: <https://www.cdp.net/en/info/about-us> [Accessed 15 April 2024]
- CDP. (2022b). CDP Scores Explained - CDP. Retrieved from www.cdp.net website: <https://www.cdp.net/en/scores/cdp-scores-explained> [Accessed 15 April 2024]
- CDP. (2024). CDP's corporate disclosure frameworks alignment. Retrieved from www.cdp.net website: <https://www.cdp.net/en/2024-disclosure/disclosure-frameworks-and-standards> [Accessed 15 April 2024]
- Channuntapipat, C. (2024, June 19). *The Roles of SAIs in Public sustainability Reporting* (C. Wongrusmeeduan, Interviewer).
- CIPFA (no date). *Sustainability Reporting: The Public Sector as Regulator and Reporter*. <https://www.cipfa.org/cipfa-thinks/insight/the-public-sector-as-regulator-and-reporter> [Accessed 8 March 2024]
- CIPFA. (2021). *Evolving Climate Accountability: A Global Review of Public Sector Environmental Reporting Title 2 CIPFA | Sustainability Report 2021*. Retrieved from <https://www.cipfa.org/-/media/files/publications/cipfa-report-evolving-climate-accountability.pdf>
- External Reporting Board (2023). *Aotearoa New Zealand Climate Standards*. <https://www.xrb.govt.nz/standards/climate-related-disclosures/aotearoa-new-zealand-climate-standards/> [Accessed 13 March 2024]
- Farneti, F., & Guthrie, J. (2009). Sustainability reporting by Australian public sector organisations: Why they report. *Accounting Forum*, 33(2), 89–98. <https://doi.org/10.1016/j.accfor.2009.04.002>
- Farneti, F., & Siboni, B. (2011). An analysis of the Italian governmental guidelines and of the local governments' practices for social reports. *Sustainability Accounting, Management and Policy Journal*, 2(1), 101–125. <https://doi.org/10.1108/20408021111162146>

- Foster, B. and Tabit, D. (2019). *As Demand for ESG Investing Grows, So Too Does the Need for High-Quality Data*. <https://www.bloomberg.com/professional/blog/demand-esg-investing-grows-need-high-quality-data/> [Accessed 8 March 2024]
- GFANZ (2021). *Amount of Finance Committed to Achieving 1.5°C Now at Scale Needed to Deliver the Transition*. <https://www.gfanzero.com/press/amount-of-finance-committed-to-achieving-1-5c-now-at-scale-needed-to-deliver-the-transition/> [Accessed 8 March 2024]
- 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), 404–428. <https://doi.org/10.1108/ijpsm-04-2015-0064>
- GRI. (2004). *Public Agency Sustainability Reporting A GRI Resource Document In Support of the Public Agency Sector Supplement Project*. Retrieved from https://www.aeca.es/old/comisiones/rsc/documentos_fundamentales_rsc/gri/resource_documents/gri_public_agency_resource_document.pdf
- Guthrie, J., & Farneti, F. (2008). GRI Sustainability Reporting by Australian Public Sector Organizations. *Public Money & Management*, 28(6), 361–366. <https://doi.org/10.1111/j.1467-9302.2008.00670.x>
- HM Treasury. (2023). *TCFD-aligned disclosure*. Retrieved from https://assets.publishing.service.gov.uk/media/65f99e23aa9b76001dfbdae5/TCFD-aligned_disclosure_application_guidance_-_Phase_1.pdf
- IFRS. (2022). *International Sustainability Standards Board*. Retrieved from IFRS website: <https://www.ifrs.org/groups/international-sustainability-standards-board/>
- IFRS. (2023). *IFRS - IFRS S2 Climate-related Disclosures*. Retrieved from www.ifrs.org website: <https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/ifrs-s2-climate-related-disclosures/#:~:text=IFRS%20S2%20requires%20an%20entity>
- INTOSAI (no date). *Sustainable Development Goals – SDGs*. <https://www.intosai.org/focus-areas/intosai-un-sdgs/sais-a-regions.html> [Accessed 17 May 2024]
- INTOSAI WGEA (2013). *Sustainability Reporting: Concepts, Frameworks and the Role of Supreme Audit Institutions*. INTOSAI WGEA
- INTOSAI WGEA (2019). *Environmental Audit and the Sustainable Development Goals: A Discussion Paper*. INTOSAI WGEA
- IPSASB (2022). *Advancing Public Sector Sustainability Reporting (Consultation Paper)*. IPSASB
- IPSASB. (2023). *IPSASB Begins Development of Climate-Related Disclosures Standard for the Public Sector | IPSASB*. Retrieved from www.ipsasb.org website: <https://www.ipsasb.org/news-events/2023-06/ipsasb-begins-development-climate-related-disclosures-standard-public-sector>
- IPSASB. (2024, June 11). *IPSASB Developing the First Public Sector Sustainability Reporting Standard with Support from the World Bank | IPSASB*. Retrieved July 9, 2024, from www.ipsasb.org website: <https://www.ipsasb.org/news-events/2024-06/ipsasb-developing-first-public-sector-sustainability-reporting-standard-support-world-bank>
- The Johannesburg Accords (2010). INTOSAI

- Kharbush, H. (no date). *Sustainability Reporting – Time for the Public Sector to Act*. <https://www.pwc.co.tz/press-room/sustainability-reporting.html> [Accessed 5 March 2024]
- KPMG (2024). *Why the Public Sector must Take the Lead in Sustainability Reporting*. KPMG International
- Lambauer, D. (2024). *Auditing Government’s Approach to Climate Change – A Perspective from the UK National Audit Office* [PowerPoint presentation]. 26th INTOSAI Symposium, 16 April, Vienna.
- Lozano, R., Nummert, B., and Ceulemans, K. (2016). Elucidating the relationship between Sustainability Reporting and Organisational Change Management for Sustainability. *Journal of Cleaner Production*, 125, 168-188.
- Ministry for the Environment New Zealand (2023). *Mandatory Climate-Related Disclosures*. <https://environment.govt.nz/what-government-is-doing/areas-of-work/climate-change/mandatory-climate-related-financial-disclosures/> [Accessed 13 March 2024]
- Stigter, R. (2012). *Sustainability Reporting by Public Agencies: Content, Drivers and Stakeholders* (Master Thesis). Erasmus University Rotterdam. Retrieved from https://thesis.eur.nl/pub/11622/M381-Stigter_308857.pdf
- Stobbs, W. (2024, January 11). *Adopting TCFD recommendations in the public sector (part 2) – Actuaries in government*. Retrieved from actuaries.blog.gov.uk website: <https://actuaries.blog.gov.uk/2024/01/11/adopting-tcfid-recommendations-in-the-public-sector-part-2/>
- Suntharanurak, S. (2024). *Sustainability Report Assurance and the Modern Role of Supreme Audit Institutions*. <https://medium.com/@sutthisun/sustainability-report-assurance-and-the-modern-role-of-supreme-audit-institutions-67a59a26d09b> [Accessed 8 March 2024]
- TCFD. (2022). *Task Force on Climate-related Financial Disclosures 2022 Status Report*. Retrieved from <https://assets.bbhub.io/company/sites/60/2022/10/2022-TCFD-Status-Report.pdf>
- UNFCCC (no date). *Biennial Transparency Reports*. <https://unfccc.int/biennial-transparency-reports> [Accessed 6 March 2024]
- Uyar, A., Kuzey, C., and Kilic, M. (2021). Testing the Spillover Effects of Sustainability Reporting: Evidence from the Public Sector. *International Journal of Public Administration*, 44(3), 231-240.
- Wissenburg, J., Dalhuijsen, E., Baldi, F., and Power, S. (2021). *Introduction to Commitments and Measurement Methods for Private Financial Sector Portfolio Alignment with the Paris Agreement – Summary for Policymakers*. Coalition of Finance Ministers for Climate Action, Washington, DC. Coalition of Finance Ministers for Climate Action.
- World Bank Group. (2016). *Focusing on value creation in the public sector*. Retrieved from <https://integratedreporting.ifrs.org/wp-content/uploads/2016/09/Focusing-on-value-creation-in-the-public-sector- vFINAL.pdf>
- World Bank Group (2021). *Sovereign Climate and Nature Reporting: Proposal for a Risks and Opportunities Disclosure Framework*. EFI Insight-Finance. Washington, DC: World Bank.

World Economic Forum (2019). *ESG Ecosystem Map*.
<https://widgets.weforum.org/esgecosystemmap/> [Accessed 8 March 2024]

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