

**An Exploration of Sustainability Reporting Requirements under
International Financial Reporting Sustainability Standards S1 and
S2, and the Impacts and Challenges for External Auditors**

Research dissertation presented in partial fulfilment of the requirements
for the degree of
MSc in Accounting & Finance Management

Griffith College Dublin

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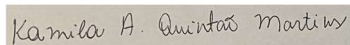
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I certify that the dissertation entitled: **An Exploration of Sustainability Reporting Requirements under International Financial Reporting Sustainability Standards S1 and S2, and the Impacts and Challenges for External Auditors**

submitted for the degree of: **MSc in Accounting & Finance Management** is the result of the my own work and that where reference is made to the work of others, due acknowledgment is given.

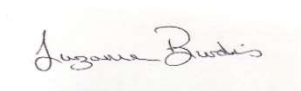
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Dedication

This work is dedicated to my beloved family. A special feeling of gratitude to my mother, Maria José, who has supported me throughout this process, even from a distance, with constant love and prayers; to my late father, José Quintão, a man of simple means but great pride in my achievements, whose enduring belief in my potential continues to guide me; and my husband, João Paulo, who is always there for me, even on the toughest days. I could not have completed my master's degree without you.

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Above all, I am profoundly grateful to God for granting me the strength, wisdom, and resilience to see this journey through to completion. I know I have come this far only by His grace, and I am grateful for the blessings He has bestowed upon me. All that I have, all that I am, and all that I do is because of and for Him.

I especially thank my family and friends for their constant support and encouragement during this journey. I am truly grateful for the cheerfulness and companionship they have provided, which has helped me navigate the challenges and celebrate the milestones of this endeavour. Thanks for always believing I could achieve anything.

Finally, I would like to extend my sincere thanks to all the study participants for their invaluable contribution to this research, and to my supervisor, Suzanne Burdis, for her guidance, patience, and expertise. I deeply appreciate the commitment to excellence, which ensured the quality of this work.

Abstract

This research investigates the complexities external auditors encounter when providing assurance on sustainability reports under IFRS S1 and IFRS S2. As the global sustainability agenda intensifies, driven by increasing awareness of the risks associated with unsustainable business practices, companies face growing pressure to enhance the transparency and accountability of their actions. In response, new reporting obligations, including IFRS S1 and S2 standards, have been introduced to standardise sustainability disclosures and hold businesses accountable for their environmental and social impacts. The study explores the challenges associated with sustainability reporting and assurance, by examining the requirements of IFRS S1 and S2, alongside the practical difficulties associated with auditing sustainability disclosures. While sustainability reporting has been extensively studied from various perspectives, the specific audit challenges that arise with the introduction of these standards have been relatively little explored. This subject is still emerging but is anticipated to grow in importance as IFRS S1 and S2 become mandatory. To investigate these challenges, this study adopts an exploratory qualitative approach, employing an inductive method. The research is grounded in a comprehensive literature review and empirical data collected through semi-structured interviews with audit practitioners in the field. The findings reveal critical issues relating to gaps in auditor skills and knowledge, a gap between sustainability report users' expectations and audit purpose, and challenges posed by the standards' requirements and client practices that adversely affect audit performance. The study positively indicates the credibility that assurance reports on the sustainability disclosures can provide, while additionally identifying potential ethical and independence threats inherent in the assurance process. To address these issues, the study proposes recommendations such as investing in auditor training, increasing reliance on the use of sustainability experts, developing audit firm capabilities, and leveraging technology to enhance audit effectiveness. This research contributes to the field of sustainability reporting and auditing, by providing empirical evidence on IFRS S1 and IFRS S2 and the challenges when auditing compliance with these standards, helping to fill a critical gap in the literature and enrich the understanding of the challenges auditors face.

Keywords: Exploration. Sustainability reporting. International Financial Reporting Sustainability Standards S1 and S2. External auditors. Challenges.

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List of Abbreviations

ESG:	Environmental, Social and Governance
IFRS:	International Financial Reporting Standards
CSR:	Corporate Social Responsibility
TBL:	Triple Bottom Line
3Ps:	Planet, People, and Profit
SD:	Sustainability Development
SASB:	Sustainability Accounting Standards Board
ISSB:	International Sustainability Standards Board
CDSB:	Climate Disclosure Standards Board
VRF:	Value Reporting Foundation
IR:	Integrated Reporting
TCFD:	Task Force on Climate-Related Financial Disclosures
GRI:	Global Reporting Initiative
ESRS:	European Sustainability Reporting Standards
IASB:	International Accounting Standards Board
CSRD:	Corporate Sustainability Reporting Directive
IAS:	International Accounting Standards
ISA:	International Standards on Auditing
ISAE:	International Standard on Assurance Engagements
IAASB:	International Auditing and Assurance Standards Board
IESBA:	International Ethics Standards Board for Accountants
SME:	Small and medium-sized enterprises

1 Introduction

1.1 Overview

Climate change, environmental degradation, and social inequality are increasingly pressing concerns for investors, governments and stakeholders alike. As the effects of these issues become more evident, there is growing pressure on businesses to address their roles in contributing to sustainability and minimise negative impacts on the environment and society while promoting economic growth. Failure to integrate sustainable practices into operations can expose companies not only to risks associated with environmental and social harm but also to significant risks, such as reputational damage, regulatory liabilities, and financial losses. In response, companies have embraced sustainability reporting to mitigate these risks and demonstrate their commitment to sustainability.

The evolution of sustainability reporting has marked an important shift in corporate accountability, emphasising the necessity for transparent and reliable disclosures on environmental, social and governance (ESG) matters. However, the significant demand for sustainability reporting has also led to the rise of disclosure issues such as information asymmetry and claims of greenwashing. Initiatives have emerged to contain threats to the environment and to promote better practices for a more sustainable future, for example, the case of the European Green Deal, a set of policies and strategies with the purpose of making the European continent climate-neutral by 2050 (European Commission, 2021). As part of the proposed actions, companies are required to publish reports on their sustainability performance (European Union, 2023).

In this context, complementing these efforts, the International Financial Reporting Standards (IFRS) Foundation has introduced the International Financial Reporting Sustainability Standards (IFRSS,) IFRS S1 and IFRS S2, setting comprehensive regulatory requirements for sustainability-related financial and non-financial disclosures. These sustainability reporting standards aim to provide stakeholders with consistent, comparable and reliable sustainability information, enabling informed stakeholder decision-making and fostering sustainable business practices (IFRS, 2023a; IFRS, 2023b).

The introduction of IFRS S1 and IFRS S2 represents a key milestone in sustainability reporting. Historically, sustainability reporting was often voluntary and lacked

standardised regulatory requirements, leading to substantial variability in the quality and scope of disclosures. The IFRS Foundation's involvement has brought a level of rigour and standardisation previously seen primarily in corporate financial reporting. IFRS S1 outlines the general requirements for sustainability-related financial information, ensuring that companies disclose material information that reflects their sustainability risks and opportunities (IFRS, 2023a). Additionally, IFRS S2 provides specific regulatory requirements for climate-related disclosures, including information on governance, strategy, risk management, metrics and targets related to climate change (IFRS, 2023b).

The adoption of these standards is driven by the growing recognition of the importance of sustainability practices in organisational value creation and risk management. Investors and other stakeholders are increasingly pursuing comprehensive and reliable information on how companies manage their ESG risks and opportunities. This demand is not only about transparency but also about enabling stakeholders to make informed decisions that consider the long-term sustainability of businesses (Bebbington *et al.*, 2017). Likewise, external assurance on sustainability reports is required in order to ensure that the data disclosed is independently verified and meets the exigencies of the standards, therefore enhancing trust and confidence among stakeholders.

However, external auditors face numerous challenges in providing assurance on compliance with IFRS S1 and IFRS S2. Unlike financial data, which is most often quantitative and follows well-established accounting principles, sustainability data can be both qualitative and quantitative and may involve subjective assessments. The complexity of sustainability data, the evolving nature of reporting standards and the diverse expectations of stakeholders creates a demanding environment for auditors (Krasodomska *et al.*, 2021; Marton *et al.*, 2023). The present study seeks to examine these challenges in detail and propose mechanisms to enhance the assurance process, therefore contributing to the credibility and reliability of the assurance report and, by extension, sustainability reports and practices.

The evolving nature of sustainability reporting standards may impact auditors' work. As sustainability issues and stakeholder expectations evolve, so too do the standards and regulatory requirements for reporting. This constant evolution requires auditors to update their knowledge and adapt their assurance practices continuously.

Furthermore, there are diverse expectations from stakeholders regarding sustainability disclosures. This diversity along with the misunderstanding and misconceptions of the role

and objectives of the auditing functions leads to the rise of the expectation gap (Teck Heang Lee *et al.*, 2009). Managing the expectations of different stakeholders is a challenge in the assurance process.

In conclusion, while the adoption of IFRS S1 and IFRS S2 represents substantial progress in sustainability reporting, it also presents several challenges for external auditors tasked with providing assurance on these reports' compliance with the standards. Addressing these challenges requires a comprehensive understanding of the reporting requirements, continuous adaptation to evolving standards and effective mechanisms to ensure the reliability and trustworthiness of assurance provided on sustainability disclosures. This study aims to explore these challenges in detail and propose practical solutions to enhance the assurance process, therefore contributing to the overall credibility and reliability of sustainability reports and practices.

1.2 Research Purpose

The primary purpose of this research is to investigate the difficulties encountered by external auditors in providing assurance on compliance with IFRS S1 and IFRS S2. This examination is critical as it highlights the challenges in obtaining assurance whether the sustainability disclosures are free from material misstatement or not, which is increasingly significant for investors, regulators, and other stakeholders.

Focusing on IFRS S1 and IFRS S2, this research seeks to provide a detailed understanding of the specific requirements and expectations outlined in these standards. This understanding is essential for identifying the difficulties auditors face. Additionally, the research aims to explore the broader implications of these challenges on the credibility and reliability of sustainability reporting.

The study also intends to offer practical recommendations for enhancing the assurance process. These recommendations will critically assess the identified challenges and suggest mechanisms that external auditors can implement to improve the effectiveness of their assurance activities. By doing so, the research aims to support the broader goal of enhancing transparency and trust in sustainability reporting, thereby contributing to the overall accountability and sustainability of businesses.

In summary, this research aims to provide a comprehensive analysis of the challenges faced by external auditors in providing assurance on compliance with IFRS S1 and IFRS S2.

It will also offer auditors practical solutions to overcome these challenges, thus contributing to the enhancement of sustainability reporting practices and the overall credibility of corporate sustainability disclosures.

1.3 Research Objective

The primary aim of this research is to explore the complexities external auditors face when providing assurance on sustainability reports in compliance with IFRS S1 and IFRS S2. By exploring the specific requirements of these standards and the challenges associated with auditing sustainability disclosures, the study seeks to offer a comprehensive analysis that can inform both practice and policy. Ultimately, the research aims to enhance the credibility and reliability of sustainability reporting by proposing actionable recommendations for auditors.

The research is guided by the following objectives:

- Critically analyse the reporting requirements under IFRS S1 and IFRS S2.
- Investigate the challenges for external auditors in offering assurance on compliance with IFRS S1 and IFRS S2.
- Recommend appropriate mechanisms for external auditors to overcome the challenges.

1.4 Significance of the Study

The significance of this study lies in its potential to improve the quality and reliability of sustainability reporting, through a detailed examination of the challenges faced by external auditors and the development of practical recommendations to overcome these challenges.

There are many reasons for the significance of this study in the present day:

Firstly, it addresses a timely and relevant issue as sustainability reporting gains prominence in the corporate world. The increasing importance of sustainability and ESG factors in risk management, corporate governance and investment decision-making, means that reliable and consistent sustainability disclosures are crucial. This research contributes to the ongoing efforts to improve the quality and reliability of sustainability reporting.

Secondly, the findings of this study will be valuable for external auditors by providing insights into the common difficulties they face in the assurance process. By identifying these challenges, the research can inform the professional development of auditors, enhancing their ability to provide effective assurance on sustainability disclosures.

Third, the study contributes to the existing body of knowledge on sustainability assurance provision. While there is a growing body of literature on sustainability reporting, there is still limited research focused specifically on the assurance process for IFRS S1 and IFRS S2. This study proposes to fill this gap by providing a detailed analysis of the practical implications of auditing these standards for external auditors. The recommendations derived from this research can inform policy and practice, aiding standard-setting bodies, audit firms and corporations in refining their approaches to sustainability reporting and assurance.

Finally, the research has broader implications for stakeholders such as investors, regulators, and the general public. Reliable and assured sustainability disclosures are critical for informed decision-making and for holding companies accountable for their sustainability impacts. By enhancing the assurance process, this study contributes to the overall goal of promoting transparency, accountability and sustainable business practices.

1.5 Structure of the Study

This dissertation is structured to address the research objectives and provide a clear narrative of the challenges and proposed recommendations in the provision of assurance on sustainability reports. The chapters are organised as follows:

Chapter 1 - Introduction: This chapter outlines the research background, purpose, objectives, significance, and structure of the study. It sets the stage for the entire dissertation by providing context and explaining the rationale behind the research.

Chapter 2 - Literature Review: This chapter reviews existing literature on sustainability reporting standards, particularly IFRS S1 and IFRS S2, and the challenges faced by external auditors in this domain. It critically analyses theoretical frameworks, previous research findings, and key concepts relevant to sustainability reporting and assurance provision.

Chapter 3 – Methodology and Research Design: This chapter describes and justifies the research design, methods of collecting data, and analyses approaches applied to investigate the research topic. It explains the rationale behind the chosen methodology and

discusses the sampling strategy, data sources, and procedures for data collection and analysis. This chapter also addresses the ethical considerations of the study.

Chapter 4 – Presentation and Discussion of the Findings: This chapter presents the findings resulting from data collection, as well as discusses those findings in the context of the research objectives, with the support of the literature review.

Chapter 5 - Conclusion: This chapter concludes the dissertation by summarising key insights from the research, highlighting the contributions and limitations of the study, and suggesting areas for future research in the same and related areas.

2 Literature Review

2.1 Overview

This chapter critically analyses the existing literature and the conceptual framework relevant to this study. It is segregated into five sections that are organised to assist in achieving the research objectives.

The first section explores the sustainability landscape and the aspects contributing to the increasing relevance of sustainability reporting. The second section explains the evolution of sustainability reporting towards the introduction of IFRS S1 and S2, including significant milestones that influenced the development of those sustainability standards. The third section encompasses the requirements under IFRS S1 and S2, split into two main subsections: conceptual foundation and core contexts. The fourth section explores the role of external auditors, and the challenges faced by them when providing assurance on sustainability reporting.

Finally, the last section provides a conceptual framework for the data collection and analysis, based on the main themes that emerged from the literature review.

2.2 Sustainability Landscape

2.2.1 Sustainability concept

The concept of sustainability is often related to the Report of the World Commission on Environment and Development (WCED), published under the title "Our Common Future", which defines sustainability development as the ability to "meet the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987, p.43). This concept was introduced as a process of effort emphasising the balance of economic growth, environmental resources and social equity, aimed at both present and future needs. The ethical approach of sustainability to shape the future is based on the presumption that natural resources are finite and our attitudes in the present have impacts in the long term (Godemann and Michelsen, 2011).

Studies predominantly describe sustainability as comprised of three main pillars: environmental, social, and economic. The environmental pillar involves natural aspects, such as climate, forests and water, the social pillar treats people's relationships with

stakeholders and the factors affecting them, while the economic pillar aims at capital aspects. The economic category, also relates to corporate governance, reflecting the management system, its processes, structures, and practices within an organisation.

Even though the concept of three pillars has been vastly investigated in the literature, there is no common view on the model. Purvis *et al.* (2019) argue that these three pillars are equally seen as categories. For Giddings *et al.* (2002), the economy is dependent on the social and environment, while social is dependent on the environment. They are not unified entities; they are separate although connected.

Over the past few decades, the concept of sustainability has evolved driven by the significant growth in awareness of society, government, and corporations on sustainability issues. The idea of sustainability, as it is known today, has emerged in response to environmental and social concerns, economic growth, and ethical issues (Kopinina and Blewitt, 2018).

2.2.2 *Corporate Sustainability and Reporting*

Corporations play an important role in the sustainability landscape. Henriques and Richardson (2013) argue that despite the global sustainability crisis arising from social and political sources, corporations have the resources, motivation, and global representation to achieve sustainability.

Within this context, sustainability has become a major part of corporation agendas. Bebbington *et al.* (2014) emphasise that sustainability has evolved from being a peripheral activity to a central concern for businesses globally. Terms linking businesses to sustainability matters such as CSR (Corporate Social Responsibility), TBL (Triple Bottom Line), SD (Sustainability Development), 3Ps (Planet, People, and Profit), and Environmental, Social, Governance (ESG), have been significantly discussed. McWilliams (2019) states that the definitions might somewhat vary, however, the main concept is that companies increasingly recognise responsibilities to the environment and society and engage in activities, either by strategy or altruism, that contribute to social good, beyond legal requirements or profit maximisation targets.

Furthermore, Kofi Annan (2004) in the report “Who Cares Wins: Connecting Financial Markets to a Changing World” states that engaging in ESG-related practices contributes to enhancing companies’ performance as well as having a positive impact on reputation,

ultimately leading to an increase in share value. Consumers and investors increasingly prefer companies that demonstrate ethical and sustainable practices, influencing brand reputation and customer loyalty. Likewise, not considering ESG aspects may have an adverse effect on a company's value, for example, polluting the environment by not correctly disposing of waste and recycling could save costs, however, it is attached to future regulatory, reputational, financial and economic risks (Dechow, 2023).

Sustainability aspects have become relevant to consider in the decision-making process. Lynch and Lynch (2022) argue that non-financial data is increasingly demanded from stakeholders along with financial data, to assist in making financial decisions. From the point of view of the stakeholders, their concerns relate to understanding companies' performance not only in economic aspects but also with respect to social and environmental issues (Lynch and Lynch, 2022). Therefore, investors require more comprehensive, comparable, and reliable ESG-related information to assess risks and opportunities related to sustainability.

The growing emphasis on transparency and accountability requires companies to commit to a strategy and operations that are environmentally, socially, and economically responsible while managing the various stakeholders' needs.

Companies are being motivated to communicate their sustainability activities and strategies due to regulatory incentives, internal benefits, and external societal pressures. Bebbington *et al.* (2014) argue that sustainability reporting is essential for organisations to communicate their ESG impacts and strategies to stakeholders, including investors, regulators, employees, and customers. This transparency is crucial for stakeholders to make informed decisions and ensure companies take responsibility for their actions. Additionally, transparent reporting could lead to competitive advantages, such as improved stakeholder relations and increased investor confidence. Key drivers behind the report on sustainability practices include regulatory pressures, enhancing credibility, improving reputation, and responding to stakeholder demands (Kolk, 2005).

2.2.3 *Challenges in Sustainability Reporting*

The sustainability reporting landscape is continuously evolving. Several writers, academics, and regulators have been monitoring its developments. This has contributed to a comprehensive understanding of the challenges faced by companies in the sustainability reporting scenario.

Despite the advancements, sustainability reporting still needs improvements to achieve a desired level of quality. The findings disclosed by the Sustainability Accounting Standards Board (SASB) in its Conceptual Framework Report originally issued in February 2017, reveal that the market is provided with information that is not adequate for the decision-making process when companies do not commit to a sustainability disclosure compliant approach (D'Aquila, 2018).

For Bouten and Hoozée (2015), companies struggle with integrating sustainability into core business strategies. Connecting ESG and financial activities is fundamental for efficient sustainability reporting. Moreover, the correlation between financial and non-financial performance should be included in sustainability reporting to create value for shareholders and other stakeholders (Owen, 2013).

Kolk (2005) mentions the complexity and costs associated with preparing sustainability reports. Sustainability metrics, such as environmental impact, social performance, and governance practices, are multifaceted and difficult to quantify. Certain ESG metrics involve measurement uncertainty, which could be a challenge for reaching a high degree of accuracy and completeness (D'Aquila, 2018). Furthermore, the process of collecting and validating sustainability data can be time-consuming and requires sufficient initiative and resources from companies, as well as the process for meeting compliance requirements, which includes contributions from third parties and reviewers, adding to the burden (Anderson and Varney, 2015).

Companies have to deal with the stakeholders' perception of greenwashing. There are concerns about the presentation of sustainability performance as overly positive without the appropriate attitudes and evidence to corroborate it (Kolk, 2005; Ali *et al.*, 2023), which would undermine trust and transparency, negatively impacting companies' reputations. According to the Investor Survey 2023 (PwC, 2024), 97% of investors in Irish companies believe that sustainability performance disclosures contain some level of greenwashing.

Further challenges involve variability of how companies report sustainability performance, which makes it difficult for comparability purposes. For D'Aquila (2018), the numerous challenges encountered within sustainability reporting are interrelated. Among them are distinct reporting methods, inconsistent measures of materiality, and boilerplate language.

2.3 The evolution of IFRS S1 and IFRS S2

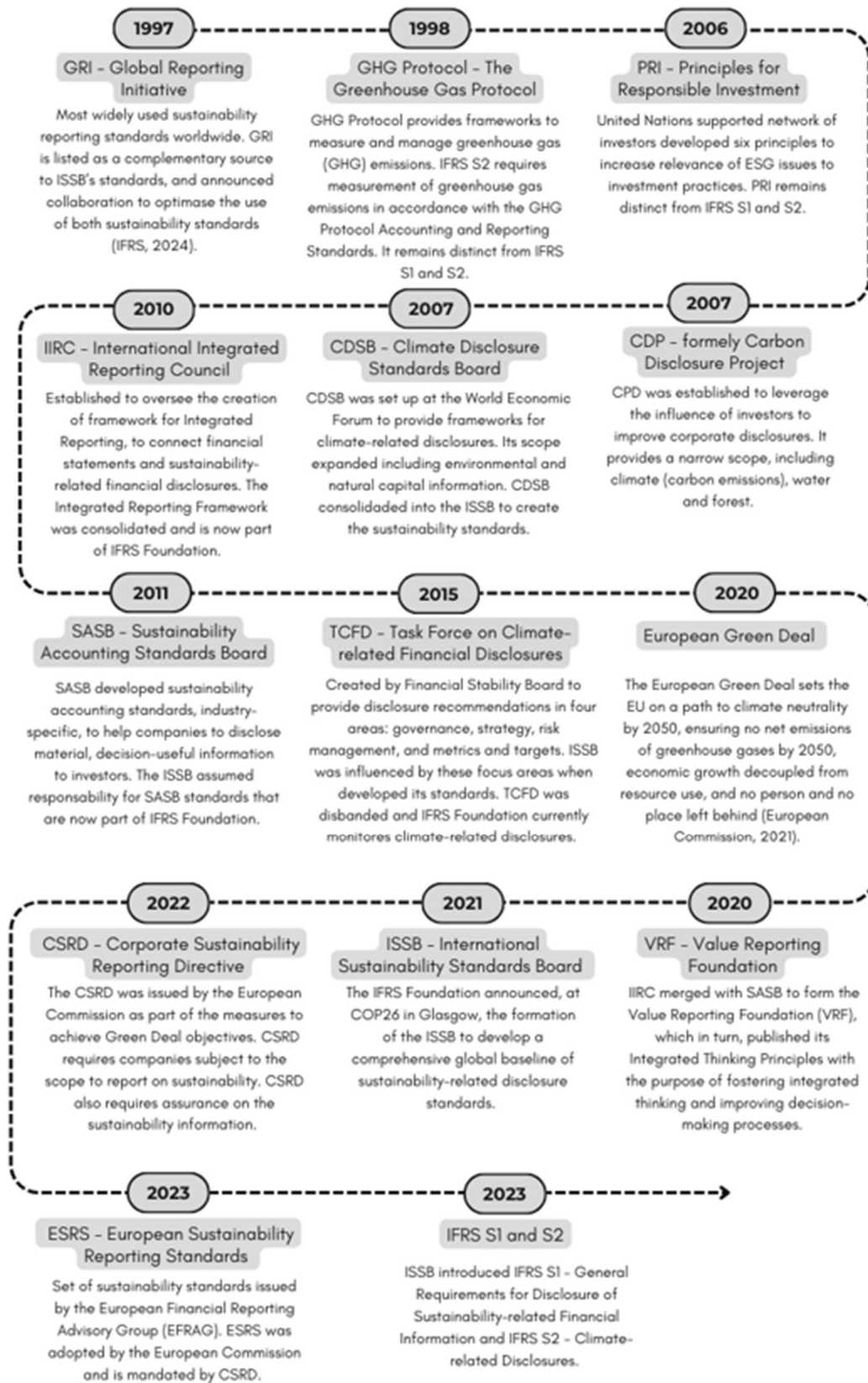
Before the introduction of IFRS S1 and S2, the scenario of sustainability reporting evolved through various initiatives and frameworks aimed at enhancing corporate transparency and accountability in addressing sustainability issues.

The evolution has involved successive, substantive transformations since its inception. Elalfy *et al.* (2021) refer to the beginning of sustainability reporting in the 1960s, when companies incorporated social performance indicators into their reporting. At that time, the attempts at social reporting were voluntarily disclosed by companies as a form of responding to responsibility towards society and the environment attributed to them (McWilliams, 2019).

However, major developments began in the 1990s increasing the popularity of sustainability reporting. Over the following years, several sustainability reporting bodies emerged to promote guidance and enhance non-sustainability reporting disclosures.

Figure 1 summarises the timeline of significant milestones with the establishment of framework providers and standard setters throughout the evolution of sustainability reporting leading towards the introduction of IFRS S1 and S2 in 2023.

Figure 1: Timeline of key milestones in sustainability reporting evolution



Source: Created by the author.

The formation of the International Sustainability Standards Board (ISSB), a new standard-setting body under the IFRS Foundation, was divulged in Glasgow at COP26 in November 2021 (IFRS, 2024b). The IFRS framework, which is widely recognised as a global standard for financial reporting, has also become a significant player in the sustainability standard reporting landscape by creating the ISSB (de Villiers *et al.*, 2024).

The ISSB comprises the merger of the Climate Disclosure Standards Board (CDSB) with the Value Reporting Foundation (VRF), assuming the responsibility for the Integrated Reporting (IR) framework, and incorporates recommendations from the Task Force on Climate-Related Financial Disclosures (TCFD) and Sustainability Accounting Standards Board (SASB) standards (SASB, 2024). According to D'Aquila (2018) and de Villiers *et al.* (2024), this initiative aims to consolidate existing standards and frameworks into a globally accepted single set of sustainability disclosure standards, to respond to the demand for consistency as well as simplification of sustainability disclosures.

Although the sustainability standards Global Reporting Initiative (GRI) and European Sustainability Reporting Standards (ESRS) remain distinct from the ISSB, they are working in collaboration to deliver full interoperability and optimise the use of those standards (EFRAG, 2024; IFRS, 2024a). Such attitude of seeking integration and harmonisation between all those relevant frameworks and standard bodies, emphasises the legitimacy of ISSB purposes. Additionally, Ali *et al.* (2023) argue that ISSB's legitimacy is determined by the strong position of the IFRS Foundation and IASB's (International Accounting Standards Board) role as an international accounting standard-setting body.

The objective of ISSB is to develop a comprehensive basis of sustainability-related disclosure standards (IFRS, 2024b). De Villiers *et al.* (2024) cite that such standards are meant to cover a range of ESG issues, as such diversity and inclusion, supply chain management, and carbon emissions. With this purpose, in 2023, ISSB released the International Financial Reporting Sustainability Standards, IFRS S1 and IFRS S2, the first two global standards for sustainability reporting. The standards shall be applied for annual reporting periods beginning on or after 1 January 2024 (IFRS, 2023a, 2023b). Certain jurisdictions legally mandate companies to report sustainability information, as in the case of the European Union that published the Corporate Sustainability Reporting Directive (CSRD) on 14 December 2022, entering into force on 05 January 2023, requiring large companies and all listed companies to adhere to the rules for the 2024 financial year, for

reports published in 2025, and these will be gradually applicable to other companies across the following years (European Union, 2023).

The creation of IFRS S1 and S2 builds on these foundational efforts, aiming to provide a comprehensive and consolidated approach to sustainability reporting that meets the interests of investors and other stakeholders. The introduction of IFRS S1 and IFRS S2 represents a relevant advancement in the integration of sustainability considerations into financial reporting.

However, IFRS S1 and S2 have been the subject of criticism, particularly concerning their priority focus on investors' interests instead of reflecting social and environmental considerations (Adams and Abhayawansa, 2022; de Villiers and Dimes, 2023; Ali *et al.*, 2023). While investors agree that companies should disclose their sustainability risks and opportunities for investment decision-making purposes, environmentalists, on the other hand, argue that disclosure should focus on holding companies responsible and accountable for reducing sustainability damages (Adams and Mueller, 2022; de Villiers *et al.*, 2024).

According to D'Aquila (2018), the ISSB faces challenges in navigating the diverse regulatory landscape and ensuring its standards are widely adopted and implemented. Collaboration and consolidation efforts with other reporting bodies and regulators will be critical to its success and long-term influence in global sustainability reporting.

2.4 The Reporting (& Assurance) Requirements for IFRS S1 & IFRS S2

The reporting requirements under IFRS S1 and S2 are designed to provide transparency and add value to sustainability disclosures by requiring companies to disclose significant sustainability-related information that could influence stakeholders' decisions.

As stated in the IFRS S1's objective, the standard aims "to require an entity to disclose information about its sustainability-related risks and opportunities that is useful to primary users of general purpose financial reports in making decisions relating to providing resources to the entity" (IFRS, 2023a). The standard further explains that useful information relevant to the needs of primary users of the reports refers to disclosures that could impact the company's finances, cost of capital, and cash flows over the short term as well as the long term.

IFRS S1 mandates that companies disclose information about their sustainability-related risks and opportunities, as well as the impact of these factors on their financial position and performance. The standard provides a complete set of sustainability-related disclosures (Financial Reporting Advisors, 2023). This includes both qualitative and quantitative information, ensuring a holistic view of the company's sustainability practices. Likewise, IFRS S2 is built on the requirements of IFRS S1 creating a thematic standard (Kampanje, 2023), addressing climate change, one specific sustainability-related topic (Global Capital, 2023). It should be emphasised that this standard is closely aligned with the recommendations of the TCFD.

To obtain a comprehensive understanding of the new standards' requirements, the next section will be divided into two parts: conceptual foundation and core content.

2.4.1 *Conceptual Foundation*

The conceptual foundation category addresses basic concepts that companies must follow through sustainability report preparation. Financial Reporting Advisors (2023) makes an analogy with the conceptual framework in accounting standards, which functions as a guide. The sustainability reporting conceptual foundation establishes principles to apply in sustainability reporting. The fundamentals are fair presentation, materiality, reporting entity, and connected information.

Fair presentation

To achieve a fair presentation, the reporting entity must comply with the standards' objective, that is to say, disclose all relevant sustainability-related (or climate-related) risks and opportunities. IFRS S1 explains that sustainability information is faithfully presented when it is complete, neutral, and accurately disclosed, and the information is enhanced when it is comparable, verifiable, timely, and understandable (IFRS, 2023a). Teixeira (2023) compares the fair presentation fundamental to those accounting standards for financial statement presentation, such as International Accounting Standards (IAS) 1 *Presentation of Financial Statements*, IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*, and IAS 7 *Statement of Cash Flows*.

Materiality

IFRS S1 (2023a), in addition, states that for sustainability-related information to be useful it should be relevant to influence the decision of users. Teixeira (2023) explains that

companies would not be expected to disclose all sustainability-related risks and opportunities, but only the ones that are assessed as significant for the purpose. Materiality judgments are contextual for each individual company and consider qualitative and quantitative aspects (Reinstein *et al.*, 2024).

Materiality is, however, a controversial topic of discussion. IFRS S1 and S2 are primarily designed to address financial materiality, as the standards focus on sustainability-related risks and opportunities that could reasonably affect the decisions of investors and other providers of financial capital. The materiality definition is aligned with the definition used in financial reporting (Financial Reporting Advisors, 2023) and prioritise investor's needs (Barker and Mayer, 2023; Millar and Slack, 2024).

However, previous studies acknowledge a perspective of impact materiality. Plochan (2023) and de Villiers *et al.* (2024) argue that the standards also apply the double materiality "outside-in" perspective, recognising the importance of broader impacts on society and the environment, to ensure that significant issues are not overlooked.

Reporting entity

The reporting entity principle requires disclosure of sustainability-related financial information for the same entities as the reporting entity for the related financial statements (IFRS, 2023a). Financial Reporting Advisors (2023) exemplifies financial statements prepared on a consolidation basis, which should report sustainability information similarly including the parent and its subsidiaries. Teixeira (2023) discusses that, in addition to the same entity, the reporting period should be equal, published at the same time, and on the same terms, as the financial statements. These are essential tenets of connecting information, which links to the following section.

Connected information

Lastly, sustainability disclosures should allow the users to understand the connections between the various risks and opportunities and different core contents within its sustainability disclosures, as well as the connection across its related financial statements (IFRS, 2023a). Although the connected information concept is not explicit in financial reporting, it should not be difficult as connectivity is inherent to financial information and an appropriate presentation between various data sets (Financial Reporting Advisors, 2023). For Teixeira (2023), the fact that connected information is presented as fundamental

to sustainability-related financial disclosures is important to generate integrated reporting and thinking.

2.4.2 Core Contents

This section is divided into four core content elements for reporting purposes under IFRS S1 and S2, as discussed in the next subtopics.

Governance

The requirement to disclose governance aspects aims to provide information to allow investors and other users to understand the company's internal processes for the management of sustainability issues.

Khatib (2024) found that governance is likely to have a greater impact on improving performance and building trust between stakeholders than the other three aspects, as disclosing governance information may strengthen roles and responsibilities, and the quality of information dissemination within the company. Conversely, the study concluded that governance was assessed as the least thoughtful aspect, given it is considered a basic system for managing companies.

In Murcia (2024) and Kusuma and Gani (2024) studies, analyses of results indicate that, in general, companies already disclose sustainability-related governance aspects, fulfilling the requirements under IFRS S1 and S2. For Reinstein *et al.* (2024), from the governance aspect, companies may need to improve their governance system, processes and procedures, and redesign internal controls, not only to comply with the requirements but especially to increase the company's value for stakeholders.

Strategy

The strategy aspect requires disclosures of companies' strategies, risks and opportunities and the anticipated and current effects on finance and performance within the business model and value chain (IFRS, 2023b).

Moreover, IFRS S2 (2023b) includes specific details related to climate-related risks and opportunities, such as direct and indirect efforts and the plans to respond to those risks and opportunities, as well as plans for how to achieve climate-related targets. Moreover, the standard IFRS S2 instructs companies to consider the application of cross-industry metrics and industry-based metrics.

Previous studies reveal that strategy factors are quite challenging to disclose. According to the results of a Kusuma and Gani (2024) study, information disclosed under the strategy aspect showed deficiencies in following IFRS S1 and IFRS S2 requirements, particularly regarding the impacts of risks and opportunities on companies' performance, and the allocation of the strategies outlined for period. The study concluded that the reason for the lack of disclosure is companies' carefulness in reporting information when it is unfavourable and may influence stakeholders' decision-making negatively.

Strategy, in addition, requires an assessment of the companies' resilience to adapt to sustainability risks and uncertainties. In the Khatib (2024) study, results show concerns about the resilience topic. Its analysis indicates that resilience disclosure is viewed not as a strategic component, but as a detailed action plan element that might expose information to competitors. In that case, such disclosure would become a disadvantage to the reporting company.

For Murcia (2024), strategy is crucial from the users' perspective so that they are able to understand the sustainability issues affecting the company, therefore, the strategy aspect needs to be presented in connection with the business model. Furthermore, the study shows that, within the topics analysed, the impact of risks and opportunities on financial performance was the least disclosed item.

Risk Management

To achieve the risk management requirement, companies shall disclose the policies and processes for identifying, assessing, prioritising and monitoring sustainability risks, along with the relevant inputs, parameters, and scenario analysis where applicable (IFRS, 2023a, 2023b). "To the extent that the company uses substantially the same risk management process to identify, assess and prioritise various sustainability-related risks and opportunities, it would integrate its risk management disclosures" (Global Capital, 2023).

Despite being a qualitative aspect, risk management requirements include quantitative factors such as the use of data, parameters, and scenarios considered by the company. According to Khatib (2024), input parameters were the indicators most recognised by experts, followed by information about process changes from the previous reporting period.

In the study conducted by Kusuma and Gani (2024), the results reveal that the sustainability reports analysed have not met risk management requirements under IFRS S1. The study

concluded that risk management processes may not be appropriately assessed if companies fail to identify significant sustainability-related risks. However, on the other hand, results based on the evaluation of the IFRS S2 find that companies met most of the requirements, especially because of their experience in preparing reports based on TCFD requirements.

For Murcia (2024), the company's capacity to manage risks is one of the most important pieces of financial analysis, as risks are directly linked to investment return, and it is equally relevant for sustainability purposes. The study results reveal that the analysed companies had started the use of a materiality matrix, showing sustainability issues considered material. Furthermore, the use of an integrated instead of a siloed approach was found to facilitate the risk management processes. The study also reveals that companies have incorporated sustainability risks into their risk matrix, considering the likelihood and magnitude of each risk.

Metrics and Targets

Metrics are the most complex aspect of the core contents. Within the context of sustainability, assessing risks and opportunities such as process or product damage to the environment, will ultimately have a financial impact. However, such impacts are not directly disclosed in the sustainability reporting, instead, metrics will picture how companies operate (Teixeira, 2023).

According to Mirchandani (2021), the purpose of the metrics and targets requirement is to explain how companies measure and monitor their sustainability issues. Further requirements of quantitative information include cross-industry metrics and industry-specific metrics. For Reinstein *et al.* (2024), sustainability reporting is oriented toward the future rather than past financial data, and therefore, metrics and targets should be treated in the same manner.

Global Capital (2023) and Financial Reporting Advisors (2023) explain that sustainability reporting can include metrics and targets set internally by the board of management, and externally, by law and regulation. For the metrics developed internally, companies must provide additional information about how the metrics are defined.

According to Murcia (2024), disclosing metrics and targets is not new in the sustainability reporting landscape. The study found that most of the reports in scope presented metrics and targets, both qualitative and quantitative, for sustainability-related risks and

opportunities. It concludes that companies have already been following GRI standards, which contain a number of metrics on different topics, and SASB standards, which include sustainability indicators across various sectors.

On the other hand, Kusuma and Gani (2024) argue that, despite the existing standards, disclosure of sustainability measurements is still an evolving practice. The study reveals that sustainability reports are far from meeting metrics and target requirements under IFRS S1 and S2. It points out deficiencies related to the methods used to calculate metrics and inputs for their calculation, detailed industrial metrics along with comparisons with the company, and insufficient information regarding cross-industry metrics.

2.5 The Role of External Audit

Regulatory developments and investor demands further underscore the importance of sustainability reporting and assurance. Governments and regulatory bodies in many countries are increasingly mandating sustainability disclosures, reflecting a recognition that such information is vital for market stability and long-term economic growth. For instance, as approached previously, sustainability reporting assurance is now mandatory under the CSRD requirements.

However, even before it became mandatory, some companies already published their sustainability reports following GRI and SASB standards, accompanied by third-party verification. According to Dalla Via and Perego (2020), the demand for assurance services for non-financial reporting has risen over the last number of years alongside the development of the sustainability reporting landscape.

From the stakeholders' perspectives, there is a perception that companies may not disclose all information if it could have a negative impact on their reputation (Martínez *et al.*, 2017). For Friske *et al.* (2023), although companies meet the requirements of the standards, it might not be sufficient to gain credibility in the view of stakeholders. Regardless of the reason, the literature emphasises the benefits of having independent, objective assurance of the legitimacy of sustainability reporting.

The need for assurance on sustainability reporting results from information asymmetry between companies and stakeholders (Boiral *et al.*, 2019; Friske *et al.*, 2023), and aims to add credibility and transparency for stakeholders investing in these reports (Owen *et al.*, 2000; Manetti and Becatti, 2009; Hummel *et al.*, 2019). A Friske *et al.* (2023) study,

conducted analyses of sustainability reporting, revealing that external audits are positively associated with the perceived credibility of reports.

External auditors play a crucial role in providing assurance on sustainability reports. Nangle (2022) argues that auditors could be the 'gatekeeper' of this era. The rationale for emphasising the auditor's role in sustainability reporting assurance is justified by the nature of the auditing work itself.

Despite targeting different subject matter information, audit and assurance engagements aim to obtain reasonable assurance (or limited assurance) that the subject information is free from material misstatement, according to the International Standard on Auditing (ISA) 200 on how to conduct financial statement audits (IAASB, 2008), and the International Standard on Assurance Engagements (ISAE) 3000 for assurance engagements (IAASB, 2013). Therefore, the same auditor's objective could be applied to sustainability reporting. Nangle (2022) argues that auditors possess skills, knowledge and disciplines that could be transferred to assess sustainability reporting, such as risk assessment and materiality, both mentioned in the ISSB's standards. According to Wallage (2000), auditors are multidisciplinary professionals and possess the necessary skills to verify data and report to those outside the company.

The role of auditors in performing assurance work on sustainability reporting is the subject of ongoing discussions in the literature, yet with different results.

Auditors shall comply with requirements of professional skepticism, professional judgment, sufficient appropriate audit evidence and audit risk when conducting audits as stated by the ISA 200 (IAASB, 2008). Additionally, they must comply with the IESBA (International Ethics Standards Board for Accountants) Code of Ethics for Professional Accountants to ensure assurance quality, which requires professional competence, independence, and objectivity. These principles have been investigated for an understanding of their potential constraints within the context of sustainability reporting assurance. Most critiques emphasise ethical concerns of conflicts of interest, lack of independence and managerial capture of information (Owen *et al.*, 2000; Hummel *et al.*, 2019; Boiral *et al.*, 2019).

Additionally, previous studies discuss the pros and cons of auditors providing assurance on sustainability reporting. Auditors have rigorous procedures and high levels of quality controls, however, due to the broad range of assurance services in scope, they may not be

as technically expert and specialised as non-auditor assurance providers (Perego and Kolk, 2012; Hummel *et al.*, 2019).

Regarding the quality aspect, debates in the literature revolve around the relationship between assurance quality and assurance provided by auditors. Some studies advocate that the level of quality is higher when the assurance is provided by auditing and accounting firms (Hodge *et al.*, 2009; Kolk and Perego, 2010; Perego and Kolk, 2012; Dalla Via and Perego, 2020), while other studies challenge this relationship (Moroney *et al.*, 2012; De Beelde and Tuybens, 2015).

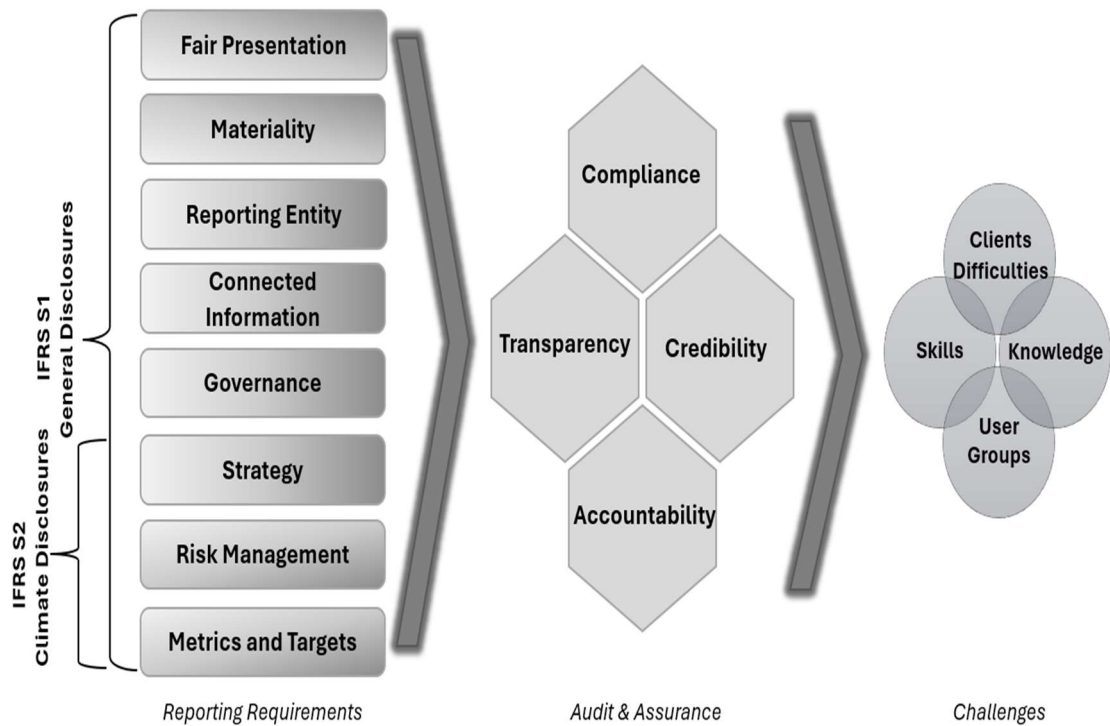
2.6 Conceptual Framework

This section addresses the research conceptual framework. Maxwell (2013) defines a conceptual framework as “the system of concepts, assumptions, expectations, beliefs, and theories that supports and informs your research”.

The role of the conceptual framework is to organise the key theories of the study in order to identify and explain the relationship among them. The conceptual framework functions to connect these theories to the entire research design, guiding the development and execution of the research.

Based on this context, the researcher compiled the main concepts approached in the literature review and constructed the conceptual framework to carry out this study.

Figure 2: Conceptual Framework



Source: Created by the author.

The conceptual framework illustrated above has its starting point in the sustainability reporting requirements under IFRS S1 and IFRS S2, followed by the role of external audit and assurance, and then, the challenges faced by the auditors to provide assurance.

In the context of sustainability reporting, the general requirements under IFRS S1 encompass conceptual foundations formed by fair presentation, materiality, reporting entity, and connected information, representing the concept basis on what reporting should be presented. Furthermore, IFRS S1 comprises core content requirements covering aspects of governance, strategy, risk management, and metrics and targets. These requirements are directed to provide information about the processes and approaches used by a company to manage sustainability risks and opportunities, as well as the performance in relation to those non-financial issues.

The standard IFRS S2 addresses climate-related disclosures - one particular sustainability topic. It provides specific and directive guidance on the mandatory reporting aspects of strategy, risk management, and metrics and targets in terms of climate-related risks and opportunities.

The following group of the conceptual framework represents the auditors' role in sustainability reporting, which aims to provide not only assurance on compliance, but credibility, transparency, and accountability.

The last group refers to the challenges faced by auditors in providing assurance in sustainability reporting, including the lack of appropriate skills for and knowledge of non-financial disclosures, the challenges audit clients encounter in applying the requirements of the standards, as well as the difficulty in meeting the expectations of the various user groups.

2.7 Conclusion

This chapter played an important role in exploring the relevant literature and providing insights into the sustainability agenda, IFRS S1 and IFRS S2 reporting requirements, the role of auditors in providing assurance on these reports, and the associated difficulties. Additionally, establishing the conceptual framework gives a solid basis for the present study, recognising the main concepts in the literature and their influence on each other. It enhances the comprehension of the research topic and provides a guide for further analysis.

In order to further meet the research objectives, the next chapter explains and justifies the research methodology adopted to understand the impact of the sustainability reporting and assurance agenda, and related issues on current practising auditors, and further explores the management of them.

3 Methodology and Research Design

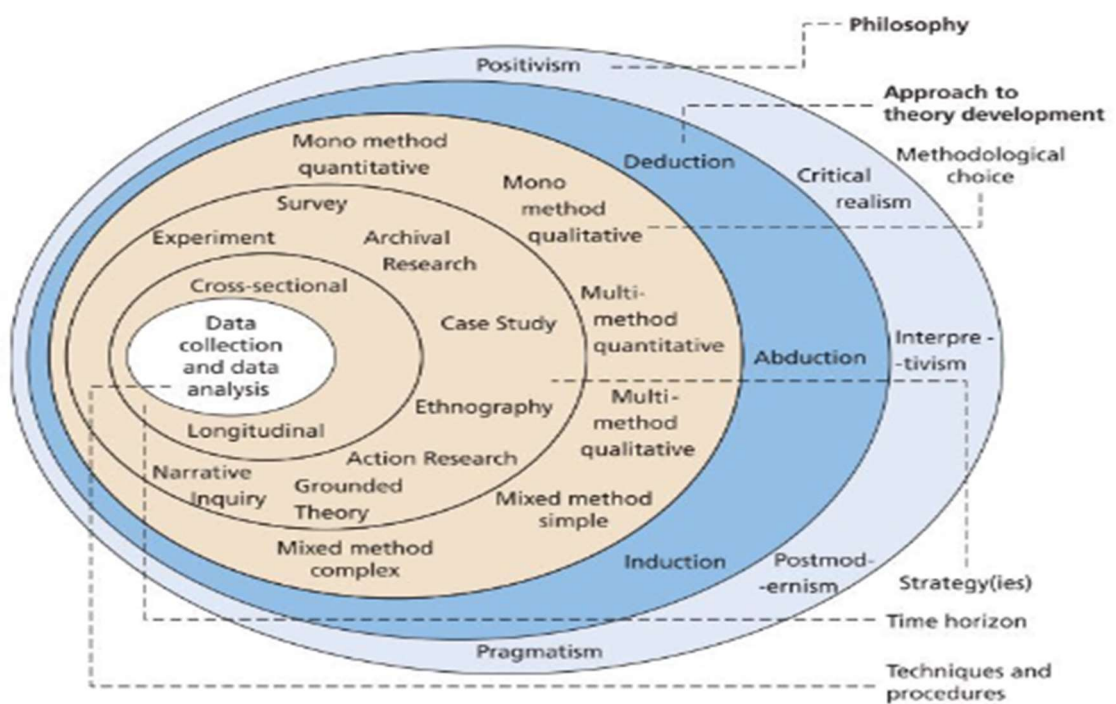
3.1 Overview

This chapter justifies the methodological approach used to conduct the primary research. It describes the methodology, research design, and the specifics of the data collection and analysis.

According to Adams (2007, p.25), “Research methodology is the science and philosophy behind the research”. It is important to explain the methodology adopted to enable a critical assessment of how the research is conducted, allowing it to achieve the research objectives of this study, which are to investigate the challenges faced by external auditors in offering assurance on compliance with IFRS S1 and IFRS S2 and recommend mechanisms to overcome those challenges.

This study will follow the methodology recommended by Saunders *et al.* (2019), which is extensively used in the research field, making this model effective and reliable. For Cohen *et al.* (2018, p.175), “Having a rigorous research design is crucial in the research process”. Therefore, following a coherent methodology is crucial to ensure the reliability and validity of the results reached.

Figure 3: The research onion



Source: Saunders *et al.* (2019, p.130).

Following the order of the diagram above, this chapter will discuss and justify the research philosophy and approach, then it will explain the research strategy, the method of primary data collection, including potential access and ethical issues, and the data analysis approach, establishing a credible basis for the findings and conclusions of this research project.

3.2 Research Philosophy and Approach

3.2.1 Research Philosophy

Research philosophy is a concept that guides the manner research is conducted. Saunders *et al.* (2019) define research philosophy as a “system of beliefs and assumptions about the development of knowledge”.

According to Saunders and Lewis (2018), researchers make a number of assumptions in the course of the research that influence the way the research is conducted, the methods used and the interpretation of the results. These include assumptions about the nature of reality (ontological assumption), valid knowledge (epistemological assumptions), and the role of value and ethics within the research process (axiological assumptions). Therefore, it is important to establish rational and consistent assumptions to form a credible research philosophy (Saunders and Lewis, 2018).

Based on the research onion developed by Saunders *et al.* (2019), there are five major philosophies, which vary between objectivism and subjectivism assumptions: Positivism, which focuses on observable reality and develops universal generalisations; Critical realism interprets observable phenomena, often through historical analysis, investigating its elements of reality; Interpretivism emphasises the subjective creation of meanings by humans, focusing on lived experiences and cultural artefacts to generate richer understandings; Postmodernism questions dominant perspectives, highlighting the influence of language and power relations, and aims to give voice to marginalised views by deconstructing data; and Pragmatism is practice-oriented, choosing research methods based on the specific problems at hand to improve practical outcomes.

Cohen *et al.* (2018) emphasise the plurality of types of research since each piece has its own purposes, theories, and outcomes. Based on this context, considering the objectives of the present study, as well as the nature of data to be collected and analysed, this research adopts an interpretivist philosophy.

Saunders and Lewis (2018) argue that interpretivism concerns the diversity between individuals, their different experiences and backgrounds, and their interaction with society, allowing researchers to capture a deeper understanding of the phenomenon and its complexity and subjectivity in its unique circumstances. The interpretivism philosophy is chosen as it enables the researcher to explore the complexity of the sustainability reporting theme, exacerbated by the novelty factor of IFRS S1 and S2 standards, by considering the interpretations and perspectives of external auditors.

The orientation towards process and the subjective nature of the data to be collected in this study, suggests that interpretivism is most appropriate for achieving the research objectives. This paradigm makes more sense since it was defined by Saunders *et al.* (2019) as one that looks at diverse realities and allows different perspectives from people.

3.2.2 *Research Approach*

The approach is relevant for creating concepts, analysis and theories for the entirety of the research (Adams, 2007). Based on the research purpose and research philosophy, the approach is defined below:

Inductive logic approach

Saunders *et al.* (2019) explain that theory development contains three main approaches: deduction, which develops theories and hypotheses from the literature review and conducts data collection and analysis to test them; induction, where theory is developed by data collection and analysis; and abduction, which involves using data to identify themes, explain patterns and examine a phenomenon, to first create a theory and after that, test it by gathering new data.

The inductive logic approach is chosen to carry out this research. Inductive research operates from specific observations to generate empirical reality and theories (Saunders and Lewis, 2018; Saunders *et al.*, 2019; Collis and Hussey, 2021).

The present research intends to explore external auditors' experiences, knowledge and perceptions to investigate the challenges involved and develop recommendations for providing assurance on the ISSB's standards. Therefore, data will be gathered from primary sources to develop a general interpretation, helping to reach the research objectives. "Observation reveals patterns or trends in a specific variable of interest and these are then used to formulate a general theory of the nature and behaviour of that variable" (Adams,

2007). This study follows an inductive approach allowing alternative explanations to form a general truth, which is not achievable in the deductive and abductive approaches.

Exploratory research purpose

Classifying by purpose, there are four types of research according to Collis and Hussey (2021): descriptive, explanatory, predictive, and exploratory. A descriptive study is conducted to identify and describe a phenomenon and its characteristics. Explanatory goes beyond description to explain the relationship of cause and effect of the phenomenon. The predictive goes further by generalising the analysis and making predictions based on hypothesised relationships. The exploratory approach, however, aims to generate a better understanding of phenomena where previous studies are limited, as well as give guidance to future research.

The research purpose of this study is exploratory once it seeks to gain a comprehensive understanding of the current practices and processes employed by external auditors to provide assurance on compliance with sustainability reporting requirements. Moreover, the exploratory purpose relies on the reality that the research topic is a new subject, still little explored.

Qualitative research process

According to Collis and Hussey (2021), research can be classified based on the process being quantitative or qualitative. The quantitative research process focuses on measuring a phenomenon by using objective and statistical methods while the qualitative process focuses on examining a phenomenon by using subjective and interpretative methods.

A qualitative research process is chosen to conduct this study. Given the present research aims to explore subjective experiences, views, and knowledge of external auditors, the qualitative process enables the gathering of detailed insights into the subject of interest. These descriptions suggest conducting this study using the qualitative method (Adams, 2007; Creswell, 2014).

Furthermore, the interpretivism philosophy reinforces this choice since it relies primarily on qualitative methods to collect and analyse data.

Applied outcome approach

According to Collis and Hussey (2021), “applied research is a study that has been designed to apply its findings to solving a specific, practical problem”. The decision to use an applied outcome approach is based on this study's purpose, which aims to investigate the challenges faced by external auditors and to provide recommendations that would improve practices for the management of those challenges when providing assurance on compliance with the ISSB’s standards requirements for sustainability reporting. It qualifies this study as applied research.

The interpretivism philosophy, alongside the inductive research approach, aligns in the direction of reaching the research objectives. The research design is deeply considered to determine the research strategy and methods explored in the next section.

3.3 Research Strategy

The research strategy is the plan to collect and analyse data to reach the research objectives. Saunders *et al.* (2019) emphasise the importance of the decisions made through the research design to achieve coherence in methodology. It is essential to determine clear scope and objectives the researcher is seeking to achieve.

This study searches for an understanding of the challenges faced by external auditors in providing assurance on sustainability reporting compliance with the requirements of the new standards IFRS S1 and S2. The conceptual framework elements, presented in the previous chapter, will be measured by experiences, knowledge, views and perceptions gathered from external auditors through the data collection process.

The data to be collected in this study is characterised by its qualitative, subjective and interpretive nature. Furthermore, another aspect that indicates a qualitative method is that the IFRS S1 and S2 standards were recently issued, and therefore the data sources are limited, which restricts the sample size for data collection.

The subjective and interpretative nature of the relevant data requests a qualitative approach, which allows for capturing the richness and complexity of human experiences and behaviours in a real context (Miles *et al.*, 2014).

Based on the decision to use a qualitative research design, the following strategy is adopted:

Methodological Choice

The researcher will use a qualitative mono-method of gathering data through interviews. This choice is explained as a technique to collect non-numerical data, such as words and audio recordings (Saunders *et al.* 2019), which is the best option given the data's nature and characteristics. Furthermore, the qualitative method remains coherent with the research design as this study adopts an interpretivist philosophy and a qualitative, inductive approach to theory development. Based on that, the quantitative method and mixed method do not fit this research as they are designed to examine the relationship between variables and would involve numerical measurement and analysis using statistical and graphical techniques (Saunders *et al.* 2019).

Strategy for collecting data

Action research is the strategy adopted for this qualitative study since it aims to investigate key challenges from the recent experiences of auditors offering assurance on sustainability reporting and provide appropriate recommendations to improve auditors' practice. This strategy makes sense based on its definition as a systematic process of inquiry focused on investigating and developing explanations for a specific issue which enables the understanding of the phenomena's nature to ultimately promote improved outcomes (Stringer, 2013).

Action research is a participative process that works through cycles of planning, acting, observing and evaluating in order to facilitate the improvement of practices (Adams, 2007; Saunders *et al.*, 2019; Collis and Hussey, 2021). Because the mandatory reporting and assurance requirements are still in the process of implementation, this study is limited and will not observe auditors' actions over time.

Even though the specific experiences of individual auditors may vary resulting from the different nature of their clients and reporting requirements in their diverse reporting jurisdictions, the concept and practice of providing assurance are the same for them all due to the professional and legal frameworks governing their actions, which confirms the appropriateness of adopting action research strategy for collecting data.

Time horizon

Two different time horizons are explained by Saunders *et al.* (2019) to be used in research: cross-sectional, involving studies of phenomena at a particular time, and longitudinal, a

type of research conducted over a long period of time that enables a study of changes and development.

The present study seeks to collect data at a given point in time, which justifies the adoption of a cross-sectional time horizon due to necessary time constraints.

3.4 Collection Primary Data

This section describes in detail the research strategy for data collection. It will identify and explain the rationale for the choices made regarding the data collection method, sources of data, access and ethics issues.

Considering the main strategy method of qualitative data collection, the one-to-one interview is defined as the best choice, given the complex nature of the role of the external auditor in providing assurance on compliance with sustainability reporting requirements. It enables a deep exploration of interviewees' perspectives, experiences and beliefs, capturing the complexity and diversity of their viewpoints (Patton, 2002).

Collis and Hussey (2021) explain that two different interview structures can be used in research: unstructured or semi-structured interviews. The first was not considered because it is time-consuming and might also be complicated to analyse and interpret the data. On the other hand, semi-structured interviews follow a list of key questions but enable some margin to expand (Vuori, 2017). Therefore, the semi-structured approach is chosen with the justification that the process is interactive and can be complemented with follow-up questions and comments. It allows the researcher to explore the viewpoints, beliefs and thoughts of the interviewees.

The questionnaire should be carefully designed to ensure the validity and reliability of the outcomes. The questions will be based on the relevant themes identified in the literature review as well as elements not covered in the literature, but to be found through interviews. The questionnaire will be structured to collect sufficient quality data to help achieve the research objectives.

The interview method planned for this study is online interviews, using video conference through the Zoom platform, due to convenience and the fact it is less costly than a face-to-face interview. It enables the researcher to reach participants based on different

geographic locations and see the faces of the participants, which is not possible during a telephone interview (Collis and Hussey, 2021).

The interviews will be conducted in August 2024, lasting approximately 40 minutes each. The interviews will be video recorded and transcribed into text for data analysis, as detailed in the next sections.

3.4.1 Sources

Considering this study aims to explore the role of external auditors and the challenges faced in providing assurance on sustainability reporting, the population comprises specifically external auditors, who work for an audit and accountancy firm and are involved in providing this type of assurance. The population is not restricted in terms of age or gender. Given the data will be collected through online interviews, the geographic location is not a limitation for the population.

The researcher will adopt a non-probability purposive sampling approach to gather the results. This method allows researchers to deliberately choose participants based on particular criteria relevant to the study (Patton, 2002). The rationale for using a purposive method is to select a representative sample to capture participants' experiences from diversified categories of audit firms based in different locations. The geographic location encompasses external auditors based in different legal jurisdictions, providing this study with more diversity of angles due to the variation of sustainability reporting regulations in those countries. Participants will be identified according to their experience relevant to the research topic and willingness to participate in the study.

According to Saunders *et al.* (2019), determining a suitable sample size for non-probability sample techniques is an ambiguous process without rules. To investigate the challenges faced by auditors in providing assurance on compliance with sustainability reporting requirements, and provide recommendations for the subject, the present study will use a small sample of three (03) external auditors. The sample selection is based on the premise that the interviewees are very likely to offer insights to allow a robust data analysis of this evolving phenomenon.

The sample size, while small, is sufficient and appropriate to reach the research objectives. Patton (2002) argues that the results obtained are more related to the data collection and analyses, than to the sample size. However, it is important to highlight that the use of a

small sample size could represent a limitation to the research results as it may not reflect the experiences and viewpoints of the entire population.

3.4.2 *Access and Ethical Issues*

This section approaches the researcher's awareness of potential issues gaining access and research ethics that may arise through the data collection process, as well as the planned actions to address those issues.

Access Issues

The first potential issue identified refers to gaining access to respondents in the sense of their willingness to participate in this study. According to Saunders *et al.* (2019), the reasons for failing to obtain cooperation are associated with the lack of perceived value to the participants, perceptions about the researcher's credibility, confidentiality concerns and time constraints.

Participants will be selected through the researchers' professional network, using existing contacts and developing new connections as a strategy to search for participants. The researcher has a strong background in the field having worked for several years as an external auditor, therefore exploring the existent connections expands the possibilities to reach participants, as well as provide credibility to the research.

Additionally, the online interview method raises potential issues regarding access to the internet and the type of software where the interviews are conducted (Collis and Hussey, 2021). The participants must be communicated with in advance, about the conditions of online interviews ensuring their awareness and willingness to partake in the selected method.

Ethical issues

Saunders and Lewis (2018) define research ethics as "the appropriateness of the researcher's behaviour in relation to the rights of those who become the subject of a research project, or who are affected by it." Therefore, researchers need to ensure that their study is designed, through all stages, to accomplish methodologically and morally to all participants.

This study is guided by the Griffith College Code of Ethics to guarantee respect for the participants' rights and monitored to address any ethical concerns that may arise. The ethical procedures established by Griffith College are detailed below:

- **Informed Consent:** the researcher will make formal contact with the participants communicating what is expected of them, outlining the purpose of the research and the extent of the participant involvement in this study. All participants are provided with a Plain Language Statement and an Informed Consent Form detailing the purpose of the research and the extent of participants' involvement. The documents advise on confidentiality and reinforce that participants' involvement is voluntary and may be withdrawn at any point. Refer to Appendix A and B. By obtaining informed consent, the researcher ensures that participants understand their rights and the potential risks and benefits involved.
- **Confidentiality:** to address the confidentiality issue, the anonymity of participants will be maintained, as well as the adoption of security measures in data storage to protect their confidentiality and privacy. Any identifiable information will be coded for data analysis and reporting. The participants will be solicited to permit video recording of the interview, and it will be made clear that the only purpose is to maintain data integrity and that the recordings will not be used for any other purpose.

Lastly, another critical issue in qualitative data collection is research bias. Norris (1997) argues that no research is immune to bias. Therefore, the researcher conducted a comprehensive literature review to ensure a reasonable understanding of the themes of the study to better interact with the participants. The researcher will also conduct a pilot to test the questionnaire before the interview to reduce bias in data gathering.

3.5 Approach to Data Analysis

The data analysis is an essential stage of research where valuable insights from the data gathered shall be extracted and substantiated into meaningful conclusions.

Based on the research design and strategy as well as following a coherent methodology, the qualitative data analysis method chosen for this study is thematic analysis.

The thematic analysis is a logical and flexible approach to qualitative data analysis that searches for themes or patterns across the data gathered in order to recognise relationships and integrate related data, to ultimately develop explanations of the phenomena achieving the research results (Saunders *et al.*, 2019). It allows the researcher to identify key themes about IFRS S1 and IFRS S2, the challenges and requirements for auditing compliance with the standards and includes measures for managing and mitigating them.

In order to analyse and interpret the qualitative data, the researcher will follow the six-steps approach developed by Creswell (2014).

Figure 4: Data analysis approach



Source: Adapted from Creswell (2014).

The initial step, as per Creswell (2014) requires preparing and organising the data for analysis by transferring the large amount of information collected through the interviews to a typed file. According to Saunders *et al.* (2019), “In qualitative research interviews, they are often audio-recorded and subsequently transcribed, that is, reproduced verbatim as a word-processed account.” Therefore, the interview transcript is the method chosen to prepare the data gathered for analysis, using the Zoom platform for editing and ensuring those transcripts are accurate.

The next step is to organise the data through a coding process. “The object of the coding process is to make sense of text data, divide it into text or image segments, label the segments with codes, examine codes for overlap and redundancy, and collapse these codes into broad themes” (Creswell, 2014).

The researcher will start the coding process by reading the interview transcripts to obtain a sense of the whole data. Then, the transcripts will be examined in detail to identify the meaning of underlying thoughts and perspectives from the participants. For each identifying text segment, a code with a meaning description will be assigned. The codes will then be aggregated to develop broad themes. The researcher will develop themes by

analysing similarities among the codes that emerge from the assessment as well as considering terms related to the topic.

The next steps are to 'report the findings' and 'interpret the findings', which consist of explaining what is found. The findings will be reported evincing dialogues and quotes extracted from the interviews, while the interpretation will involve making sense of those findings to form meaning about the phenomenon based on findings review, personal reflections and comparisons with the literature (Creswell, 2014).

Lastly, the final step is to validate the findings. According to Saunders *et al.* (2019), "Validation is the process of verifying research data, analysis and interpretation to establish their validity/credibility/authenticity." As such, in order to validate the accuracy and ensure the quality of the present study, the researcher will use methods of triangulation and member checking cited by Creswell (2014) and Saunders *et al.* (2019).

3.6 Conclusion

This chapter explained and justified the methodology adopted to conduct this study. It is extremely important to make coherent decisions to define a robust and appropriate research methodology and design. This enables the achievement of reliable results to reach the research objectives of critically analysing the reporting requirements under IFRS S1 and IFRS S2, investigating the challenges for external auditors in offering assurance on compliance with those standards, and recommending appropriate mechanisms to overcome the challenges.

The figure 5 below summarises the choices made in this chapter to build the methodology and design of this study.

Figure 5: Research methodology and design

Research Philosophy	• Interpretivism
Research Approach	• Induction
Methodological Choice	• Mono-method qualitative
Research Strategy	• Action Research
Time Horizon	• Cross-sectional
Sampling Approach	• Non-probability purposive
Data Collection	• Interviews
Data Analysis	• Thematic Analysis

Source: Created by the author

The next chapter presents and discusses the findings from the data collection and analysis.

4 Presentation and Discussion of the Findings

4.1 Overview

This chapter presents and analyses the results obtained from the data collection process. It comprises the description of the findings, a discussion based on participants' responses, a comparison of the same with the literature reviewed, and the conclusion formed from the data interpretation.

As explained previously, the present research adopted an exploratory qualitative methodology to collect data through semi-structured interviews. The findings presentation and discussion are formalised to address the research objectives, which aim to critically analyse the reporting requirements under IFRS S1 and IFRS S2, investigate the challenges for external auditors in offering assurance on compliance with these requirements, and recommend appropriate mechanisms to overcome the challenges.

4.2 Findings

The study collected responses from 03 (three) experienced external auditors. The first part of the interview gathered demographic information from the participants. The main interview consisted of 11 questions guided by the research objectives, which are organised into 07 (seven) key themes that emerged from the data collection, as presented throughout this section.

4.2.1 Demographic information

The participants' general characteristics provide relevant insights for further consideration when analysing the approaches to the current audit practices towards providing assurance on sustainability reports and compliance with IFRS S1 and S2 standards.

Figure 6: Demographic Information of Interview Participants

Interviewees	A	B	C
Age	25-30	31-35	36-40
Education	Bachelor degree	Pos Graduation	Pos Graduation
Professional Qualification	Part-Qualified	Fully-Qualified	Fully-Qualified
Years of Professional Experience	05-10	05-10	10-15
Geography (Country)	Ireland	Brazil	Australia

Source: Created by the author

The participants' ages vary in a range from 25 to 40 years old. Although this information does not affect the study conclusions, the results suggest a predominance of experienced external auditors with characteristics of *Millennials* or *Generation Y*.

In analysing the educational and professional profile, the results show that all the participants have advanced education, considerable years of experience working as external auditors, and are, currently, in senior positions. Additionally, it is worth highlighting that respondent B works with a Big Four audit firm and lectures IFRSS subject for a post-graduation course. Such information is important for this study since professionals with relevant backgrounds in the field can provide valuable insights for the research.

The last demographic information reveals that the participants are based in different geographic locations, namely Ireland, Brazil and Australia. It enables the research to capture diverse experiences and viewpoints in consideration of the present status of reporting requirements in each region.

4.2.2 *General understanding of auditors about the reporting requirements under IFRS S1 and IFRS S2*

The first two questions target to capture the participants' general understanding of IFRS S1 and S2 standards requirements. The literature describes IFRS S1 as a general guidance comprised of conceptual foundations, which include fair presentation, materiality, reporting entity, connected information, and core content, which approaches governance, strategy, risk management, and metrics and targets. IFRS S2 defines specific requirements to disclose climate-related issues.

[Q1] What is your understanding of IFRS S1 and IFRS S2 standard requirements?

The responses to [Q1] indicate that the participants are knowledgeable about the standards and understand their objectives, directions and main requirements.

According to participant A, meeting the IFRS S1 and IFRS S2 requirements tends to lead companies to disclose, at a certain level, standardised information, which would benefit the market by providing comparable reports.

“So, IFRS S1 explains what must be disclosed, overall, for all sustainability issues, and then IFRS S2 provides detailed demands on what is needed to be disclosed in terms of climate issues, such as information about greenhouse gas emissions. And I believe the main purpose of these requirements is to have standardisation between companies because currently, we still see discrepancies in the type of information presented when comparing different company’s ESG reports.”

In the view of participant B, having segregated standards enables a better understanding of the requirements, firstly, giving brief instructions on the sustainability reporting scope and then, detailing the steps for disclosure of specific climate matters.

“So, the IFRS S1, it describes topics related to governance, such as controls, monitoring ESG issues, and managing ESG risks. This standard provides a foundation for the reporting. Then, we have IFRS S2 to detail the disclosures regarding climate issues and all the aspects related to climate change. And, it also states numeric matters, such as metrics, KPIs, and guidance on how to present these matters, while IFRS S1 is more theoretical.”

Participant C concurred with the previous statements and highlighted the importance of disclosing reliable information.

“IFRS S1 sets the groundwork for disclosing sustainability-related financial information, ensuring that this information is as reliable and relevant as financial data, and IFRS S2 specifically addresses climate-related risks and opportunities in order to require companies to disclose the impact on financial performance. Also, the requirements of IFRS S2 are aligned with TCFD recommendations.”

[Q2] In your opinion, are there any ambiguities or areas in these standards that need more clarity?

Participant A claimed that the requirement of presenting connections between sustainability data and financial data is a relevant concept under the standards and, due to the nature of the non-financial data, this topic should be carefully followed.

“I think, maybe a key point would be to understand how to connect the information, like, how to connect the sustainability with the accounting and financial

statements... It's not something difficult for financial data but about sustainability..”

Participant B drew attention to the fact that the materiality concept under IFRS S1 and S2 has been subject to discussion between auditors.

“Two weeks ago, I discussed materiality with some colleagues. You see, some argued that materiality needs more clarity and some disagreed. In my point of view, it is clear because IFRS based the materiality concept on the TCFD and GRI, and they are specific about it.”

The opinion of participant C is that areas demanding subjective analysis, could use more clarity in IFRS S1 and IFRS S2.

“Materiality (requirements) is kind of vague. For example, a particular risk may be immaterial now but, thinking about long-term risk, it can become material in the future. And, scenario analysis also lacks more detailed guidance, because, in my opinion, the standards don't provide clear instructions on how to conduct these analyses.”

The data gathered reveals that there are professional discussions revolving around various topics under IFRS S1 and IFRS S2, particularly regarding the integration of sustainability data and financial data, materiality determination, and climate-related scenario analysis to assess climate resilience, risks and opportunities. According to the respondents' opinions, more clarity would enhance the reporting process.

4.2.3 Client challenges

This theme grouped questions and responses that approached the challenges faced by audit clients in preparing sustainability reports in accordance with IFRS S1 and IFRS S2. The literature considers the difficulties experienced by companies with compliant reporting, which may also represent a challenge to external auditors in providing assurance on those topics.

[Q3] What are the primary challenges your clients face in preparing sustainability reports in accordance with IFRS S1 and IFRS S2?

According to participant A, the primary difficulties encountered refer to the clients being able to properly understand what is required to present following IFRS S1 and IFRS S2 standards, as well as gathering the necessary information for such disclosures.

“What I see as the main challenge, it relates to the ability of companies to identify information for reporting. Because IFRSs give the requirements but companies are responsible to interpret what needs to go into the reports...”

Participant B stated that, although sustainability reporting is not yet mandatory, several companies, particularly those listed on the stock exchange, do report their ESG issues voluntarily as good practice. However, as ISSB standards are fairly recent, companies are only starting to develop a better understanding of these reporting requirements and may face challenges with compliant reporting.

“I think the challenges are regarding data collection and data archiving. If you compare it to financial data, for example, there are years of experience in collecting data and storing data, and still, we can see companies struggling with it.”

It is the view of participant C that there are some common challenges among companies that issue sustainability reports.

“So, one common difficulty involves data collection and quality. For example, companies struggle with gathering reliable, relevant data across different departments and supply chains. Another is to determine what is relevant or not to disclose, so sustainability risks, for example. And, I would also include integration of sustainability reporting with existing financial processes as a challenge.”

[Q4] Can you share specific instances where your clients encountered difficulties in interpreting or applying these standards?

Participant A brought up a challenge faced by the investment funds industry, given the nature of their business and the complexity of their portfolios.

“In my experience, it is difficult to recognise sustainability issues in this industry because it doesn’t directly involve the consumption of energy, fuel, or people, for example.”

Participant B complemented the previous question by adding the integration of non-financial data into the financial data as a challenge faced by clients. The participant shared the difficulties of one client that operates in the logistics industry.

“This transition shouldn’t be hard, because they already report following TCFD and GRI. However, connecting sustainability to financial information like fixed assets, deferred assets, or revenue, this has been challenging. They (client) don’t know how to manage sustainability data.”

Participant C emphasised the difficulty of determining what is materially significant from a sustainability perspective, especially in determining the materiality of sustainability risks with long-term impacts, due to the subjectivity and uncertainty involved.

“What I see, identifying these long-term risks can be tricky. Because, for example, they might not have immediate financial consequences, and they (clients) need to evaluate whether a risk that could impact their operations in the future, should be treated as material now.”

Based on the data gathered, each participant identified different challenges faced by audit clients. Participant A reflected on the challenges found by investment funds, while participant B shared difficulties faced by the logistics industry, and participant C commented on manufacturing and consumer industries. The diversity of responses may be justified by the participants' own experiences with their clients' portfolios, providing the research with a greater range of perspectives.

4.2.4 Main users of sustainability reporting

This theme discusses the main users of sustainability reporting as well as the participants' perspectives, in the context of IFRS S1 and IFRS S2 focusing mainly on addressing investor interests, a topic that was greatly discussed in the literature review.

[Q5] In your opinion, who are the main users of sustainability reports? Do you believe IFRS S1 & S2 aim to address mainly investors' interests, and why?

Participant A stated that the IFRS S1 and IFRS S2 standards mainly focus on investors' interests, however, the respondent also acknowledged the impacts on society as a result.

“Well, I think it weighs up both sides ... I think, in the first moment, the investors are the main users (of sustainability reporting). So, I believe it makes sense the standards are oriented toward their interests ... But if you think rationally, investors, also, would like to keep a good reputation, so eventually, they will make greener choices, and consequently, it will affect the public.”

According to Participant B, the reporting standards benefit not only investors but all stakeholders.

“Investor pressure kind of pushes a better quality from the companies. Because once you have more regulatory statements, you have more controls, and since you have more controls, companies can perform better, and investors are happier. And their customers will benefit from this, they will have better services or products. So, it's like a chain. It's a win-win matter. And I think it's all connected.”

Participant C stated that the standards clearly concern investors' interest by requiring disclosures that could impact the financial performance of companies, although all user groups are ultimately impacted by the reporting requirements.

“I believe this is because they were designed by IFRS so it kind of relates to the accounting standards. So, the main users are investors, but they are also regulators and customers. And, there are the internal stakeholders as well. So, even though the standards focus on investors, at the end of the day, they affect all the groups.”

Overall, the participants concurred that IFRS S1 and IFRS S2 emphasise investors' needs. However, they all argued that in seeking to meet the expectations of investors, different user groups are also impacted as a result. In particular, Participant B mentioned a benefit for all stakeholder groups.

4.2.5 Audit Approach

The following theme is directed to examine potential differences in the audit approach between financial statements and sustainability reporting audits. The literature recognises a diverse range of stakeholders associated with sustainability reporting, such as investors, regulators, employees, governments, and society. Therefore, the participants expressed their perspective on the effects of the audit approach in the context of the diverse range of user groups.

[Q6] To your knowledge and experience, is the approach to the audit affected due to the many user groups of sustainability reports in comparison to financial statements?

Participant A argued that the diverse user groups do not impact the audit purpose of providing assurance, however, the audit approach could be affected due to the challenges arising from the non-financial type of data.

“Well, so far, we have been examining financial data, and now, we need to look at non-financial data, and this is different from what we are used to. It’s deeper, you know, to understand what type of evidence we need and how to have that evidence. So, I think this is a challenge and we need to adjust to it.”

Participant C shared a similar opinion as participant A, stating that the audit approach could be affected given the sustainability environment may present different risks to the reporting.

“The approach to auditing sustainability reports is somewhat different because we need to consider issues that we don’t do for financial statements, for example, environmental and social impacts. So, it requires auditors to develop a wider understanding of both financial and non-financial risks.”

The indications are therefore that the audit approach to financial statements and sustainability reporting may differ due to the nature of the information under review, as

pointed out by respondents A and C. It is important to emphasise though that all participants agreed that the audit objective should not be impacted when assessing compliance with reporting obligations.

4.2.6 Role of Auditor

In this section, the data is presented to explore the participant's assessment of the role of auditors in providing assurance on sustainability reports that were extensively discussed in Chapter 2.5, as well as their perspectives on stakeholders' expectations regarding sustainability assurance reports.

[Q7] What role do the auditors play in providing assurance on sustainability reporting?

For participant A, the auditor's role is to offer an opinion on the reliability of sustainability information presented by the company, as well as reduce the asymmetry between companies and stakeholders.

"I think the main role is to ensure that all parties have the same information, that that information exists, it's true and reliable... So, yes, providing credibility and transparency, I believe auditors can do that when offering assurance, that's the main purpose."

Participant B reinforced that assurance on sustainability reporting is not yet mandatory in Brazil, therefore, currently, auditors play a role more of adviser, introducing discussions in order to help companies develop the necessary knowledge to prepare sustainability reports in compliance with IFRS S1 and IFRS S2.

"Auditing sustainability reports is a very difficult task, but not only that, it is time-consuming and expensive, especially at this beginning stage ... What I see is that at this time, some (companies) are not worried about it (assurance) yet. But, for some, we've been giving advice to help, to start to develop a work on that..."

The opinion of participant C is that auditors play a critical role in providing independent assurance that the sustainability information reported is reliable, complete, and prepared in accordance with the IFRS S1 and IFRS S2.

"Our work helps enhance the credibility of sustainability reports. We review the processes and controls used to gather the data, test the reliability of the information, and assess whether the disclosures are aligned with the company's sustainability risks and opportunities."

[Q8] What do you believe are the key expectations of stakeholders regarding sustainability assurance reports?

According to participant A, the stakeholders expect to have sustainability information that enables a better decision-making process.

“They (stakeholders) expect to have access to information that provides comparability between different companies, and then, they can make those decisions. So, for example, if they will invest in company X instead of Y, buy products of company X instead of Y.”

It is the view of participant B that stakeholders' perspectives could be impacted by the assurance provider.

“Depending on the firm that’s going to provide assurance. Well, from the point of view of the stakeholders, I believe that having an audit opinion increases the reliability of that information, for sure... They (audit firms) must be concerned about knowledge, qualification, accreditation, etc., as stakeholders are likely to pay more attention. So, you are not just hiring because they are good but also because of their reputation.”

Participant C underlined the relevance of sustainability assurance reports in enhancing the trust of stakeholders.

“It gives stakeholders confidence that the information reported was verified. And, this is very important for them to understand the business strategy and for the decision-making process. Without assurance, stakeholders might question the validity or reliability of the information.”

The evidence seems to be strong that auditors help to provide credibility and reliability to the information reviewed. Moreover, sustainability assurance reports enhance users' trust and confidence in the disclosures. On this basis, it may be inferred that auditors play a significant role in offering assurance on sustainability reporting.

4.2.7 Insights from Financial Statements Audits

This theme groups questions to gather insights from the participants' experiences of providing assurance on financial statements, which can be applied to sustainability reporting. According to the previous literature, auditors possess skills that can be transferred to assess sustainability assurance reports.

[Q9] What can be learned from financial statements assurance that can be used in sustainability reporting assurance?

Participant B brought up two topics from financial statements audits that would be relevant and applicable for sustainability reporting, namely, maintaining evidence that supports the disclosures and having internal controls directed to address sustainability disclosure issues.

“First, the company should have all the data stored, classified, and all the evidence that is supporting the report. And every KPI, every metric should have a spreadsheet database or something that supports it. The second topic is that companies need to have internal controls regarding sustainability reporting. So, the company should review and if necessary, build new internal controls for preparing the report.”

Participant C shared a similar opinion emphasising the importance of keeping a robust internal control system for data reliability.

“Just as financial reporting relies on internal control systems to ensure the reliability of financial data, sustainability reporting also requires processes to gather, verify, and report non-financial information. I believe that, in addition, audit procedures like determining materiality and risk assessment are similar and can be applied to sustainability audit.”

The results revealed that the internal control system is a crucial tool for mitigating sustainability reporting risks. Participant B, in addition, emphasised that all relevant information disclosed must be supported by evidence, which represents the core of assurance procedures.

Furthermore, participant C observed that external auditors are experienced in performing audit procedures that could be similarly carried out throughout sustainability report audits.

4.2.8 Addressing the Challenges

Based on the literature review; knowledge and skills gaps, expectation gaps, and the clients' challenges were identified as key challenges and risks faced by auditors in providing sustainability assurance. As such, this section seeks to understand how audit firms are managing to address these difficulties and identify potential support and resources that help the process.

This section is supported by the responses for [Q10] *How is the firm you work with managing to address the difficulties in providing assurance on compliance with IFRS S1 and S2 requirements?* and [Q11] *What type of support or resources would be most beneficial in helping auditors provide assurance according to IFRS S1 and IFRS S2?*

Participant A stated that because these are recently issued standards, the difficulties still revolve around understanding and applying them correctly. Likewise, the participant mentioned that the necessary support should involve the use of experts and the dissemination of knowledge.

“I think knowledge is extremely relevant, so you need to build this knowledge and share it throughout training sessions with staff, and also ensure that clients have the necessary knowledge as well. And you will probably need to use specialists given the nature of non-financial data, and all the specific terms, analysis, and understandings that we as auditors do not have expertise.”

According to participant B, working for a global audit firm is an advantage in having access globally, enabling benchmarking practices against those implemented and already working in other locations.

“We are building workshops and training and exchanging information with offices in other countries that are ahead in sustainability reporting ... And I should say that we have like, for most of the audit programs, we have this standardisation of risk assessments and audit procedures, so we follow the same procedures worldwide and that is very effective.”

Furthermore, participant B claimed that technology can be a useful tool for storing and analysing sustainability data.

“There is now new software used by companies that link areas between ESG modules. Companies can monitor the metrics inside this software. Using this example, a client has ESG, internal controls module, accounting, financial, and all modules integrated. So, this is a very valuable resource because it provides a complete view of the company.”

Participant C emphasised the beneficial support of comprehensive, ongoing improvement for sustainability topics and the specifics of IFRS S1 and S2.

“We are investing in training and developing tools and methodology to help in the evaluation of sustainability data. And it is not only with the staff, we’re also engaging with clients to support them in improving their internal processes. And one more thing that I find very important is the collaboration between our financial auditors and sustainability experts. This is essential to bridge the gap in the knowledge.”

The results reveal suggestions that would be useful to overcome the difficulties faced by auditors in providing assurance on sustainability reporting. The participants unanimously indicated training to effectively provide both staff and clients with support and knowledge.

Furthermore, it was also suggested by Participants A and C that, due to the nature of sustainability data, auditors would need to rely on specific expertise. Participant B, on the other hand, as an auditor working with a Big Four, emphasised the opportunity to access audit practices globally to benchmark and implement locally. On this basis, it may be inferred that participants A and C, who do not work with global firms, might not have access to the same network of knowledge as participant B, and as a result, must rely on experts' work. It must therefore be recognised that it is a benefit to being a large global firm in this evolving sustainability assurance landscape, which by contrast, may represent additional costs and risks for smaller audit firms.

Lastly, participant B identified technology as a valuable resource to facilitate data management.

4.3 Discussion

This section presents discussions of the findings that emerged from the data collection and analysis. The discussions are structured and guided by the three research objectives.

4.3.1 Objective one: Critically analyse the reporting requirements under IFRS S1 and IFRS S2

The recent issue of IFRS S1 and IFRS S2 has raised considerable interest and discussion among audit practitioners, as evidenced by the interviewees' in-depth knowledge of the disclosure requirements. Despite the mandatory compliance period having not yet commenced in the participants reporting regions, they all demonstrated a robust understanding of the requirements, the necessary disclosures, and the preparatory steps clients must undertake. This includes both general considerations, such as the disclosure of governance structures and responsibilities, and technical aspects, such as greenhouse gas emissions disclosures.

This study reveals a significant comprehension of the requirements and concepts. Participants not only showed familiarity with the standards but also engaged in critical analysis of them, identifying ambiguities, and offering suggestions for improvement.

A significant area of concern highlighted by the participants was the concept of materiality. They emphasised that while materiality is a critical aspect of the standards, its subjective nature requires clearer guidelines to minimise misunderstanding. This aligns with existing literature, where the debate around materiality is well discussed, in particular, the study by D'Aquila (2018) that establishes materiality as one of the challenges encountered through the preparation of sustainability reporting.

Additionally, the integration of financial and non-financial information was identified by one participant as a critical issue, aligned with Teixeira (2023) who refers to connected information as essential to enhancing sustainability-related financial disclosures.

Another area of concern raised by a participant was the scenario analysis component of the standards. The participant argued that the guidance provided for scenario analysis is insufficient. While scenario analysis is recognised in the literature as essential for strategy and risk assessments, its identification as a practical challenge by the participant diverges from the literature, where it is not commonly noted as defiant.

It is notable the similarities in the interviewees' responses, however, it is worth highlighting variances in their perspectives, that could be attributed to their differing professional experiences. Participant A exhibited limited interaction with the topic, whereas participant B demonstrated a deep understanding, frequently engaging in discussions and debates on the subject. Participant C, on the other hand, provided concise, theory-based responses. These differences likely reflect the diversity in their education, knowledge, professional experiences and levels of engagement with the standards.

While all participants exhibited a sound theoretical understanding of IFRS S1 and IFRS S2, their practical knowledge appeared limited. This limitation was evident in their struggle to translate theoretical concepts into actionable practices. Common questioning of how to, underscores the challenges auditors and their clients face in applying the standards in real-world contexts.

Finally, the discussion revealed that participants perceive the primary users of these standards to be investors, aligning with the standards' apparent emphasis on investor needs. However, opinions on this focus vary. While the literature often criticises the standards for prioritising investor needs over those of other stakeholders, as revealed by the studies conducted by Adams and Abhayawansa (2022), de Villiers and Dimes (2023), and Ali *et al.* (2023), one respondent argued that this investor-centric approach could

ultimately benefit all stakeholders. This perspective challenges the prevailing criticisms in the literature, suggesting that the emphasis on investor needs might have broader positive implications.

Although they are aware that sustainability reporting covers a larger number of user groups than financial reporting, auditors, in general, perceive that it does not impact the purpose of the audit, which is to provide assurance on the information.

4.3.2 Objective two: Investigating the challenges for external auditors in offering assurance on compliance with IFRS S1 and IFRS S2

The study identified a range of challenges that external auditors face in offering assurance on compliance with IFRS S1 and IFRS S2. These challenges can be broadly categorised into those related to the standards themselves, the clients' implementation of these standards, and the audit process.

Firstly, the inherent ambiguity in the IFRS S1 and IFRS S2, as described in the previous section, poses significant challenges for auditors. Participants highlighted difficulties in identifying material risks, particularly those with long-term impacts, and in integrating non-financial information with traditional financial data. The lack of clarity in the standards can adversely affect the effectiveness of audit procedures, making it imperative for auditors to thoroughly understand the standards to then execute their roles effectively.

The research also identified an important challenge to be considered. The study revealed that clients are struggling to apply the concepts outlined in IFRS S1 and IFRS S2, which were consistently mentioned by all participants. This challenge ultimately impacts the audit performance. The participants argued that this difficulty arises since these are newly issued standards, and at this initial stage, companies are still confronting adversities with substantial time and cost investments.

Although companies usually have experience with financial statements, the preparation of non-financial reports presents unique challenges due to the nature of the data. Participant A noted that this difficulty is particularly increased in industries where the application of sustainability principles is not straightforward. However, participant B pointed out that companies already using frameworks such as GRI and TCFD might face fewer challenges, as they are transitioning rather than starting from scratch.

Data collection and storage emerged as critical challenges, with most participants emphasising the difficulties in gathering information from various departments and the supply chain. The challenge extends beyond collection, and encompasses ensuring the quality and reliability of the data. Audit clients must produce and store evidence that supports the information presented, but determining the appropriate type of evidence and maintaining its quality are ongoing concerns. Ensuring this evidence is reliable in the view of stakeholders is crucial, and this challenge directly impacts the auditors' ability to maintain professional skepticism throughout the audit process.

The complexity of ESG data and the costs associated with assessing and managing this information were pointed out by most participants as significant challenges for companies in preparing sustainability reports. This perspective is consistent with the literature, in particular the study conducted by Kolk (2005). In addition, one participant brought up the integration topic, aligned with the study by Bouten and Hoozée (2015), which finds integrating ESG practices into business strategies fundamental for efficient sustainability reporting, but that is still a challenge for companies.

The last significant category of challenges relates to the audit process itself. Most participants agreed that the audit approach must adapt to the differing nature of the data involved, which introduces new types of risks for auditors. Additionally, the results indicate that auditors lack expertise in the area of sustainability, making it difficult for them to understand, examine, and draw conclusions about this non-financial data. This knowledge gap requires ongoing education and the involvement of specialists to provide the necessary support, which in turn increases the time and costs associated with audit engagements.

Another key challenge is maintaining the credibility of auditors when providing assurance on sustainability reports. Participants generally agreed that independent verification by external auditors enhances stakeholders' perceptions of reliability, a view consistent with the literature (Friske *et al.*, 2023). Participant B raised a critical point regarding the disparity between large and small audit firms. Larger firms, with their well-established reputations and greater resources for training and specialisation, are perceived to offer more credible assurance. This creates a significant challenge for smaller audit firms, which may lack the same facilities.

As a result, the challenge is extended to small and medium-sized enterprises (SMEs) that, in the foreseeable future, are expected to comply with IFRS S1 and IFRS S2 and may struggle to afford the assurance services of larger firms. Generally, SMEs do not possess the same

level of governance, internal control system or dedicated sustainability departments, which in turn, raises challenges in complying with the standards, exacerbating the difficulties for smaller audit firms in providing high-quality assurance to SME clients. This situation complicates the assurance process and increases the risks associated with auditing these companies' reports, leading to higher costs to mitigate these risks. Consequently, small audit firms may face significant resource requirements and the need to upskill their staff to ensure they can provide high-quality assurance services for SMEs.

Finally, the difficulty in finding participants for this research reflects a broader challenge in the auditing field: the current lack of knowledge and expertise among sustainability assurance providers. The limited number of participants eligible to take part in this study underscores this issue, suggesting that the auditing profession as a whole may need to invest more heavily in developing expertise in this emerging regulated area.

4.3.3 *Objective three: Recommending appropriate mechanisms to overcome the challenges*

The findings of the study also offer recommendations to address the challenges auditors face when providing assurance on sustainability reports' compliance with IFRS S1 and IFRS S2. These recommendations focus on practical tools, resources, and improvements that can support auditors in overcoming the identified challenges. This section is based directly on the data collected from participants' experiences and insights.

Firstly, a significant recommendation from the participants is the need for auditors to invest in expanding their knowledge of sustainability reporting. Training was unanimously acknowledged as a valuable resource, both for audit staff and for clients. Moreover, the lack of necessary knowledge about non-financial data can also be addressed by involving sustainability experts in the audit team. Participants supported the use of specialists to provide the specific knowledge needed to effectively audit sustainability reports.

One participant suggested that auditors can leverage their existing knowledge of financial reporting assurance when auditing sustainability reports. This recommendation shows the similarities between the two assurance services, particularly the use of a risk-based auditing approach for risk assessment and materiality determination. This perspective is consistent with the literature, which identifies auditors as qualified professionals possessing skills and knowledge acquired from financial statements audits that can be executed for sustainability assurance, as per Nangle (2022) and Wallage (2000). By

applying these established methodologies to sustainability audits, auditors can enhance the robustness of their assurance processes.

Collaboration within audit firms was also recommended as a mechanism for improving knowledge and procedures. Large audit firms, especially those with global operations, can benefit from internal collaboration, sharing best practices, and benchmarking against offices that have successfully implemented effective audit practices for auditing sustainability reports. This internal exchange of knowledge and experience can lead to more consistent and effective audit outcomes.

Another recommendation is the use of technology, cited by one participant as a critical tool for managing sustainability data efficiently. As sustainability reporting is vast and complex, the integration of advanced technologies will be essential for audit clients to manage large volumes of non-financial data, therefore enhancing the overall quality and reliability of sustainability reporting and making it easier for auditors in the assurance service provision, as per Bouten and Hoozée (2015).

Finally, it is worth mentioning that the participants highlighted the need for audit clients to enhance their governance practices and internal control systems, particularly in relation to sustainability risks. This involves a thorough review of existing internal control matrices to identify necessary adjustments or the creation of new processes and controls. Strengthening these internal mechanisms will help ensure that sustainability data is accurately collected, stored, and ultimately disclosed, thus improving the reliability of the information provided in sustainability reports. One participant specifically emphasised the importance of clients maintaining appropriate evidence to support their sustainability disclosures, underscoring the critical role of data management in this context.

To effectively address these challenges, auditors must also be aware of the difficulties faced by their clients. In this context, it is important to bring to the discussion the auditor's role of advisory mentioned by most of the respondents. Participants B and C noted that, as sustainability assurance reports are not yet mandatory for all companies, auditors would be able to engage in advising clients on their systems, processes, and procedures towards enhancing the sustainability reporting. This scenario, however, could lead to a situation where auditors end up auditing the same systems and processes they advised on, posing a significant threat to auditor ethics and independence.

Similarly, the literature, in particular, studies by Owen *et al.* (2000), Hummel *et al.* (2019) and Boiral *et al.* (2019) warns of the potential for auditor independence to be questioned when involved in sustainability report audits. Therefore, auditors must follow ethical and independent guidance carefully to avoid any conflicts of interest.

4.4 Conclusion

This chapter presented and discussed the findings from the data collected through the interview with external auditors. The analysis of the findings was supported by the literature review in order to allow this study to address the established objectives.

The next chapter closes this research by providing concluding reflections on the contributions and limitations of this study, as well as recommendations for practice and future research.

5 Concluding Thoughts on the Contribution of this Research, its Limitations and Suggestions for Further Research

This chapter synthesises the key findings of the study, emphasising their implications and contributions to the research topic, the limitations of the study, and recommendations for both practice and future research.

This exploratory study employed a qualitative research methodology, adopting an inductive approach to investigate the impacts of the evolving landscape of sustainability reporting on the audit service, under the newly introduced IFRS S1 and IFRS S2. Data was gathered through semi-structured interviews with external auditors who possess relevant experience in the field.

The qualitative nature of the study enabled the researcher to develop a grounded understanding of the issues, forming the basis for the conclusions presented in this chapter. The conclusions draw on the detailed analysis conducted based on the research objectives in relation to IFRS S1 and IFRS S2 requirements, the challenges faced by external auditors in offering assurance on compliance with the standards, and the recommended mechanisms to address these challenges.

The last section presents the concluding statement with final reflections.

5.1 Implications of Findings for the Research Questions

The findings of this study offer significant insights into the broader research topic of reporting requirements under IFRS S1 and IFRS S2, the challenges for external auditors in providing assurance on these reports, and the mechanisms to overcome these challenges.

The main implications of this research are following:

Reporting Requirements under IFRS S1 and IFRS S2:

The study reveals that while auditors possess a strong theoretical understanding of IFRS S1 and S2, there is a clear need for further development in applying this knowledge effectively in real-world scenarios. This gap between theoretical understanding and practical implementation suggests the auditing profession may require additional guidance and support to fully meet the standards' objectives.

The study indicates the introduction of IFRS S1 and S2 is likely to have a broad impact on how sustainability is integrated into financial reporting. The standards' emphasis on governance and risk management underscores a shift toward a more holistic approach to financial disclosures. These findings agree with the literature, especially the studies by Kolk (2005) and Bouten and Hoozée (2015). This approach aligns with the growing importance of sustainability in corporate governance and the increasing demand for transparency in how companies manage ESG risks.

The implications for the research are twofold. First, there is a need to continuously monitor and assess how these standards are being adopted across different industries and regions. As companies and auditors become more familiar with IFRS S1 and S2, best practices and common challenges will emerge, offering valuable insights for refining and improving the standards.

Second, the findings underscore the importance of developing robust audit frameworks and methodologies that can support auditors in effectively auditing compliance with these standards, thereby ensuring that sustainability-related financial disclosures meet the high standards of consistency and reliability expected by stakeholders.

Expertise and Training in Sustainability Reporting:

The findings resulting from the participant interviews agree with previous literature, particularly with Wallage (2000) and Nangle (2022), in that auditors possess skills and knowledge acquired from financial statement audits that are transferable for providing sustainability assurance. However, this research reveals a significant need for enhanced expertise and specialised training in sustainability reporting among auditors. With the relatively recent introduction of IFRS S1 and S2, auditors are still in the process of acquiring the necessary knowledge and skills to effectively audit this complex non-financial data. This knowledge gap poses challenges for auditors in providing assurance, and that could impact the stakeholders' decisions.

Continuous professional development emerges as crucial in equipping auditors to meet these new challenges. The findings underscore the importance of ongoing education and training initiatives within audit firms, emphasising that these efforts are essential for auditors to develop the expertise required to mitigate the complexities of sustainability reporting.

Participants highlighted the necessity of integrating sustainability experts into audit teams to address these knowledge gaps. This suggests that audit firms should either collaborate with external specialists or invest in developing internal expertise to support their audit teams. Such integration is critical to enhancing sustainability audits, thereby providing high-quality assurance services.

The findings also bring implications for audit firms' internal processes, suggesting a pressing need for significant investment in education and training within audit firms. This investment is essential not only for bridging the current knowledge gap but also for ensuring that auditors are well-prepared to handle the evolving demands of sustainability reporting.

Audit Risk Due to Clients' Challenges:

The study reveals that auditors face increased risks when clients encounter difficulties in implementing IFRS S1 and S2. The literature recognises several difficulties facing companies trying to comply with the core content requirements of the standards. This research identified additional challenges, particularly in the areas of collecting, storing, and presenting non-financial data in terms of material ESG risks, scenario analysis, and data integration. Auditors must recognise that clients' struggles with non-financial data management result in substantial audit risks. Consequently, there is a need for auditors to develop and implement robust risk mitigation strategies.

The study's findings emphasise that auditors must address clients' challenges as part of their assurance responsibilities, thereby mitigating increased audit risks. This highlights the necessity for auditors to invest in strategies and practices that support clients in overcoming these challenges, enhancing the overall quality and credibility of sustainability reporting.

Audit Challenges and Ethical Issues:

The complexity inherent in auditing sustainability reports introduces a range of challenges, particularly those related to ethical considerations. The study highlights that as auditors, the risk of conflicts of interest becomes more prominent, especially when engaging closely with clients when advising on sustainability issues. This situation raises critical concerns regarding auditor independence, which is fundamental to the credibility and trustworthiness of the assurance report.

The implications of these findings are significant, as they suggest the evolving role of auditors in the sustainability reporting landscape may inadvertently lead to ethical dilemmas that could undermine the integrity of the audit of sustainability reports. When auditors become involved in advising clients, there is a potential for their objectivity to be compromised during the audit of the related disclosures.

The study's findings highlight the importance of maintaining a rigorous ethical stance in the face of audit challenges introduced by sustainability reporting. As auditors play a pivotal role in contributing to the credibility of sustainability disclosures, it is imperative that they remain vigilant against potential conflicts of interest and uphold the highest standards of independence and objectivity.

SMEs and Compliance:

SMEs encounter unique challenges in complying with IFRS S1 and S2, due to their constrained resources and less sophisticated organisational structures. Unlike larger corporations, SMEs often lack dedicated departments or specialised personnel to manage the intricacies of sustainability reporting. This limitation makes it difficult for them to gather, analyse, and report non-financial data in a manner that meets the rigorous requirements of these standards. However, SMEs are expected to comply from financial years starting on or after 1 January 2026, as regulated by CSRD (European Union, 2023).

The study highlights the financial burden of securing assurance services from larger audit firms further complicates compliance for SMEs. These firms often command higher fees due to their expertise and resources, which can be unaffordable for smaller enterprises. As a result, SMEs may find themselves at a disadvantage, struggling not only to achieve compliance but also to maintain competitiveness in a market increasingly focused on sustainability.

Large Audit Firms vs. Small Audit Firms:

The study reveals a disparity between large and small audit firms regarding their ability to provide sustainability assurance under the standards. Large audit firms with a global presence, are equipped with extensive resources, specialised expertise, and well-established reputations, and are more adept at meeting the complex demands of auditing sustainability reports. Their capacity to allocate dedicated expert teams and access advanced tools allows them to offer a higher level of assurance, which enhances their credibility in the market.

In contrast, smaller audit firms face considerable challenges in this area. Limited resources, both in terms of personnel and technology, can complicate their ability to compete effectively with larger firms. This disparity not only places smaller firms at a disadvantage in the marketplace but also raises concerns about the overall accessibility and inclusivity of high-quality sustainability assurance services across the industry.

It is crucial to address the challenges faced by smaller firms. Developing strategies to bridge the resource and expertise gap will not only enhance the competitiveness of smaller firms but also ensure that high-quality, affordable sustainability assurance is accessible by all SMEs, as well as larger organisations.

5.2 Contributions and Limitations of the Research

Contributions

This research makes significant contributions to the existing body of literature on sustainability reporting and external auditing, particularly concerning IFRS S1 and S2. The study expands the literature by providing empirical evidence on the challenges and implications of these recently introduced standards. Given the academic discussion surrounding IFRS S1 and S2 is still in its infancy, this research fills a critical gap by exploring how these standards are perceived and implemented in practice, from the perspective of external auditors.

The results of this research enrich the literature offering valuable insights into an area that is still emerging and under-explored. A key contribution of this study is its in-depth analysis of the real-world challenges faced by auditors when providing assurance on sustainability reports under IFRS S1 and S2. This analysis enhances the understanding of the practical difficulties encountered during audits and provides a foundation for developing more effective audit methodologies and training programs tailored to these new standards. The findings contribute by offering insights that could inform future audit practices.

Limitations

Regardless of its contributions, the study has some limitations that need to be recognised.

Inductive Research: As inductive research, this study was designed to explore and understand specific phenomena within a particular context rather than to test predefined hypotheses. While this approach allowed for a rich, detailed exploration of the challenges

and implications of auditing IFRS S1 and S2 reports, it inherently limits the generalisability of the findings.

Small sample size: While the small participant sample included expert auditors from various industries, and provided valuable insights into industry-specific challenges and similarities in audit experiences across sectors, it also dilutes the findings, making them less generalisable across the broader audit population. The conclusions drawn are context-specific and reflect the experiences and perspectives of the study's participants, who may not represent the broader population of external auditors. Thus, caution is advised when applying these findings to different conditions or settings.

Scope of this research: The scope of this research was confined to a relatively small sample of external auditors, all operating within different geographic locations where the mandatory compliance period for IFRS S1 and S2 had not yet commenced (at the time of research). This limitation affects the breadth and depth of the findings, as the sample may not fully capture the diversity of experiences and challenges faced by auditors globally.

Research topic: IFRS S1 and S2 are newly introduced and evolving standards which present another limitation. There is currently limited knowledge available, and as such, this study captures only a snapshot in time. A more longitudinal approach in future research could provide more comprehensive insights as these standards become more established and widely adopted.

Researcher limitations: Finally, as this research was conducted by a student researcher with limited experience and within a constrained timeframe, the depth and scope of the study were necessarily limited. These limitations can affect the ability to conduct a broader or more in-depth investigation, and as a result, some nuances of the audit challenges associated with IFRS S1 and S2 may not have been fully explored.

5.3 Recommendations for Practice

Based on the findings of this study, there are several opportunities to be further explored in the context of sustainability assurance reports. As such, key recommendations are proposed to help external auditors effectively address the challenges posed by the IFRS S1 and S2 standards. These recommendations focus on enhancing auditors' capabilities, and audit processes, therefore improving the assurance service and increasing the reliability and credibility of sustainability reporting.

1. Enhance Training and Education

Given the evolving nature of sustainability reporting, auditors must prioritise continuous learning and professional development. Training programs should be updated regularly to reflect the latest developments in IFRS S1 and S2 and best practices in providing audit and assurance on non-financial data. Investing in specialised training will enable auditors to better understand and evaluate the complexities of sustainability reporting, therefore improving the quality of their assurance services.

2. Integrate Sustainability Experts into Audit Teams

The inclusion of sustainability experts within audit teams is essential to bridge the knowledge gap between traditional financial statements auditing and sustainability assurance, in compliance with the requirements under IFRS S1 and S2. These experts can provide valuable insights into non-financial data and ESG risks that are critical to sustainability reporting. External auditors should consider collaborating with or hiring sustainability specialists to support their work, ensuring that they can deliver comprehensive and credible audit opinions.

3. Leverage Technology

Auditors should invest in and leverage technology to manage the extensive amounts of data involved in sustainability reporting. Advanced data management tools can help in the collection, storage, and analysis of non-financial data, making the audit process more efficient and reliable. This is particularly important in reducing the audit risk associated with the complexity and volume of non-financial data.

4. Strengthen Audit Approach and Processes

The study reveals that audit risk increases when clients lack established systems and controls for sustainability reporting, and when auditors are equally unprepared. To address this, external auditors should refine their risk assessment processes, paying close attention to the risks associated with material misstatements in sustainability reports. Auditors should also enhance their procedures for integrating financial and non-financial information, ensuring that all relevant risks are identified and adequately addressed in the audit process.

5. Develop Smaller Audit Firms Capabilities

The implications of the findings suggest a need for targeted strategies to support smaller audit firms in building their capabilities. One potential approach could involve fostering collaboration between large and small firms, allowing smaller audit firms to leverage the expertise and resources of their larger counterparts. Additionally, industry-wide initiatives could be developed to provide shared resources, such as training programs, technological tools, and best practice guidelines, specifically aimed at enhancing the sustainability assurance capabilities of smaller audit firms.

Furthermore, the findings highlight the importance of creating a more level playing field within the audit industry to ensure that all firms, regardless of size, have the opportunity to contribute effectively to sustainability assurance. This could also involve regulatory bodies and professional organisations taking active steps to support smaller audit firms through policy adjustments or providing incentives for innovation and capacity-building in sustainability reporting.

6. Support SMEs in Compliance

While not specifically considered in the research, the findings imply the need for tailored guidance and support mechanisms specifically designed for SMEs. Such support could include simplified reporting frameworks, scaled to the size and capacity of smaller enterprises, or more affordable assurance services that still meet the essential requirements of IFRS S1 and S2. Additionally, legislative and regulatory bodies and industry associations could play a crucial role in developing and disseminating resources that address the unique needs of SMEs, helping them to bridge the gap in sustainability reporting and assurance.

This theme suggests that without targeted interventions, SMEs may continue to face significant hurdles in complying with these evolving standards, potentially leading to broader issues of non-compliance and reduced transparency in sustainability reporting within this critical segment of the economy. Therefore, it is imperative to develop solutions that are accessible and practical for SMEs, ensuring that they can fully participate in and contribute to the global movement towards enhanced sustainability practices.

7. Address Audit Risk and Ethics as Future Research Areas

Audit risk increases when clients rely on the auditor to help them develop expertise, processes and systems necessary to meet the requirements of IFRS S1 and S2, and then audit their own advice.

The ethical implications of auditors becoming too involved in client training raise concerns about auditor independence and objectivity. As auditors navigate the complexities of sustainability reporting, it is crucial to uphold the highest ethical standards and maintain independence. Given the potential for conflicts of interest, firms must ensure that clear boundaries are established and adhered to. Auditors should be transparent about their roles and responsibilities and avoid situations that could compromise their objectivity and the credibility of their audit opinions.

5.4 Recommendations for Future Research

As the landscape of sustainability reporting continues to evolve, particularly with the recent introduction of IFRS S1 and S2, there remains a significant need for ongoing research. These standards are still in the early stages of adoption and are not yet mandatory across all regions, industries or organisations. This presents numerous opportunities for future research to explore and expand upon the initial findings of this study. The dynamic nature of sustainability reporting requirements, coupled with the varying levels of implementation across different contexts, underscores the importance of further inquiry to enhance understanding and refine best practices.

Broader Industry and Geographic Scope

Expanding the industry and geographic scope should be considered for future research related to IFRS S1 and S2. Given the diverse economic, regulatory, and cultural environments across different regions, a broader scope could provide valuable insights into how these standards are being interpreted and applied globally. Additionally, exploring a wider range of industries could uncover sector-specific challenges and opportunities in sustainability reporting. This would contribute to a more comprehensive understanding of the standards' applicability and effectiveness, helping to identify best practices and areas where additional guidance may be needed.

Research on SMEs and Sustainability Reporting

While it is not mandatory reporting at present, future research should examine the specific challenges faced by SMEs in adopting and complying with IFRS S1 and S2. Given that SMEs often lack the resources and expertise required to meet these standards, a focused study could explore the effectiveness of simplified reporting frameworks, tailored training programs, and affordable assurance services. This research could also examine the role of technological solutions in helping SMEs overcome their unique obstacles, and provide insights that could inform the development of targeted support mechanisms and policies aimed at enhancing sustainability practices within this critical segment of the economy.

Research on Smaller Audit Firms and Assurance Challenges

Another important area for future research is the examination of the challenges faced by smaller audit firms in providing assurance services under IFRS S1 and S2. Unlike their larger counterparts, smaller firms may struggle with limited resources, expertise, and access to specialised knowledge, potentially affecting the quality of their assurance services. A dedicated study could investigate how these firms can build their capabilities and capacity, providing insights into how smaller firms can remain viable and effective in the evolving landscape of sustainability reporting.

Increase the Sample Size

To strengthen the generalisability of findings, future research should consider increasing the sample size of participants. A larger sample would allow for a more representative analysis of the broader audit profession, capturing a wider range of perspectives and experiences. This would help in identifying more nuanced trends and challenges that might not be apparent in smaller studies. A larger sample could also facilitate a more robust statistical analysis, providing stronger evidence to support the development of best practices and policy recommendations.

Review and Refine Interview Questions

Another opportunity for future research involves reviewing and refining the interview questions used in studies related to IFRS S1 and S2. Given the evolving nature of these standards and the emerging challenges identified in this study, it is crucial to adapt research instruments to capture the most relevant and pressing issues. Revising the interview questions to address specific areas of concern, such as audit risk, ethical issues,

and the role of technology, could provide more targeted insights. This would ensure that future research remains aligned with the current realities of sustainability reporting and audit practices, ultimately contributing to the continuous improvement of both the standards and their implementation.

Longitudinal Studies

Longitudinal research would be particularly valuable in assessing how the implementation and assurance of IFRS S1 and S2 evolve over time. By tracking the progress of companies and auditors as they gain more experience with these standards, researchers could identify trends, improvements, and ongoing challenges. This approach would also provide insights into the long-term impact of these standards on sustainability reporting quality, audit practices, and stakeholder trust. Longitudinal studies could reveal whether initial challenges persist or diminish as familiarity with the standards grows, offering critical data for refining the standards and related implementation and audit guidelines.

Research on Perspectives from Key Stakeholders in Sustainability Reporting

Future research should expand to explore the viewpoints of other key stakeholders involved in sustainability reporting under IFRS S1 and S2. This includes studying the experiences and challenges faced by organisations and their accountants, management, and sustainability officers. Additionally, the perspectives of regulators, professional bodies, investors, educators, and other stakeholders are crucial for a comprehensive understanding of the broader implications of these standards. Investigating how these groups perceive and respond to the evolving requirements could provide valuable insights into the effectiveness of the standards, the adequacy of current training and education programs, and the overall impact on transparency and accountability in sustainability reporting. This research could also identify areas where further guidance, support, or policy adjustments may be needed to facilitate successful implementation across various sectors.

5.5 Final Conclusion and Reflections

The primary objective of this study was to explore the implications of IFRS S1 and S2 on the external audit process, specifically focusing on the challenges and opportunities these new standards present. To achieve this objective, a comprehensive literature review was conducted to identify insights and existing knowledge gaps related to sustainability reporting and auditing practices. This was followed by qualitative data collection and

analysis through interviews with experienced external auditors, providing perspectives on the practicalities of auditing compliance with these standards.

Reflecting on the research process, it is evident that the field of sustainability reporting is rapidly evolving, presenting both challenges and opportunities for auditors. As standards such as IFRS S1 and S2 evolve, the audit profession must adapt and innovate, ensuring that auditors can continue to provide the high level of assurance that stakeholders expect. This research has been a journey of discovery, highlighting the critical role that auditors play in shaping the future of sustainability reporting.

This study sheds light on the critical challenges and opportunities associated with the implementation and assurance of IFRS S1 and S2. While auditors and their clients are still struggling with the practical application of these new standards, the findings suggest that with appropriate mechanisms and a commitment to ongoing education and technological integration, these challenges can be effectively addressed. The study's contributions offer valuable insights for audit practitioners, standard-setters, and researchers alike, paving the way for more robust and reliable sustainability reporting in the future.

Ultimately, the successful implementation of these standards will not only enhance the transparency and accountability of sustainability reporting but will also contribute to broader societal goals. By ensuring that companies accurately report on their sustainability practices, the audit profession plays a crucial role in fostering trust and confidence among stakeholders, therefore supporting the global transition towards more sustainable and responsible business practices.

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Appendices

Appendix A – Plain Language Statement for Research Participants

PLAIN LANGUAGE STATEMENT

Introduction to the Research Study

Research Study Title: An Exploration of Sustainability Reporting Requirements under International Financial Reporting Sustainability Standards S1 and S2, and the Impacts and Challenges for External Auditors.

University: Griffith College, Graduate Business School.

Principal Investigator: Dr Garrett Ryan.

Researcher Name: Kamila Aparecida Quintao Martins

Email: ka_qmartins@hotmail.com

II. Details of what involvement in the Research Study will require

This project involves taking part in semi-structured interviews. The interview responses will be recorded, and seek to gather information on your experience as an external auditor to comply with the IFRS S1 and S2 standards requirements. Questions are directed toward your thoughts on the challenges faced with providing assurance on sustainability reporting and practices implemented to overcome such challenges. I estimate the interviews will take no longer than 40 minutes to complete.

III. Potential risks to participants from involvement in the Research Study (if greater than that encountered in everyday life) I do not anticipate any risk to participants as a result of participation in this Research Study.

IV. Benefits (direct or indirect) to participants from involvement in the Research Study

The objective of this Research Study is to gain new knowledge that will enable to understand the challenges faced by external auditors in offering assurance on compliance with IFRS S1 and IFRS S2 and recommend potential mechanisms to address those challenges. This study may, therefore, be of benefit to you by providing you with the opportunity to contribute to body of knowledge on sustainability reporting standards IFRS S1 and IFRS S2 so that you and or society may benefit.

V. Advice as to arrangements to be made to protect the confidentiality of data, including that confidentiality of information provided is subject to legal limitations

Every effort is made to ensure the confidentiality of the participants. Participant names will not be recorded, as all participants will be assigned a code. Where used, recorded interview data will be downloaded to a password-controlled computer, and typed transcripts results are held within password-controlled documents. Participant biographical details and or mention of other persons will be omitted in the final report. Confidentiality of information provided is subject to legal limitations.

VI. Advice as to whether or not data is to be destroyed after a minimum period

Audio tape data will be destroyed on the successful completion of this master's degree in full compliance with GDPR regulations.

VII. Statement that involvement in the Research Study is voluntary

Involvement in this Research Study is voluntary. Participants who decide to take part may withdraw from the Research Study at any point. There will be no penalty for withdrawing before all stages of the Research Study are complete.

If participants have concerns about this study and wish to contact an independent person, please contact:

Dr Garrett Ryan
Graduate Business School
Research Committee
Griffith College
South Circular Road, Dublin 8, Ireland

Phone: + 353 1 416 3324

Email: garrett.ryan@griffith.ie

INFORMED CONSENT FORM

I. Research Study Title: An Exploration of Sustainability Reporting Requirements under International Financial Reporting Sustainability Standards S1 and S2, and the Impacts and Challenges for External Auditors.

University: Griffith College, Graduate Business School.

Principal Investigator: Dr Garrett Ryan.

Researcher Name: Kamila Aparecida Quintao Martins

Email: ka_qmartins@hotmail.com

II. Clarification of the purpose of the research

The aim of this research is to fulfill the requirements for the degree Master of Science: Accounting and Financial Management at Griffith College Dublin. Furthermore, through a combination your participation and the latest research into the challenges faced by external auditors in providing assurance on compliance with sustainability reporting standards IFRS S1 and IFRS S2, this research will add to body of academic understanding of the Research Subject.

III. Confirmation of particular requirements as highlighted in the Plain Language Statement

This project involves taking part in semi-structured interviews. The interview responses will be recorded, and seek to gather information on your experience as an external auditor to comply with the IFRS S1 and S2 standards requirements. Questions are directed toward your thoughts on the challenges faced with providing assurance on sustainability reporting and practices implemented to overcome such challenges. I estimate the interviews will take no longer than 40 minutes to complete.

Participant – please complete the following (Circle Yes or No for each question)

Have you read or had read to you the Plain Language Statement	Yes/No
Do you understand the information provided?	Yes/No
Have you had an opportunity to ask questions and discuss this study?	Yes/No
Have you received satisfactory answers to all your questions?	Yes/No
Are you aware that interviews will be audiotaped?	Yes/No

IV. Confirmation that involvement in the Research Study is voluntary

Involvement in this Research Study is voluntary. Participants who decide to take part may withdraw from the Research Study at any point. There will be no penalty for withdrawing before all stages of the Research Study are complete.

V. Advice as to arrangements to be made to protect confidentiality of data, including that confidentiality of information provided is subject to legal limitations

Every effort is made to ensure the confidentiality of the participants. Participant names will not be recorded, as all participants will be assigned a code. Where used, recorded interview data will be downloaded to a password-controlled computer, and typed transcripts results are held within password-controlled documents. Participant biographical details and or mention of other persons will be omitted in the final report. Confidentiality of information provided is subject to legal limitations.

VI. Participant Signature:

I have read and understood the information in this form. My questions and concerns have been answered by the researcher, and I have a copy of this consent form. Therefore, I consent to take part in this research project

Participants Signature: _____

Name in Block Capitals: _____

Witness: _____

Date: _____



Griffith College Ethical Approval Form

This form should be completed by the researcher (with the advice of the Research Supervisor), for all research which involves human participants.

Research Title	Examine the challenges faced by external auditors in providing assurance on compliance with sustainability reporting standards IFRS S1 and IFRS S2.
Researcher(s)/Student	Kamila Aparecida Quintao Martins
Supervisor (where relevant)	Suzanne Burdis
Programme of Study (where relevant)	MSc Accounting and Financial Management

Checklist:

<i>Please attach to all forms:</i>	
Summary of Project Proposal (no more than 500 words)	
Participant Information Sheet	
<i>If applicable, application should also include the following:</i>	
Draft Consent Form	
Draft Research Instrument e.g. survey, interview schedule, focus group questions etc	

Part (a)

		Yes	No	N/A
1	Will you describe the main research procedures to participants?	X		
2	Will you tell participants that their participation is voluntary?	X		
3	Will you obtain written consent for participation?	X		
4	If the research is observational, will you ask participants for their consent to being observed?			X
5	Is the right to freely withdraw from the research at any time made explicit to participants?	X		
6	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	X		
7	Will you debrief participants at the end of their participation?	X		
8	Will your research involve discussion of topics which the participants might find sensitive?		X	
9	Will financial inducements (other than reasonable expenses or compensation for time) be offered to participants?		X	
10	Will your project involve deliberately misleading participants in any way?		X	
11	Is there any realistic risk of any participants experiencing either physical or psychological distress or discomfort?		X	
12	Does your research involve participants who are particularly vulnerable or who may feel unable to give informed consent e.g. Prisoners; children; people for whom English is not their first language; learners in a programme you teach on?		X	
13	Will any non-anonymised and/personalised data be generated and/stored?		X	

If you answered YES to any of questions 8 to 13 please complete Part (b) of this form. If there are any other ethical issues that you think the Committee should consider, please explain them in Part Two of this form. It is the researcher's obligation to bring to the attention of the Committee any ethical issues not covered on this form.

Part (b)

For each question 8 to 13 that you answered YES, please give a summary of the issue and action to be taken to address it (no more than 300 words in total):

N/A

Signed (by Researcher):

Date:

To be completed by the Research Supervisor (in the case of a student application)

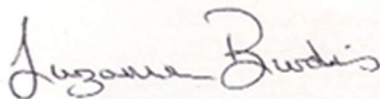
PLEASE TICK ONE

As the Research Supervisor of this research project, I confirm that I believe that all ethical issues relating to research have been dealt with in accordance with the College's policy on research ethics.

The application requires the attention and approval of Griffith College

Ethics Committee. (In general, forms which answer 'yes' to questions 8-13, should be forwarded to Griffith College Ethics Committee).

Comments:



24/7/2024

Signed (Supervisor):

Date:

List of the Main Interview Guiding Questions

[Q1] What is your understanding of IFRS S1 and IFRS S2 standard requirements?

[Q2] In your opinion, are there any ambiguities or areas in these standards that need more clarity?

[Q3] What are the primary challenges your clients face in preparing sustainability reports in accordance with IFRS S1 and IFRS S2?

[Q4] Can you share specific instances where your clients encountered difficulties in interpreting or applying these standards?

[Q5] In your opinion, who are the main users of sustainability reports? Do you believe IFRS S1 & S2 aim to address mainly investors' interests, and why?

[Q6] To your knowledge and experience, is the approach to the audit affected due to the many user groups of sustainability reports in comparison to financial statements?

[Q7] What role do the auditors play in providing assurance on sustainability reporting?

[Q8] What do you believe are the key expectations of stakeholders regarding sustainability assurance reports?

[Q9] What can be learned from financial statements assurance that can be used in sustainability reporting assurance?

[Q10] How is the firm you work with managing to address the difficulties in providing assurance on compliance with IFRS S1 and S2 requirements?

[Q11] What type of support or resources would be most beneficial in helping auditors provide assurance according to IFRS S1 and IFRS S2?