

# **ALPHABET SOUP: WHICH SUSTAINABILITY REPORTING FRAMEWORK IS MORE SUITABLE FOR A UNIVERSITY?**

## **1 INTRODUCTION**

This paper is part of a Project which aims to develop the Sustainability Reporting (SR) of the Federal University of Rio de Janeiro (UFRJ). Our objective is to provide two papers in addition to providing a draft of the report. The main objective of the first paper is to discuss which Sustainability Reporting Framework (SRF) is more suitable to apply to a university, and this present paper is the first paper of the project. We aim not only to provide a SR of the UFRJ, but also, in the future, use the SR as a tool for decision-making, particularly regarding the management of sustainable practices seeking Sustainable Development.

The desire to pursue Sustainable Development leads to projects of different entities and how they relate themselves to the environment and society (Brundtland, 1987). One way to show how entities relate themselves to the environment and society is presenting what they are doing to achieve Sustainable Development by presenting a SR (Mio, Agostini & Scarpa, 2024). Disclosing that kind of information is vital to ensure accountability and transparency from an ever-growing number of state and non-state development actors (Georgeson & Maslin, 2018).

Different entities can develop and present sustainability reports, whether public or private, increasing the relationship between entities and their stakeholders, including universities (Amoako, 2023; Son-Turan & Lambrechts, 2019). Additionally, we should consider that these reports may follow different models and complex indicators (Innes & Booher, 2010). We rise the research problem: Which Sustainability Reporting Framework (SRF) is more suitable to a university? The objective of this paper is to discuss which SFR is more suitable to a university. To achieve the objective, we provide two analyses: i. we discuss the key points of each currently acceptable SRF according to the literature; ii. we discuss the same relevant key points (reached out on the literature) according to their own Framework.

This study is primarily justified by its potential to enable the discussion of different SFRs. Eventually, it may collaborate to present a draft of the Sustainability Reporting (SR) of the Federal University of Rio de Janeiro (UFRJ). The SR of the UFRJ could facilitate accountability and transparency in the university's sustainable practices. We hope that this will not only provide society, and different stakeholders with an informational tool, but also enable the university's own academic community to learn about the projects of their peers which may incentivize new actions or develop the existing ones further, enabling us to seek Sustainable Development — based on ambitious cooperation and collaboration.

## **2 THE ALPHABET SOUP: SUSTAINABILITY REPORTING FRAMEWORKS**

In recent years, the sustainability reporting field has transformed into what many researchers describe as an “alphabet soup” — a complex proliferation of overlapping and sometimes competing frameworks, standards, and initiatives aimed at defining what, how, and to whom firms disclose environmental, social, and governance (ESG) information. As Liang et. al (2024) argue the multitude of frameworks often leads to inconsistencies in measurement and reporting, complicating comparability for users of such disclosures and increasing the reporting burden for organizations. Furthermore, scholars such as Christensen, Hail, and Leuz (2019) have observed that while standardization may enhance transparency and reliability, too many alternatives, each with different scopes, definitions of materiality, levels of regulatory enforcement, and stakeholder focus, can dilute clarity and impede decision-making.

## **3 SUSTAINABILITY INFORMATION: WHY ENTITIES REPORT?**

The disclosure of sustainability information has become a central feature of organizational communication with stakeholders. Different theoretical perspectives explain the

rationales behind sustainability reporting. Academia discusses that there are many elements that can explain reporting sustainability information by entities, such as theories (e.g. legitimacy theory, stakeholder theory, institutional theory, voluntary disclosure theory, signal theory) and drivers (e.g. managers' opportunistic behavior) (Benvenuto, Aufiero & Viola, 2023). The common characteristic of those explanations can be that these are applied to entities that are focused on results, which means firms oriented by profits. For governmental entities, sustainability reporting primarily serves as a means of disclosing sustainability-related information, with the main motivation being to provide such information to internal stakeholders (Farneti & Guthrie, 2009).

However, in this system, it is important to consider that reporting may also serve a tool in a strategic purpose, such as enhancing reputation to improve access to funding, or attracting students, employees, and partners, especially relevant in the case of universities, which operate in a competitive global environment (Amoako et al., 2023).

Moreover, SR enables universities to enhance transparency and accountability (Bosi et al., 2022) and internal governance through the process of data collection and disclosure — institutions develop systematic mechanisms to monitor their resource consumption, waste generation, and social engagement, thereby identifying opportunities for efficiency and innovation (Fonseca et al., 2011). This managerial dimension of reporting is not merely symbolic but may contribute to organizational learning, and continuous improvement.

Finally, universities are uniquely positioned to bridge research, education, and practice in sustainability. Reporting can serve as an educational instrument, involving students and faculty in data collection, analysis, and interpretation of sustainability performance. In this sense, disclosure is not only an accountability practice but also a pedagogical tool that reinforces the university's mission to educate responsible citizens and professionals (Lozano, 2011). This discussion leads us to believe that the development of the university's Sustainable Report may encourage students, faculty, and other professionals to seek Sustainable Development through more responsible citizens by identifying your own way to engage.

#### 4 METHODOLOGY

To achieve the objective of this paper which is to discuss which Sustainability Reporting Framework (SRF) is more suitable to apply to a university, we provide two analyses: In the 1<sup>st</sup> analysis — we discuss the key points of each currently acceptable SRF according to the literature (**i. materiality, ii. comparability, iii. regulatory reach, and iv. complexity**). In the 2<sup>nd</sup> analysis — we discuss the same relevant key points (reached out on the literature) according to their own Framework, such as **i. materiality**, **ii. if there is an applicability in specific sectors (which facilitates comparability)**, **iii. users (regulatory reach)**, but for **iv. complexity**, we created a scale to analyze it (implementation burden).

We created Frame 1 with the most relevant information of each of the alphabet soup — SRFs, the sources and data base of the key points in the second analyzes. Frame 1 was omitted due to space constraints. In short, the Data Base and the Source we use to collect Data of each of the SFR regarding Responsible Organization, Applicability/Sector Specificity, Materiality Approach, Primary User are collected in the official website of each of the SRF. The analysis includes Global Reporting Initiative (GRI), the Integrated Reporting (IR), the Sustainability Accounting Standards Board (SASB), the Task Force on Climate-related Financial Disclosures (TCFD), the Sustainable Development Goals (SDG) indicators for entities, the European Sustainability Reporting Standards (ESRS), and the IFRS Sustainability Disclosure Standards (ISSB Standards). It is important to highlight that the document referred to as SDG, is called Guidance on Core Indicators for Sustainability and SDG Impact Reporting, published by the International Standards of Accounting and Reporting (ISAR), part of the UNCTAD.

## 5 RESULTS

In this section we provide the results of the two analyses, and a discussion regarding the research question of which SRF is more suitable to a university.

### 5.1 1<sup>ST</sup> ANALYSIS: KEY POINTS OF SRFs BASED ON THE LITERATURE

The academic debate on sustainability reporting frameworks reveals both areas of convergence and divergence, particularly regarding their objectives, usability, and adequacy. Among the most prominent frameworks, the Global Reporting Initiative (GRI), the International Sustainability Standards Board (ISSB, incorporating SASB), and the European Sustainability Reporting Standards (ESRS) under EFRAG stand out as the most influential in shaping sustainability disclosure practices. These frameworks differ substantially in their conceptualizations of materiality, their primary audiences, and their reporting objectives.

Regarding **i. materiality**, it has emerged as a critical point of debate. The ISSB adopts a financial or “enterprise value” perspective, emphasizing information relevant to investors’ decision-making. Millar and Slack (2024) highlight persistent tensions between investors and ISSB, especially concerning the scope of materiality. In contrast, the ESRS applies a double materiality approach, requiring disclosure of both financial implications and societal and environmental impacts. Similarly, the GRI framework has been praised for its stakeholder orientation, as it prioritizes broader impact disclosure over a narrow financial focus (Tsui, 2023).

Issues of **ii. comparability** and **iii. regulatory reach** further distinguishes these frameworks. While the ISSB is often regarded as a step toward global convergence, concerns persist over definitional clarity and assurance mechanisms (Millar & Slack, 2024). Additionally, literature discusses **iv. complexity**. The ESRS, which is mandatory in the European Union, offers comprehensive guidance but it is also considered high in complex (Finch & Beak, 2023). Conversely, the GRI demonstrates accessibility and long-standing use, which suggest low complexity (Tsui, 2023).

### 5.2 2<sup>ND</sup> ANALYSIS: KEY POINTS OF SRFs BASED ON THE FRAMEWORK

We show and compare in a spreadsheet – Frame 2, the relevant key points of each currently acceptable SRF. Frame 2, previously included, was omitted from the study due to space constraints, but we present the discussion of the relevant key points of each currently acceptable SRF: Applicability and Sector Specificity, Materiality Approach, Primary User, Level of Implementation Complexity and Implementation Costs.

The first key point, **i. materiality**, the Materiality Approach, can be divided into four different groups: Financial Materiality, Impact Materiality, Double Materiality and Climate-specific materiality. As of August 2022, the International Sustainability Standards Board (ISSB) of the IFRS Foundation assumed responsibility for the SASB Standards, similarly, the Integrated Reporting Framework and Integrated Thinking Principles are maintained under the auspices of the IFRS Foundation, the IFRS Foundation’s International Accounting Standards Board (IASB) and International Sustainability Standards Board (ISSB) are jointly responsible for the Integrated Reporting Framework. The SASB, IIRC and ISSB adopt Financial Materiality in their frameworks, that means a company is asked to disclose material information about the sustainability-related risks and opportunities that could reasonably be expected to affect its prospects. The GRI framework, adopts Impact Materiality, which can be defined as, “Information on the reporting company’s impact on the economy, environment, and people for the benefit of multiple stakeholders, such as investors, employees, customers, suppliers and local communities”. While SDG also adopts Impact Materiality, directly tied to the 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, containing 17 Sustainable Development Goals (SDGs) and 169 targets. The Guidance on Core Indicators for Sustainability and SDG Impact Reporting provides an annex tying each core indicator on the framework to a relevant SDG target and/or indicator. The ESRS, adopts the

concept of “Double Materiality” that can be defined as the interlinking of impact materiality and financial materiality. Impact materiality will require reporting on impacts a company is having on society and the environment and hence their contributions towards sustainable development. Financial materiality will require reporting of sustainability-related financial disclosures addressing the financial implications of sustainability issues. Regarding materiality, the TCFD framework states: “To ensure as much compatibility as possible with national disclosure requirements for financial filings, the Task Force believes companies should determine materiality for climate-related issues consistent with how they determine the materiality of other information included in their financial filings”.

The second key point, **ii. comparability**, we analyze Applicability and Sector Specificity, resulted in a mix of frameworks that adopt universal, generally applicable standards, and frameworks with sector specific standards. The GRI framework is divided into universal standards, sector standards and topic standards, covering several different industries. The GRI 404 Training and Education, is a topic standard that addresses the disclosure of training and education-related impacts in organizations, notably related to the main objective of this paper. The SASB, now part of the IFRS Foundation, provides Industry-specific disclosure topics, acting as a source of guidance for applying the IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information in the absence of specific IFRS Sustainability Disclosure Standards. The SASB Standards identify the sustainability-related risks and opportunities most relevant to investor decision-making in 77 industries. The IR, TCFD, SDG and ESRS, provide universal standards that are generally applicable across all industries. Although, the ESRS is only applicable to companies in the European Union under the Corporate Sustainability Reporting Directive (CSRD). Whilst the TCFD provides guidance on disclosure of Climate-focused information across all sectors. The ISSB standards S2 Climate-related Disclosures offers additional Industry-based Guidance on implementing Climate-related Disclosures on the following industry sectors: Consumer goods sector, extractives & minerals processing sector, financials sector, food & beverage sector, health care sector, infrastructure sector, renewable resources & alternative energy sector, resource transformation sector, services sector, technology & communications sector and transportation sector. There is no additional guidance related to educational reporting.

The third key point, **iii. regulatory reach**, we analyze Primary User, resulted in main users of information regarding the disclosure of sustainability-related impacts. The IFRS Foundation’s focus is on meeting the information needs of investors. Therefore, the IIRC, SASB and ISSB frameworks, are primarily used for investors, financial institutions, public shareholders, and stock market players. The GRI, SDG and TCFD, focus on providing accessible information for multiple stakeholders, such as investors, employees, customers, suppliers and local communities, while the ESRS defines two kinds of stakeholders: affected stakeholders, individuals or groups whose interests are affected or could be affected by the undertaking’s activities and its direct and indirect business relationships across its value chain, and users of sustainability statements, such as investors, credit institutions, civil society, government and academics, for example.

The analysis of the fourth key point, **iv. complexity** is derived from Frame 3.

Frame 1 – Relevant key points of each currently acceptable SRF

<b>Level of implementation complexity / Implementation Costs</b>	
<b>Very Low</b>	Simple implementation, usually free of charge, with no need for external consulting.
<b>Low</b>	It requires some internal training, but it can be done with resources already available.
<b>Medium</b>	It requires investments in technology, dedicated personnel and adaptations in the reporting processes.
<b>High</b>	It is necessary to hire consultancies, specialized software, partial audits.

<b>Very High</b>	Highly sophisticated structure, certifications, mandatory external verification and continuous adaptation processes.
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Source: Sustainability Reporting Frameworks' Responsible Organizations websites and official documents.

According to the scale created, the GRI Framework can be classified as medium in Level of Implementation Complexity/ Implementation Costs, since it's a comprehensive, clear guidance on disclosure of sustainability-related reporting. Although, the implementation of GRI standards can require adaptations in the reporting processes and usually requires added investments in technology and dedicated personnel. The SASB, IIRC and ISSB, according to the scale of Level of Implementation Complexity/ Implementation Costs, could be considered high since it usually requires the assistance of specialized consultancy and auditing firms, since is so closely tied to financial materiality, which is audited in the consolidated financial reports. The TCFD can be considered high in Level of Implementation Complexity/ Implementation Costs since it is climate-focused it can require scenario modelling, which would drive technology costs up. Expenses for collecting climate data, conducting internal analysis and hiring external ESG consultants can lead to relevant implementation costs. The SDG framework, according to the scale of Level of Implementation Complexity/ Implementation Costs, could be considered medium, since there are essential indicators, but since the document is a Guidance on Core Indicators for Sustainability and SDG Impact Reporting, the adoption can be more flexible, and there is no mandatory auditing. Lastly, the ESRS according to the scale of Level of Implementation Complexity/ Implementation Costs, could be considered very high since it is mandatory in the European Union, there are assurance and auditing requirements, the standards are highly detailed and adopts double materiality driving the implementation complexity and costs up.

## 6 FINAL CONSIDERATIONS

The main objective of this paper is to discuss which Sustainability Reporting Framework (SRF) is more suitable to apply to a university. We develop two analyses of the main Sustainability Reporting Frameworks. In the 1<sup>st</sup> analysis — we discuss the key points of each currently acceptable SRF according to the literature (**i. materiality, ii. comparability, iii. regulatory reach, and iv. complexity**). In the 2<sup>nd</sup> analysis — we discuss the same relevant key points (reached out on the literature) according to their own Framework, such as **i. materiality, ii. if there is an applicability in specific sectors (which facilitates comparability), iii. users (regulatory reach)**, but for **iv. complexity**, we created a scale to analyze it (implementation burden). Subsequently, we aim to integrate both analyses to support our discussion.

Note that, Lozano (2011) emphasizes that, for universities, the selection of an appropriate framework must reflect their diverse missions and stakeholder landscape. Unlike profit-oriented firms, universities pursue educational, research, and societal objectives, and so, their reporting should capture these broader responsibilities. The results show evidence that initially, the SDG guidelines are more appropriate due to materiality that encompasses multiple stakeholders beyond their greater ease of data collection, less complex analyses, and focus on sustainable development. The GRI and ESRS appear particularly suitable, as both emphasize double materiality, stakeholder engagement, and due to the specificity of the education sector while ISSB standards may complement them by enhancing comparability and financial rigor.

Finally, it is important to consider that this paper has limitations. For instance, in the first analysis, the literature review is based on some relevant papers. However, in the main project our idea is provide discussion regarding SFR and some guidance to develop the Sustainability Reporting of the Federal University of Rio de Janeiro (UFRJ). But the true bottom line here is that we believe that this study may encourage i. the discussion regarding RSFs; ii. the development of the UFRJ' SR, developing the call for students and faculty to engage; iii. the transparency and accountability of the university's sustainable practices; iv. the use of SR as a tool for decision-making focused on more sustainable practices.

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