Global Reporting Initiative and Sustainable Development Goals. A focus on energy and climate-related reporting experiences

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ABSTRACT: ***(GLOBAL REPORTING INITIATIVE AND SUSTAINABLE DEVELOPMENT GOALS. A FOCUS ON ENERGY AND CLIMATE RELATED REPORTING EXPERIENCES).*** *This study investigates the prospects of the Global Reporting Initiative (GRI) Standards in supporting organisations' efforts to disclose and report sustainability matters in light of energy and climate-related Sustainability Development Goals (SDGs) demands. This research relies on a constructivist understanding of GRI, which is led by institutional theoretical lens. A content analysis is conducted on a sample of 109 Italian Non-financial reports published by energy and climate related organization in accordance with the requirements of the EU Directive with respect to the financial years from 2017 to 2020. The authors investigate the adoption of 11 GRI Topic Standards requested by the Non-financial Disclosure (NFD) regulation and aligned with the material SDGs 7 and 13. Findings reveal that all the organisations of the sample disclose and report sustainability information through the usage or "in accordance" with GRI Standards. However, disclosure is not always homogeneous also among SDTs of the same standard, providing room for reflections on how an engagement among standard-setting institutions is beneficial to provide robust support for energy- and climate-related reporting. This study aims to contribute to on-going debate on sustainability standard-setting process. Consistent with current academic debate, this research acknowledges that standard-setting in not just a technical process but also a political issue, which requires making choices between conflicting opinions and beliefs. GRI has assumed a leading role in supporting companies to communicate their sustainability performance. Nevertheless, findings suggest how the entrance of new - and more investor-oriented - institutions, such as the EFRAG and ISSB, could further support address key gaps emerged from the analysis. Sustainable development issues are today more that even urgent, complex and capable of generate effects on people and planet. A consensus on a shared reporting framework mandatory for organizations could guarantee that much-desired need for information on their impacts on sustainability development and management approach to identify risk and opportunities, incorporating them into the strategy and the business model. Moreover, a shared sustainability framework could assure the aligning between financial and economical short-time performances with long-term SDGs targets and value creation. This research contributes to call for studies on the future role of GRI in responding to stakeholder demand for enhanced sustainability information, the contributions GRI has made to the sustainability reporting space and the practice of sustainability reporting. Particularly, this study focuses on energy and climate-related reporting response of Italian organisations obliged by NFD regulation to issue non-financial statements. Some reporting drop-offs imply further efforts for GRI to support higher sustainability pressures.*

KEYWORDS: *Global Reporting Initiative; Sustainable Development Goals; Reporting.*
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1. Introduction

Agenda 2030 for sustainability development has brought out the interconnectedness between health, social inequalities and climate changes, highlighting the complex, heterogeneous and fragility of the actual global economic system. Covid-19 pandemic has further swept away any doubts as to the necessity to a profoundly rethinking of business in a more sustainable way that takes in account to the impacts generated by biodiversity loss, anthropogenic climate change, deforestation and poverty diffusion (ADAMS AND ABHAYAWANSA, 2021). This scenario has conducted organisations to reformulate how manage and report their long-term value creation process and the impacts on stakeholders, increasing the efforts to align their long-term financial performance with benefits to society.

Accordingly, SDGs provide a coherent and timely blueprint for coping with the most relevant sustainability challenges (COSTA ET AL., 2022; CARUNGU *ET AL.*, 2022). Organisations have been increasingly expected to incorporate SDGs in their business models and strategies, designing value creation processes, which encompass the economic, social, and environmental pillars of sustainable development (FONSECA AND CARVALHO, 2019). Consequently, sustainability reporting preparers must understand and measure the corporate progress towards the achievement of the SDGs (DE VILLIERS *ET AL.*, 2022; GARCÍA-SÁNCHEZ *ET AL.*, 2020). To achieve it, preparers need to master the complex sustainability reporting landscape as sustainability is progressively becoming "the lens through which a business is judged by its customers, workforce, society, governments and even its investors" (CGMA, 2018, P. 7). Sustainability reporting has become a global standard business practice at the level that it poses risks to laggard organisations that will soon be left behind. During the last 20 years, a fundamental institutional actor in promoting sustainability reporting has been GRI who, with its launch of reporting guidelines in 1999, has been central to the process of institutionalization. Its "institutional entrepreneurship" and the role in providing legitimacy to reporting activities is widely recognized (BROWN *ET AL.*, 2009; ETZION AND FERRARO, 2010; LEVY *ET AL.*, 2010). This process was achieved by the ability of the GRI to emerge what sustainability reporting should involve (BEBBINGTON AND LARRINAGA, 2021) and to become a powerful tool to increase the detail and rigor of the disclosures (COSTA ET AL. 2022; THUN AND ZÜLCH, 2022; CARINI ET AL., 2018), ensuring that sustainability information is integrated into the overall corporate reporting framework, thus bridging the traditional gap between financial and non-financial reporting (VENTURELLI ET AL., 2019).

Within the European context, the Directive 2014/95/UE (NFRD) has imposed, for the first time, large organisations to disclose information on what they see as the risks and opportunities arising from social and environmental issues, and on the impact of their activities on people and the environment, with the aim to support stakeholders to evaluate the sustainability performance of companies, as part of the European green deal (HORVÁTH ET AL., 2017; OHNESORGE AND ROGGE, 2021; BAUMÜLLER AND GRBENIC, 2021). Despite these efforts, dissatisfaction and distrust emerged in the initial years post-NFRD implementation. Numerous studies pointed out doubts around key issues like unclear materiality definition (Jeffery, 2017), the abuse of the "comply or explain" principle (PIZZI ET AL., 2020; VENTURELLI ET AL., 2020), inconsistent reporting frameworks (SZABÓ AND SØRENSEN, 2015), the absence of mandatory assurance (LA TORRE ET AL., 2018), and flexibility granted to Member States for state-specific requirements on companies (Mio et al., 2021; NICOLÒ ET AL., 2022). In response, the European Commission (EC) launched a public consultation in 2020 to collect stakeholders' views on possible revisions to the NFRD. Relevance, comparability and reliability issues, were some of the main topics signalled by stakeholders, as well as the need for robust audit requirements, increased information digitalisation, and transparent materiality assessment processes (EC, 2020). As part of the European Green Deal, the EC proposed a new Corporate Sustainable Reporting Directive (CSRD) in April 2021, amending the NFRD. The CSRD addressed previous shortcomings by extending reporting requirements to all large and listed small and medium-sized companies, emphasising the double materiality principle, requiring compliance with new European Sustainability Reporting Standards (ESRS), introducing sustainability information assurance, and imposing to include sustainability information in the management report (EU, 2022). The CSRD came into force on January 5, 2023, simultaneously, the European

Financial Reporting Advisory Group (EFRAG) worked on EU ESRS based on the double materiality principle. The EC adopted the final draft of ESRS on July 31, 2023, including two cross-cutting standards that define general principles and disclosure requirements and ten sector-agnostic topical standards that address environmental, social and governance matters (EC, 2023). In parallel, the International Financial Reporting Standards (IFRS) Foundation entered the sustainability reporting landscape, establishing the International Sustainability Standards Board (ISSB). ISSB's strategic focus includes information materiality for investors, prioritising climate-related reporting, building on existing frameworks, such as the Task Force on Climate-related Financial Disclosures (TCFD), and engaging with standard-setters from key jurisdictions (IFRS Foundation, 2021). The ISSB published two exposure drafts in March 2022, focused on general requirements for disclosure of sustainability-related financial information and climate-related disclosures. This renovates awareness of the risks about the impact of environmental and social issues on long term-value creation has stretched more organisations to report their long-term value creation. Investors are particularly interested in the organisations' sustainability impacts on financial performance and investments returns from sustainability matters. Particularly, investors' interests and the finance sector in terms of impacts on financial performance and investments returns is growing significantly. These new institutional actors have started to join the discussion demanding simpler ways of assessing sustainable development issues through comparable and consistent metrics translated into financial impacts (DE VILLIERS *ET AL.*, 2022; HUME AND SANDERSON, 2020; TETT, 2020; ABHAYAWANSA, *ET AL.*, 2018). Consequently, momentum has grown behind increased coalescence of the major non-financial reporting standards (EFRAG, 2021). The Corporate Reporting Dialogue, which brings together the major financial and non-financial standard setters, has provided a space for discussions about further alignment.

However, this sudden frenzy and urgent need to move to harmonise sustainability reporting in light of the recent investors demands account disregards two crucial aspects: i) sustainability issues and related accounting and reporting practices are complex, interconnected, dynamic and uncertain, which require a more nuanced practical perspective and an in-depth professional knowledge that, so far, was driven mainly by the GRI as "institutional entrepreneur" able to provide legitimacy to reporting activities (BROWN *ET AL.*, 2009; ETZION AND FERRARO, 2010; LEVY *ET AL.*, 2010); ii) the request for consistent and comparable metrics able to simplify accounting and reporting practices risks to deprive the sustainability information quality and dissolve the effort of the best practices in terms of sustainability reporting. Moreover, sustainability metrics per-se are incapable of painting a comprehensive picture of organisational realities (MATTINGLY AND BERMAN, 2006; SADOWSKI *ET AL.*, 2010). In the GRI perspective, sustainability reporting aims to "inform decisions for a wide range of stakeholders, ranging from employees to policy makers and from customers to investors" (GRI, 2020, P.1). It aims to respond to the information needs of investors while also meeting other stakeholder needs. As suggested by Adams (2021), we are assisting to an attempt to remove away a sustainability reporting standard setting with multi-stakeholder process - currently carried out by the GRI – in favour of an investor-oriented standard setting approach. Moreover, in order to legitimize the entrance into the sustainability field of these "new institutional actors" (GINER AND LUQUE-VILCHEZ, 2022), a myth of harmonization was promulgated and fuelled by leading magazines and newspapers referring to the "alphabet soup" of the standard-setter. A general sentiment of pressure was described on sustainability reporting editors who would feel the need for clear reporting guidelines to guide their work. As a result, simpler methods seem to have become essential

to assess sustainable development problems through comparable and consistent metrics translated into financial impacts (ABHAYAWANSA *ET AL.*, 2018). So far, studies that analysed the role of GRI in supporting SDGs implementation and disclosure are still scarce. Some researchers have highlighted how companies failed to disclose information on specific indicators related to SDGs (HERAS-SAIZARBITORIA ET AL., 2022; LODHIA ET AL., 2023; MANES-ROSSI AND NICOLÒ, 2022), wisely selecting only the SDGs with which they feel comfortable (OXFAM et al., 2018; HERAS-SAIZARBITORIA ET AL., 2022). Other scholars provided further insights concerning the factors influencing SDG disclosure, like governance mechanisms (PIZZI ET AL., 2021a; ZAMPONE ET AL., 2022; ARENA ET AL., 2023), firm-level characteristics (PIZZI ET AL., 2021a; ARENA ET AL., 2023), institutional pressures (GALEAZZO ET AL., 2023) and country-level drivers (BOSE AND KHAN, 2022) or the association between SDG disclosure and ESG performance (NICOLÒ ET AL., 2024). However, little is known about the role played by different institutional actors and the structural conditions that engendered sustainability reporting through the GRI standards (ADAMS *ET AL.*, 2022; DE VILLIERS *ET AL.*, 2022; LARRINAGA AND BEBBINGTON, 2021), and which reflexively examine the recent events characterising the European Union regulatory standard-setting landscape in the sustainability field (GINER AND LUQUE-VÍLCHEZ, 2022).

Consistently, this study aims to explore how GRI Standards support organisations' efforts to disclose and report sustainability matters in light of energy and climate-related SDGs demands. A content analysis has been conducted on a sample of 109 Italian non-financial reporting (NFR) in accordance with the requirements of the NFD regulation for the years from 2017 to 2020. The research focuses on organizations operating within environmental sensitive industries. The authors developed an environmental SDGs disclosure index (ESDGsDI) investigating the adoption of 11 GRI Topic Standards requested by the NFD regulation and aligned with the material SDGs 7 and 13 to reflect on the following questions: i) if the disclosure extent of SDG 7 and SDG 13 within NFR is aligned with the NFD regulation in terms of economic dimension; and ii) if the disclosure extent of SDG 7 and SDG 13 is aligned with the NFD regulation in terms of environmental dimension. The study will offer some reflective prompts on the GRI Standards role in supporting Italian organizations to report their performance along with energy- and climate-related SDGs and if there are any improvements' opportunities for GRI's role within the current sustainability standard-setting landscape.

The rest of the paper is structured as follows. Section 2 provides the theoretical background. Section 3 describes the composition of the sample and the research methods adopted. Section 4 shows the findings of the study, and section 5 provides the conclusions of our analysis.

2. Theoretical background

Corporate reporting represents a key vehicle by which organisations communicate with stakeholders as part of their accountability commitments (BUSCO *ET AL.*, 2013; LOMBARDI AND SECUNDO, 2020; ACCOUNTANCY EUROPE, 2020). Undoubtedly, this process of communication and accountability affects a broad range of constituents, such as standard setters, regulators, policy makers, investors, and society (FEDERATION OF EUROPEAN ACCOUNTANTS, 2016; LA TORRE *ET AL.*, 2020). The rise of stakeholder audience leads to the pressing needs for a better understanding of organisations' longer-term value drivers,

expectations and risks, including their impact on the environment and society, and it requires a reconsideration of corporate reporting (ADAMS AND MCNICHOLAS, 2007; BUSCO *ET AL.*, 2013; HOPWOOD, 2009). As a result, an increasing number of organisations worldwide are refining their corporate reporting practices, and the content of corporate reporting is expanding in order to address the demands of a growing stakeholder audience for corporate information (KPMG, 2017).

Prior accounting research uses institutional theory as theoretical lens to understand how institutions shape similar or different disclosure patterns due to coercive, normative, and mimetic pressures (see, for example, CAMPBELL, 2007; CARUNGU *ET AL.*, 2020; DE VILLIERS AND ALEXANDER, 2014; FAROOQ AND DE VILLIERS, 2019; ROSZKOWSKA-MENKES AND ALUCHNA, 2017). According to institutional theory, various external factors affect organisations to account for sustainability. Basically, an organisation's underlying motivation is to conform to other organisations, by adopting well-accepted sustainability practices that are in line with society's demands (HIGGINS *ET AL.*, 2015). Therefore, this theory helps in understanding the reasons for owing uniform features in organisations within the same organisational field (SUSITH AND STEWART, 2014). DiMaggio and Powell (1983, p. 147) define an organisational field as "those organisations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organisations that produce similar services or products". Consistently, organisations conform within an organisational field mainly due to institutional pressures for change as "they are rewarded for doing so through increased legitimacy, resources, and survival capabilities" (SCOTT 1987, P. 498). DiMaggio and Powell (1983) argue that, once an organisational field is defined, several influential forces arise within society, which foster organisations to conform to other organisations within the same organisational field. Institutional isomorphism occurs because organisations tend to be aligned with the other organisations, to obtain a higher level of legitimacy (SCOTT, 1987, P. 498). This theoretical perspective could enlighten the case of organisations adopting GRI standards for their sustainability and non-financial reports. Accordingly, together with the implementation of homogenous sustainability accounting and reporting practices, isomorphism is perceptible in how these practices have institutional meaning and conform to a set of converging expectations about proper behaviour (LARRINAGA AND BEBBINGTON, 2021). For instance, some reporters have participated in the divulging process of sustainability reporting via the GRI process and other initiatives. In a multi-stakeholder dialogue setting, organizations influence epistemic communities, carriers and governments, which represent proactive producers of reporting norms aimed to shape their own reports. Another element of institutions is stability of practices. Arguably, institutional theory conceives of institutions as "chronically reproducing complexes of routines, rules, roles, and meanings" (JEPPERSON AND MEYER, 2011, P. 64): institutions are therefore resistant to change (Scott, 2008). As institutional theory emphasizes, social processes are characterized by stability and inertia, and an important focus of this theory is the explanation of why when something is institutionalized it is not likely to change (ZUCKER, 1977). Djelic and Sahlin-Andersson (2006) contend that"[i]nstitutional forces generally become taken for granted as the ... 'natural' way of being and doing" (p. 23). The analysis in this paper follows from these points to articulate how GRI standards support organisations' efforts to disclose and report sustainability matters in light of energy- and climate-related SDGs demands. Accordingly, this study engages with accounting literature on the role played by different institutional actors and the structural conditions that engendered sustainability reporting through the GRI standards (LARRINAGA

AND BEBBINGTON, 2021), and which reflexively examines the recent events characterising the European Union regulatory standard-setting landscape in the sustainability field (GINER AND LUQUE-VÍLCHEZ, 2022).

GRI represents a key institutional actor in promoting sustainability reporting and providing legitimacy to reporting activities (LARRINAGA AND BEBBINGTON, 2021). Particularly, GRI is an independent international organisation, established in 1997 as a joint initiative of the Coalition for Environmentally Responsible Economies, an American non-government organisation, and the United Nations Environmental Programme. The primary GRI's aim was to set the first accountability mechanism to guarantee organisations adhere to responsible environmental conduct principles, which was then broadened to include social, economic and governance issues (GRI, 2022). In 2016, the Global Sustainability Standards Board issued the first global standards, which include all the main concepts of the previous guidelines, improved with a more flexible structure, clearer requirements and a more straightforward language. These standards configure a set of modular reporting guidelines aimed at supporting organisations in communicating the impacts of their activities on economic growth, society and environment (GRI, 2022). The release of the first edition of the GRI guidelines in 1999 generated an immediate impact, with 44 companies publishing a sustainability report in 2000, according to the GRI databases, as well as a more enduring impact, with more than thirteen thousand organizations reporting in 2019 standards (LARRINAGA AND BEBBINGTON, 2021). Since its initial implementation, the GRI has gained extensive attention from organisations worldwide, and has become an international reporting framework (FEDERATION OF EUROPEAN ACCOUNTANTS, 2016). The KPMG (2020) survey provides further evidence on the high popularity of GRI standards among organisations. GRI remains the most used reporting standard, used by around two-thirds of N100 reporters and around three-quarters of G250 reporters. The application of the GRI Standards (introduced at the end of 2016) has significantly increased compared with 2017. Within the Italian context, GRI represents the *de facto* reporting standard (CANTELE, 2014). For instance, in 2017 the 69.95% of the Italian organisations obliged to NFD regulation used the GRI standards for preparing their mandatory NFR (MOLINARI AND CARUNGU, 2019). The issuing of the GRI reporting guidelines impact sustainability accounting and reporting practices. The GRI also codified several rules and expectations about sustainability reporting, which remain a predominant reference in the field, despite subsequent developments such as integrated and non-financial reporting (LARRINAGA AND BEBBINGTON, 2021).

The GRI standards are de-facto institutionalized sustainability reporting standards, which have been progressively embedded within the existing institutional structures, coping with increasing sustainability information needs (LARRINAGA *ET AL.*, 2020). Institutional meaning is evidenced the existence of a shared language, such as stakeholder engagement, materiality or triple bottom line reporting and by the development of specific metrics (LARRINAGA AND BEBBINGTON, 2021). For instance, GRI has extensively contributed to the popularization of the concepts of inclusive multi-stakeholder process, social impact indicators and materiality Official recognition by national governmental agencies, such as the UN and OECD, has imparted to GRI prestige, visibility and legitimacy, which in turn boosts to institutionalize sustainability reporting as a standard reporting practice (BROWN *ET AL.*, 2009). Furthermore, GRI has evolved in line with emerging global challenges, such as climate change, development of new technologies, economic inequality and the world population, and the transition to a sustainable economy (GRI, 2022). For instance, the GRI

created the 'Sustainability and Reporting 2025' project to discuss about the type of information needed to deal with these global issues and discuss the role of technology in enabling organisations and stakeholders to appropriately collect, check, analyse, and manage non-financial data (FIANDRINO, 2019). Levy *et al.* (2010) explain that GRI entrepreneurship involved launching a reporting initiative that soon achieved a high degree of approval by relevant actors and, particularly, a high degree of acceptation by large companies across the globe. These authors argue that GRI's contribution entailed a skilful mixture of strategies that comprised the development of GRI as an organization, the inscription of a network of relations with powerful actors and the building of discourses that legitimized sustainability accounting and reporting practices worldwide (LARRINAGA AND BEBBINGTON, 2021).

GRI designs its guidelines and standards in close collaboration with different stakeholders for the purpose of making "collective efforts to accelerate progress in the 2030 Agenda for Sustainable Development" (GRI, 2021). Therefore, Agenda 2030 reaffirms this institutional movement to promote sustainable development. Indeed, the UN SDGs call global attention from various key stakeholders, including regulators, standard-setters, investors, policymakers, and professionals to address climate change, poverty, inequality, environmental pollution and other challenges of our time (MAKARENKO AND PLASTUN, 2017). Two SDGs rely on energy and climate-related issues. SDG n. 7 calls effort in ensuring access to affordable, reliable, sustainable and modern energy for all. SDG n.13 urges action to confront with climate change and its related impacts. The SDGs provide a coherent and holistic framework for tackling the global sustainability challenges, and they are intended to "stimulate action over the next 15 years in areas of critical importance for humanity and the planet" (UN, 2015, P. 3). The SDGs "have the potential to become the guiding vision for governmental, corporate and civil society action for a shared and lasting prosperity" (HAJER *ET AL.*, 2015, P. 1657). Noteworthy, these goals lead to multiple tractions in reporting, accounting profession, and accounting research, crafting a fertile basis "for (re)invigorating accounting's contribution to sustainable development debates", such as accounting technologies in SDG analysis, re-discovering topics of relevance, and re-examining conceptual commitments (BEBBINGTON AND UNERMAN, 2018, P. 2). All UN Member States are involved in achieving the SDGs by 2030 (UNITED NATIONS, 2016). However, the SDG framework recognises that governments cannot solely attain the SDGs, as this will require joint collaborations across governments, public and private sector organisations, civil society and individual citizens (FIANDRINO, 2019). Organisations and institutional governments must perceive the significance of multi-faceted, entrenched, and interlinked values and objectives, and consequently activate initiatives aimed at pursuing the related global challenges (MUSERRA *ET AL.*, 2019). Achieving the 17 goals leads to review and align all other economic, social and environmental strategic and policy priorities with the SDGs. This alignment process requires the contribution of organisations as an indispensable catalyst for the execution of the SDGs (CSR EUROPE AND GRI, 2017). In the corporate arena, SDGs are beneficial to organisations in terms of strategy development and change towards sustainability (MOLINARI AND CARUNGU, 2019). Indeed, organisations committed to furthering sustainable development must ponder how the SDG framework could affect their sustainability policies and practices, how they could most effectively contribute to the attainment of the SDGs, and how report these achievements. The 2020 KPMG's survey shows that the SDGs have resonated strongly with organisations worldwide since their launch. This trend suggests that the SDGs will have an increasing

space in sustainability landscape (KPMG, 2020). However, organisations are still struggling to effectively report their performance along with energy- and climate-related SDGs demands.

3. Methodology

3.1 Composition of the sample

The present study is focused on Italian organisations that published - from the year 2017 to 2020 - their NFR in line with NFD regulation. According to the list provided by the Italian Supervisory Authority for financial markets (CONSOB), the Italian organisations involved, from those listed, including public interest entities, were 208 in 2020; 210 in 2019, 200 in 2018 and 2013 in 2017. This research relies on a panel of companies that operate in strong sensitive environmental industries: Utilities; Energy and Oil and Gas (CARUNGU *ET AL*., 2022). As reported in the Table the final sample includes n. 26 companies for the year 2017; n. 27 companies for the year 2018; n. 28 companies for the year 2019 and n. 28 companies for the year 2020 for a final sample of 109 observations across 4 years.

Year/Sector	Oil and Gas	Energy	Utilities	Total
2017	2 (8%)	11 (42%)	13 (50%)	26
2018	2 (7%)	11 (41%)	14 (52%)	27
2019	2 (7%)	12 (43%)	14 (50%)	28
2020	2 (7%)	12 (43%)	14 (50%)	28
Total	**8 (7%)**	**46 (43%)**	**55 (50%)**	**109 (100%)**

The choice to focus on the Italian case it is mainly motivated by institutional factors, such as the predominance of large companies operating in energy, utilities, oil and gas industries, and historical reasons, such as the relevance of the energy- and climate-related matters, and the high involvement of government (ROSSI AND LUQUE, 2020; TARQUINIO AND ROSSI, 2017). From an institutional perspective Italy is characterized by a civil law legal system, traditionally stakeholder oriented (BALL ET AL. 2000; SIMNETT ET AL., 2009). As suggested by HABISCH *ET AL*., (2011) the Italian organizational context could be defined as an "Agora model", which, among other aspects, pays special attention to the stakeholders' involvement and dialogue. Moreover, as reported by KPMG (2020) survey Italy is one of the top countries and jurisdictions with sustainability reporting rates higher than the global average, with a grow of the 86% in year 2020 compared with 2017.

3.2 Methods

Using a methodology adopted in the literature dealing with sustainability reporting (ROMERO ET AL., 2019; MICHELON ET AL., 2015; BERETTA AND BOZZOLAN, 2004), a manual content analysis was performed on NFR to calculate an environmental SDGs disclosure index (ESDGsDI) with the aim to explore the degree of NFR disclosure extent

on environmental SDGs using the GRI Standards framework. Reports have been manually collected for each organization, through capillary research from their corporate websites. Once selected the complete list of the organisations involved, the authors downloaded their reports directly from their website and, in a few cases, from the websites of the IIRC and Italian stock exchange.

To construct the index, the authors associated to each specific disclosure aspect required by the Italian NFD regulation, the standards provided by GRI, identifying a total of 30 GRI Topic Standards. Subsequently, using the document "Linking the SDGs and the GRI standards"[1] published by the GRI, were selected only the GRI Topic Standards connected with SDG 7 "Affordable and Clean Energy" and SDG 13 "Climate Action", due to material implications for the organisations of the sample (ADAMS *ET AL.*, 2021). The document was published on 2018 when, the United Nations Global Compact (UNGC) and the GRI launched a joint enterprise on SDG reporting (GRI, 2018; UNGC, 2018) commending businesses *"to incorporate SDG reporting into their existing processes, empowering them to act and make the achievements of the SDGs a reality"* (UNGC, 2018). According to the GRI (2018), sustainability reports can facilitate the measuring, understanding, driving and communication of companies' SDG-related performance, setting internal goals and managing the transition towards more sustainable development (COSTA ET AL. 2022). To conduct the analysis the authors verified the presence of 3 GRI series standards - GRI-201 (Economic Performance); GRI-302 (Energy); and GRI-305 (Emissions) and 11 GRI Topic Standards.

The ESDGsDI was calculated for each GRI Topic Standard dividing the number NFR that reports the specific GRI Topic Standard investigated for the total number of the NFR of the sample.

ESDGsDI= Number of NFRS that disclose a GRI topic standard/ Total number of NFD standard

A detailed indication of the GRI Topic Standards analysed are reported in Table below.

SDGs	**GRI relevant indicators**
SDG 7 - Affordable and Clean Energy	302-1, 302-2, 302-3, 302-4, 302-5
SDG 13 – Climate Action	201-2, 302-2, 302-3, 302-4, 302-5, 305-1, 305-2, 305-3, 305-4, 305-5

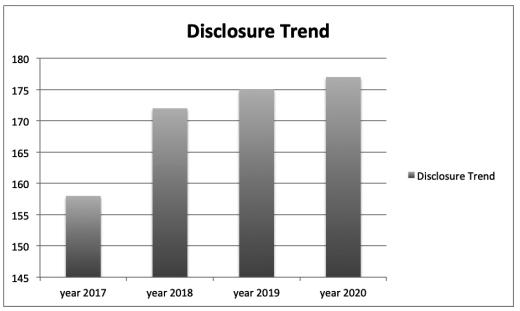
A similar research approach has been followed in the previous literature (LARRINAGA *ET AL.*, 2020; HUMMEL *ET AL.*, 2017). Content analysis requires an inspection of the reports for the presence or absence of disclosure across the set of information items (GUIDRY AND PATTEN 2010). The coding procedure consisted in assigning 1 for the presence (and 0 for

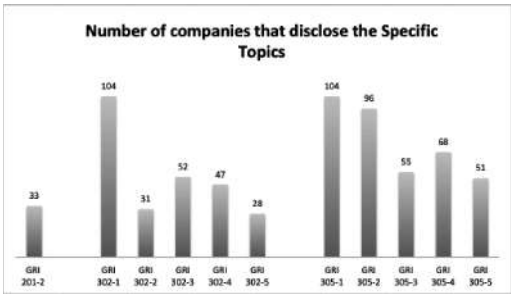
[1] A linkage document that shows the disclosures within the GRI Standards that can be used to report on specific SDGs and their targets. The latest version was updated on March 2022. https://www.globalreporting.org/public-policy-partnerships/sustainable-development/integrating-sdgs-into-sustainability-reporting.

its absence) of each specific GRI Topic Standard. Content analysis validity and reliability (POTTER AND LEVINE DONNERSTEIN, 1999) depends on the above-mentioned coding procedures, designed for thematic content analysis, and the fact that internationally recognized frameworks in sustainability accounting are the source of the disclosure items.

4. Findings

This section shows the findings of the research. Particularly, sub-section 2 focuses in-depth on the economic dimension of SDTs, and subsection 3 on the environment dimension of SDTs. Findings reveal that all the organisations of the sample disclosed their NFRs declaring to have developed information through the usage or "in accordance" with GRI Standards, confirming how GRI framework represents a business practice that have reached the "tipping point" (ADAMS *ET AL.*, 2022; DE VILLIERS *ET AL.*, 2022). GRI has been conceived as an institutional entrepreneur (BROWN *ET AL.*, 2009; LEVY *ET AL.*, 2010), who was a political mediator that had stakes in particular institutional activities. A total of 109 reports were analysed. Among them, 55% organisations operate in the Utilities industry, 46% in the Energy and 8% in the Oil and Gas industries. The Figures illustrate the total number of GRI Topic Standards reported within the reports from the year 2017 to 2020, showing a low but constant increase of the environmental SDGs disclosure quantity over the years and indicating how organisations seem to implement and improve their disclosure practices progressively in force of various forms of institutional pressure (DI MAGGIO AND POWELL, 1983). In this sense, previous studies suggested how institutional pressures at the country level is the primary driver for integrating SDGs into non-financial information systems (GARCIA-SANCHEZ ET AL., 2021) corporate social responsibility is perceived as a national issue, indicating that local regulatory and cultural contexts significantly influence SDG reporting practices (GARCÍA-SÁNCHEZ ET AL. 2021). Moreover, NFD regulation acts as a coercive mechanism that, by making sustainability information mandatory, affects companies' approach to sustainability reporting (TIRON-TUDOR ET AL., 2019; AURELI ET AL., 2020; CARUNGU ET AL., 2020) improving the extent and the quality of the disclosure (VENTURELLI ET AL., 2017; DONI ET AL., 2019; CAPUTO ET AL., 2020). The analysis of results for specific GRI standard offers further insights, which are explained within the following subsections.





GRI Standards	*Description*	*SDGs*	*ESDGs DI*
GRI 201 – Economic Performance			
201-2	Financial implications and other risks and opportunities due to climate change	13	0,3
GRI 302 – Energy			
302-1	Energy consumption within the organization	7 -13	0,95
302-2	Energy consumption outside of the organization, in joules or multiples	7 - 13	0,28
302-3	Energy intensity ratio for the organization	7 - 13	0,47
302-4	Amount of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives, in joules or multiples	7 - 13	0,43
302-5	Reductions in energy requirements of sold products and services achieved during the reporting period, in joules or multiples	7 -13	0,26
GRI 305: Emission			
305-1	Direct (Scope 1) GHG Emission	13	0,95
305-2	Energy indirect (Scope 2) GHG emissions	13	0,88
305-3	Other indirect (Scope 3) GHG emissions	13	0,5
305-4	GHG emissions intensity	13	0,62
305- 5	Reduction of GHG emissions	13	0,46

4.2 Economic dimension

GRI Topic Standard 201-2 is included within the GRI-201 regarding economic performance, which requires organisations to disclose information about the financial implication and other risk and opportunities due to the climate change. In particular, the reporting organization shall report detailed information on aspects that have the potential to significantly affect and changes operations, revenue, or expenditure. Specifically, organizations must disclose: i) a description of the risk or opportunity and its classification as either physical, regulatory, or other; ii) a description of the impact associated with the risk or opportunity; iii) the financial implications of the risk or opportunity before action is taken; iv) the methods used to manage the risk or opportunity; v) the costs of actions taken to manage the risk or opportunity. The analysis conducted shows how only 33 reports disclosed the topic with an ESDGsDI of 0,3. As suggested by the literature the target audience of sustainability reporting is society, demonstrating accountability to stakeholders included investor and creditors (GRAY, 1992; GRAY ET AL., 1996). Nevertheless, findings reveal how organizations seem to do not have a system in place to account the financial implications in terms of costs and revenue projections. This is crucial if we consider that reporting on financially material energy-and climate-related matters may be "an enabler of change, since it creates a financial incentive for companies and their investors to improve

performance on enterprise value-relevant sustainability matters as much and as quickly as they can" (IIRC AND SASB, 2020A, P. 9). As suggested by Giner and Luque-Vilchez (2022), the use of sustainability reporting as leverage to promote changes in behavior towards sustainability and SDGs is a key aspect in the understanding the current standard-setting landscape. Regulation adopted by the EU exercise coercive pressures over its members and is perceived by organizations as a corporate duty to comply with. Given its mandatory nature, the introduction of the EU Directive is considered a form of coercive mechanism that could affect companies' approach to reporting (TIRON-TUDOR ET AL., 2019; AURELI ET AL., 2020; CARUNGU ET AL., 2020). Nevertheless, our study shows that coercive mechanisms resulting from the introduction of the EU Directive make no impact on sustainability reporting extent regarding the economic dimension. This result is aligned with that part of literature that highlighted how mandatory disclosure of NFI does not lead to significant improvements in the SDGs disclosure quality (LUQUE-VILCHEZ AND LARRINAGA, 2016; DUMITRU ET AL., 2017; ANDRADES PEÑA AND LARRAN JORGE, 2019). While external institutional pressures can trigger the adoption of sustainability reporting, they often exhibit weak power in explaining the content and quality of disclosures (DONG ET AL., 2022; CHAUVEY ET AL., 2015; COSTA AND AGOSTINI, 2016; LUQUE-VILCHEZ AND LARRINAGA, 2016; DUMITRU ET AL., 2017; CARUNGU ET AL., 2020).

Considering the alignment of the NFD regulation with GRI Standards but at the same time the complexity of the SDT 201-2, GRI should provide tools or practical examples of how effectively communicate sources of risks and opportunities, which can be internal, external or, as often happens, a combination of both. Moreover, more specific methodologies should be reported by GRI in supporting the probability that the risk or opportunity will materialize and the extent of its effects, as well as the specific steps to be taken to contain or manage the main risks. As current sustainability accounting literature suggests, a constructive spirit of collaboration among several institutions such as IFRS, EFRAG, SDGs Board and GRI may further address those issues (ADAMS ET AL., 2022, DE VILLIERS ET AL., 2022; GINER AND LUQUE-VILCHEZ, 2022).

4.3 Environmental dimension

4.3.1 GRI 302 Standard Serie - Energy

Energy aspects are developed within the GRI 302, which contains five GRI Topic Standards. Adopting the GRI approach, using energy more efficiently, and opting for renewable resources are crucial for combating climate change and lowering an organization's overall environmental footprint. Particularly, SDT GRI 302-1 requires organizations to indicate the energy consumption within their boundary, which means to develop an internal measuring system able to monitoring the total fuel consumption within the organization and distinguishing between non-renewable and renewable sources, reporting also the total energy consumption within the organization (in joules or multiples), standards, methodologies, assumptions, and/or calculation tools used as well as source of the conversion factors used. Findings suggest that 104 reports (ESDGsDI 0,95) of the sample have reported this topic, showing how organizations seem to have well implemented these aspects. The normative pressure exerted by GRI induced companies to go beyond legal requirements to shape the quantity of SDGs information disclosed

(MOSEÑE ET AL., 2013; CUBILLA- MONTILLA ET AL., 2020), in response to moral obligations to be reliable and material (PERRAULT CRAWFORD AND CLARK WILLIAMS, 2010).

Different is the situation for the GRI 302-2 that requires calculating the energy consumption beyond the boundaries of the organization. Accordingly, the energy consumption can occur for example throughout the organization's upstream and downstream activities associated with its operations. This can include consumers' use of products the organization sells, and the end-of-life treatment of products. Only 31 reports provide information on this topic with a ESDGsDI of 0,28. Organizations are keen to account for these aspects, which involve tracing activities and impacts non directly controlled and throughout the organisation's upstream and downstream activities associated with its operations. Those accounting practices are complex, time-consuming, resource-demanding, and require heterogeneous and specific skills. GRI 302-3 (Energy intensity ratios) defines energy consumption in the context of an organization-specific metric. These ratios express the energy required per unit of activity, output, or any other organization-specific metric. Intensity ratios are often called normalized environmental impact data. In combination with the organization's total energy consumption, reported in SDTs 302-1 and 302-2, energy intensity, it helps to contextualize the organization's efficiency, including in relation to other organizations. Less than half of the NFRs analysed reported on this SDT showing a ESDGsDI of 0,47. Same percentage of adoption is also for GRI 302-4 (Number of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives, in joules or multiples) with 47 reports providing information and a ESDGsDI of 0,43. GRI 302-5 attains the reduction in energy requirements of products and services. Organisations report information on the reductions in energy requirements of sold products and services achieved during the reporting period and explain the basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it and clearly declares standards, methodologies, assumptions, and calculation tools used. The percentage of organisations that comply with this standard is very low. The authors find it only in 28 reports, which means a ESDGsDI of 0,26 and it implies that organisations limit their monitoring activities to the simpler data without investigating and measuring the indirect impacts of its operations, output and supply chain. As highlighted before, coercive pressure prompts the harmonization of NFR, nevertheless EU Directive has generated some uncertainty among companies about how to put the new requirements into practice (SZABO AND SØRENSEN, 2015). Uncertainty is seen as the most powerful force for mimetic isomorphism (DIMAGGIO AND POWELL, 1983). Results suggested how the disclosure extent of the organizations analysed are aligned in treating a certain type of information more accurately than others. A fundamental element that generates imitation is the level of company exposure to the collectivity, intended how the visibility and vulnerability degree to the environment in which they operate. Higher levels of business exposure can cause problems in terms of legitimacy, pushing companies to improve their activities of stakeholder engagement and enhance their reporting practices following leading companies in the field (SHABANA ET AL., 2017). Numerous studies document that companies are typically affected by mimetic pressure resulting from the industry to which they operate (MOSEÑE ET AL., 2013; FERNANDEZ-FEIJOO ET AL., 2014; DEPOERS AND JERÔME, 2020). The industry is taken as a reference group because companies with similar nature and structure share similar goals, are subjected to the same uncertainties and institutional pressures, engage with same stakeholders and are committed to the same regulation (DEPOERS AND JERÔME, 2020; CUBILLA-MONTILLA ET AL., 2020).

4.3.2 GRI 305 Standard Serie - Emission

Emission topic is faced within the GRI 305. Greenhouse gas (GHG) emissions are measured as either direct or indirect. Direct emissions are emitted from sources immediately controlled or owned by the reporting organisation, and indirect emissions originate from an external source because of the reporting organisation's actions (WBSCD/WRI, 2011). Scope 1 emissions are equivalent to direct emissions (GRI 305-1), and indirect emissions are divided into Scope 2 and Scope 3 (GRI 305-2; GRI 305-3) (WBSCD/WRI, 2004). If direct emissions have received most attention from government, carbon footprints, which include Scope 2 (indirect emissions from electricity use) and Scope 3 (emissions from product lifecycle, supply chain, and distribution), have captured the interest of both technical and policy literature (Piecyk, 2010; Prakash, 2002). Scope 3 GHG emissions are indirect GHG emissions that cannot be classified as Scope 1 or Scope 2.The analysis shows how almost all the reports investigated (104 reports, ESDGsDI 0,95) have reported information about: gross direct GHG emission in metric tons of CO2 or equivalent. Also, SDT GRI 305-2 reports on Energy indirect (Scope 2) GHG emission, is calculated by 96 reports analysed with a ESDGsDI of 0,88. At the contrary only the percentage of disclosure drops to around 50% for the disclosure of Scope 3, demonstrating how both the quantity and quality of Scope 3 emissions reporting remained highly discretionary. This situation is also caused by the existence of competing standards and protocols used to account for Scope 3 emissions, such as the UK Department for Environment, Food and Rural Affairs (DEFRA), the Intergovernmental Panel on Climate Change (IPCC), the Environmental Protection Agency (EPA) Climate Leaders GHG Inventory Guidance, the International Petroleum Industry Environmental Conservation Association (IPECA), and the American Petroleum Institute (API), that complicates the comparability but at the same time enrich the disclosure extent. Theoretical perspectives based on institutional sociology and normativity production have been used to explain how recent NFR practices have emerged and developed to become norms (LARRINAGA ET AL., 2020; BEBBINGTON ET AL. 2012; LEVY ET AL. 2010). The sociological roots of institutional theories emphasize the diffusion of conformity pressures leading to the emergence of well-established social order in organizational behaviour (AERTS ET AL. 2006). Considering that the findings of the analysis suggest common patterns of behaviour, institutional theory provides an appropriate conceptual platform to explain how NFR has become a norm for business. What emerges is that the sources of normativity are multifarious, with norms emanating from a plurality of regulating actors (not necessarily a hierarchical state). Along the same lines, a further distinction is made between state and non-state norms, allowing for a more fluid understanding of norms. For example, previous research has problematized regulation showing that environmental disclosure (state) rules are not matched by environmental reporting disclosure practices (norms) (e.g. PETERS AND ROMI 2013). Bebbington et al. (2012) defined normativity production such as the process through which different actors understand specific rules (norms) as binding. Translated into SDGs disclosure, this concept allows us to explore the emergence of disclosure norms and the role played by the participant actors. GRI 305-4 reports on GHG emissions intensity ratio for the organization. GHG emissions intensity expresses the amount of GHG emissions per unit of activity, output, or any other organization-specific metric. In combination with an organization's absolute GHG emissions, reported in Disclosures 305-1, 305-2, and 305-3, GHG emissions intensity helps to contextualize the organization's efficiency, including in relation to other organizations. This SDT is reported in 68 reports of the sample with a ESDGsDI of 0,62. Finally, GRI 305-5 concerns with the reduction of GHG emission, and

it requires organisations to disclose GHG emission reduced as a direct result of reduction initiatives. This disclosure can be used in combination with Disclosures 305-1, 305-2, and 305-3 of this Standard to monitor the reduction of GHG emissions with reference to the organization's targets, or to regulations and trading systems at international or national level.

5. Discussion and reflective prompts

This research provides evidence on how GRI support organisations in disclosing and reporting energy- and climate-related matters in light of the recent SDGs demands by focusing on the Italian context. Particularly, the SDG n. 7 calls to "ensure access to affordable, reliable, sustainable and modern energy for all". Energy lies at the heart of both the 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change. The SDG n.13 calls to "urgent action to combat climate change and its impacts". Organisations must provide strong contributions to the attainment of these SDGs. More specifically, energy and multiutility organisations play a crucial role for SDGs' achievement due to their highly sustainability sensitive industry. Consequently, they are accountable of their activities to broader audience. GRI standards embrace those SDGs. GRI 201-2, 302, and 305 are connected to the targets of SDGs n. 7 and n. 13. However, this study reveals low values in several disclosure indexes. For instance, 30.27% of organisations provide disclosure on the financial implications and other risks and opportunities due to climate change, consistent with GRI 201-2 and SDG n. 13. Moreover, just 28.44% of the organisations discloses on the energy consumption outside the organisation, and only the 25.68% of the organisations reports reductions in energy requirements of sold products and services achieved during the reporting period, in line with the 302-5 GRI, and both SDGs n. 7 and n. 13. Multiple reasons could be argued to explain the lack of appropriate disclosure on these matters. From a standard-setting perspective, the GRI's multistakeholder approach implies less emphasis on economic- and financial-oriented standards. Therefore, GRI are perceived as standards to disclose and report mainly environmental and social issues. This implies the use of other standards for financial-related matters, which are mainly investor-oriented. The recent IFRS's project to set sustainability standards is an example. Barker and Eccles (2018) also make assumptions about what an 'investor perspective' is and assume it should be paramount. They state that a standard must be 'discriminating and prescriptive'. This is not the nature of standards that, for example, require disclosure of the process undertaken to identify material impacts on sustainable development, such as GRI. Further, 'discriminating and prescriptive' standards would not provide investors with information required to evaluate organisational responses to systemic sustainability risks.

From an accounting and reporting perspective, many preparers have still not the appropriate knowledge and skills to disclose energy and climate-related matters in line with all indicators advanced by the GRI (ADAMS ET AL., 2022: DE VILLIERS ET AL., 2022). Therefore, organisations are struggling to implement such indicators due to their intrinsic complexity. Ideally, preparers need time to acquire necessary skills and information for SDGs reporting. Conversely, disclosure indexes on the GRIs focused on emission are higher. A reason could rely on the long journey in standard-setting on emissions. The Carbone Disclosure Project (CDP) is an example. This may imply the need of further development of energy-related GRI standards in terms of enabling and routinization work for organisations (FAROOQ AND DE VILLIERS, 2019).

Considering the efforts carried out by organisations in the last twenty years, it appears paradoxical how the chance of the mandatory based GRI Standards is disregarded by the FASB and IASB. This study shows how the GRI Standards are *de facto* institutionalized for the 100% of the Italian organisations that use it as a conceptual framework to externally communicate their non-financial performances. GRI standards are the most used and the unique sustainability reporting standards, which support organisations to identify, disclose and report their impacts on society and the environment. Consistently, GRI standards can help sustainability-reporting preparers to address the recent energy and climate-related SDGs demands. Particularly, the GRI's strengths rely on their enabling work, which represents "the creation of rules that facilitate, supplement and support institutions, such as the creation of authorizing agents or diverting resources" (LAWRENCE AND SUDDABY, 2006, P. 230) along with embedding and routinizing institutional processes. One source of competitive advantage of the GRI refers to its multistakeholder process. Another explanation for the trajectory that evolution of GRI' institutional logic is the prompt answer to current sustainability challenges, such as imposed by SDGs. While this process encouraged and nourished a rich dialogue about sustainability performance, it has also led to an emergence of a dominant constituency with the greatest stakes, such as investors which require precise and information. In doing so, it propelled GRI's evolution toward the ways of thinking and interests of this constituency (BROWNS *ET AL.*, 2009). However, several criticalities arise. Firstly, a lack of focus on investors' demands, which nowadays represent the main pressures of organisations, and consequently sustainability reporting preparers. Accordingly, IFRS is developing a set of sustainability reporting standards, which are mainly investor oriented. Many organisations consider the GRI reliance on accountability as a costly activity (SAFARI AND AREEB, 2020). Research also warns about sustainability reporting preparers' issues. Particularly, middle and staff management layers are still struggling with sustainability reporting demands, and they are developing the required level of skills (ADAMS *ET AL.*, 2022). Although GRI standards are commonly applied by different organisations, there is still an unsatisfactory level of understanding of multiple standards and indicators among reporting preparers (SLACIK AND GREILING, 2020). For instance, TOPPINEN AND KORHONEN-KURKI (2013) criticise the ambiguity in definitions of GRI indicators. Organisations focus on compliance with GRI indicators, rather than consider the practical meaning of GRI standards; in turn, the substance of disclosing sustainability and non-financial information to address stakeholders' expectations (SAFARI AND AREEB, 2020). Consequently, GRI Standards should still incorporate additional indicators in line with the specific country and industry context in which organisations operate (ADAMS *ET AL.*, 2022).

Highlights of this study provide some reflective prompts, which should drive the future of the GRI - in particular - and of the current sustainability landscape - in general. Although GRI are institutionalized standards and embrace the recent SDGs challenges, several organisations that operate in sustainability sensitive industries, do not properly disclose and report energy- and climate-related issues. Various suggestions may be advanced to cope with these criticalities. For instance, GRI should further enlarge standards aimed to address investors demands. This may be applied through explicating and unpacking the current standards on the economic performance. Another course of action could rely on the harmonization process among multiple standard-setters. Sustainability standards provide "sustainability information most relevant to investors and other market participants" (IFRS Foundation, 2020a, p.14). There is an urgent need for a global sustainability standard-setting body. Interestingly, there is not an explicit call for a single set of standards. Current efforts aim to prompt elimination of overlaps, confusions and redundancies between existing

standards, guidelines and frameworks. For instance, Business for Social Responsibility (2018, p.1) calls for the standards and framework setters to work together to build a framework for using different standards together and to "undertake a substantial harmonisation of disclosures, metrics, and indicators." However, they note: "we do not believe that a single unified standard is a desirable or practical solution" (p.1). The calls for a single set of standards have not been backed by an independent assessment of the merits and demerits of existing sustainability standard-setting bodies and how standardise disclosure while increasing the quantity would reduce the richness and unique nature of disclosures. Accordingly, Barker and Eccles note "we have a large number of NGOs working… to develop standards for sustainability reporting" but fail to highlight there is really only one that has got global traction above the others in usage as reported in the most recent (KPMG, 2020). Overall, there is an opening dilemma between the GRI standalone approach and leading standard-setters collaborative approach, which will lead the sustainability reporting scenario during the next couple of years. This study acknowledges that standard-setting is at the same time a technical and political process, which requires both an extensive dialogue between institutions to combine efforts towards the harmonisation of sustainability reporting and a common designed baseline with the aim to facilitate companies' sustainability reporting exercise (GINER AND LUQUE-VILCHEZ, 2022). Although there is no right or wrong answer, several courses of action may confront this dilemma. This paper has also some limitations. Firstly, our study is limited to the Italian companies that operates in strong sensitive environmental industries: Utilities; Energy and Oil and Gas; thus, the analysis could be further researched by including other European countries and further industries. Moreover, the study is focused on SDGs 7 and 13, it would also be interesting to understand the extent of NFR disclosure to other SDGs. A promising area of future research might be the extension of this study with qualitative data. Semi-structured interviews with key actors in European non-financial regulation fields could provide rich information on the dynamics involved in the interaction between different actors producing norms and/or capturing this activity (SMITH ET AL. 2011).

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