Received: 11 November 2022 | Revised: 23 March 2023 | Accepted: 27 March 2023
DOI: 10.1002/sd.2566

RESEARCH ARTICLE

Sustainable Development ERP ENVIRONMENT ISDR Society WILEY

Sustainability as a strategy base in Spanish firms: Sustainability reports and performance on the sustainable development goals

Herenia Gutiérrez-Ponce

Department of Accounting, Faculty of Economics and Business, Universidad Autónoma de Madrid, 28049 Madrid, Spain

Correspondence
Herenia Gutiérrez-Ponce, Department of Accounting, Faculty of Economics and Business, Universidad Autónoma de Madrid, 28049 Madrid, Spain.
Email: herenia.gutierrez@uam.es

Abstract

This article examines corporate sustainability reports, the standards they use, and their connection to performance on the sustainable development goals (SDGs) from firms in the main Spanish stock index. The investigation was performed through an exploratory, descriptive, analytic study as well as examination of the disclosure and performance on the SDGs after Law 11/2018 went into effect in Spain. The study methods used include parametric correlations that explain the associations between the global reporting initiative (GRI) and environmental, social, and governance (ESG) standards and the level of performance on SDGs/ESG in the sustainability reports. We found that all firms present their verified sustainability reports, that the level of ESG information is above 75%, and that the GRI is the sustainability standard used. Further, all firms contribute on average a 75% level of information on all goals and on each of the 17 goals for the 2030 Agenda. We obtain significant analogies in level of disclosure of GRI-ESG information and level of performance on the SDGs/ESG. In addition, the higher the level of information on environmental GRI standards, the better the firm's position in the environmental SDG ranking.

KEYWORDS
ESG score, SDG compass, SDG reporting, sustainability reporting, sustainable development goals

1 | INTRODUCTION

This study analyzes corporate sustainability reports, global reporting initiative (GRI, 2021) standards, and their relationship to progress toward the sustainable development goals (SDGs) as a strategy of Spanish listed companies (IBEX35, 2022).

Sustainability is currently one of the main strategic issues in the European Union and a driver of economic growth. It is posed as a cross-cutting policy that impacts all other policies in the new sustainable economic model designed fundamentally to fight climate change. In 2015, the United Nations approved the 2030 Agenda for sustainable development (United Nations Global Compact, 2018), establishing 17 SDGs (GRI, 2021; Reporting, 2022; UNGC, 2018, 2020) and 169 targets, which are integrated and indivisible in character and cover the economic, social, and environmental spheres. Policies related to the SDGs are also currently being implemented by governments, companies, and non-governmental organizations and cover issues such as climate change, the circular economy, education, health, and poverty (Di Vaio et al., 2022; Diaz-Sarachaga, 2021; Rosati & Faria, 2019a). According to the United Nations and the GRI (2018), company sustainability reports facilitate the measurement, understanding, and communication of performance on the SDGs by defining specific goals in a company's sustainability strategy. In this context, various theoretical approaches have been developed to define what makes organizations sustainable (Jizi, 2017; Manes-Rossi & Nicolo, 2022; Tyson & Adams, 2020).

The European Union Directive (Directiva 95, 2014) imposes new requirements for disclosure of environmental, social, and governance (ESG) information. Spain developed a regulatory framework through Law 11/2018 (Le, 2018) requiring public interest entities (PIEs) and large companies to present the non-financial information statement (NFIS) as of fiscal year 2019 for the purpose of risk identification, to improve sustainability and increase the confidence of investors, consumers and society in general. The NFIS must be verified and included in the management report or, if applicable, in a sustainability report. This distinctive feature makes the Spanish context especially interesting for researchers and especially the group of Spanish listed companies (IBEX35) which are PIEs, large companies and the most internationalized.

Corporate sustainability reports must be analyzed to identify and define companies' economic and sustainability models, as well as their commitment to the SDGs. Although multiple studies (García-Sánchez, 2021; Gutierrez-Ponce et al., 2022; Gutiérrez-Ponce, Chamizo-González, & Arimany-Serrat, 2022; Sierra-Garcia et al., 2018; Tarquinio et al., 2018) indicate that Spanish companies obtain high scores on their sustainability reports, few studies analyze the relationship between sustainability reports (ESG) and the SDGs in the Spanish context. This paper aims to fill this research gap for Spanish listed companies. It seeks specially to determine the important dimension of Corporate Sustainability Reports that enables us to understand "how" and "to what extent" the SDGs can strengthen business strategy and compliance with the Climate Change and Energy Transition Law, or the Spanish Circular Economy Strategy, based on the philosophy of the 2030 Agenda. Researchers expect companies to play an important role in making the SDGs a reality by publishing companies' progress toward them in their ESG reports and through the GRI indicators (Rosati & Faria, 2019a, 2019b; Sierra García et al., 2022).

Numerous studies (Bebbington & Unerman, 2018, 2020; Galan & Zuñiga-Vicente, 2023; Lapsley & Miller, 2019; Larrinaga et al., 2019; Martínez-Ferrero & García-Meca, 2020; Mio et al., 2020) have tackled the links between partial aspects of sustainability reports and SDGs from various points of view. However, as Kinderman (2020) stresses, great challenges remain in achieving supranational harmonization within the European Union. A study by van der Waal and Thijssens (2020) demonstrates that business participation in the SDGs remains limited and depends on the configuration of countries and size of firms, indicating largely symbolic and intentional rather than substantive participation. García-Sánchez, Aibar-Guzman, and Aibar-Guzman (2022) and García-Sánchez, Aibar-Guzmán, et al. (2022) identify a wide range of factors that condition integration of the SDGs into sustainability reports, such as institutional pressures at country level, company size, and investors' demands.

For this reason, it is important to identify the relationship between the SDGs and the ESG information included in the reports required by European and Spanish regulation of the companies on the main Spanish stock market index (IBEX35) since these are required by law to report on the sustainability measure from the perspective of the triple bottom line (TBL).

In December 2022, Directive (EU, 2022) 2022/2464 of the European Parliament and of the Council on sustainability reporting was approved. The European Financial Reporting Advisory Group also approved updated versions of the European Sustainability Reporting Standards (ESRS), which will become mandatory starting in early 2024. Our study analyzes the level of GRI-ESG information from Spanish listed companies and its connection to these companies' performance on the SDGs in this context of regulatory changes in ESG reports. The study helps to fill the gap in academic research on how much of companies' business strategy and substantive performance on the SDGs is included in the GRI-ESG reports.

Recognizing sustainability reporting (ESG) and GRI standards as a "driver" in meeting the SDGs, this study provides interesting contributions to research and practice through extensive reading of these standards. The study is useful for monitoring companies after mandatory application of the new European Directive and European sustainability standards. It is also important in enabling the companies themselves to define the content of ESG information, improve its quality, and achieve the SDGs in a way that makes disclosure of sustainability contribute positively to their image and reputation. The study's main contribution is to confirm analogies between level of GRI-ESG information disclosure and level of performance on the SDGs/ESG.

The next section presents the theoretical framework used and develops our research questions (RQ) through a literature review. We then explain the sample and databases for this analysis and the methodology used. Next, we describe and discuss the results of our empirical study. Finally, we summarize the main conclusions drawn.

2 | LITERATURE REVIEW AND DEVELOPMENT OF RQs

Academic papers have approached sustainability reporting from various perspectives. In accordance with interest group theory, Campanella et al. (2021) conclude that stakeholders' participation is key to improving both corporate environmental policy and sustainable development. Lokuwaduge and Heenetigala (2017) obtain the same results for companies in the metallurgical and mining sector listed on the Australian Stock Exchange.

Krasodomska and Cho (2017) question the usefulness of non-financial information on corporate social responsibility (CSR), due to its low quality and limited use for financial analysts in financial institutions in Poland. Jackson et al. (2020) find a positive relationship, however, between mandatory ESG disclosure and CSR in companies across 24 OECD countries.

Numerous studies have analyzed the credibility of sustainability reports (ESG) and their assurance or verification, achieving consensus that external verification of the content of these reports improves companies' business reputation and global reliability and credibility (García-Sánchez, 2021). Studies by Pflugrath et al. (2011), Perego and

Kolk (2012), Cheng et al. (2015), Fernandez-Feijoo et al. (2016), García-Sánchez (2021), and Sierra García et al. (2022) hold that reliability of and trust in reports is greater when they are verified by an independent entity.

Along these lines, Simoni et al. (2020) find that pressure from stakeholders and companies' need to maintain good relationships with them are important factors in producing verified ESG reports. Similarly, Junior et al. (2014) argue that the practice of publishing verified sustainability reports has become a global phenomenon and that organizations use them to show accountability to their stakeholders. Cohen and Simnett (2015) indicate that performing the verification process efficiently requires the service provider to have specific skills and in-depth knowledge of the material to be verified. Examining whether investors believe in voluntary assurance, Reverte (2021) similarly finds (as predicted in the 2014 Directive) that investors favored companies that embrace external verification.

As multiple studies argue (Gillet-Monjarret, 2018; Sierra García et al., 2022; Sierra-Garcia et al., 2018; Tyson & Adams, 2020) it is crucial to research verification of sustainability reports and find alternative ways of improving their credibility. Analyzing the sustainability reports of Spanish companies for the 3 years since the Non-Financial Information Law went into effect can make an important contribution to this field, as this law that requires companies to submit verified or audited ESG reports.

The COVID-19 pandemic has increased awareness of the risk of systemic problems and existential threats such as climate change to the stability of the financial system, as well as greater interest in ESG information. Some investors have therefore sought simpler ways to evaluate the problems of sustainable development through comparable and consistent metrics (Adams & Abhayawansa, 2022; Gutiérrez-Ponce et al., 2021). Stakeholders demand that organizations provide more consistent, comparable ESG disclosure, and this demand has led to harmonization through internationally recognized sustainability standards. The GRI provides a framework of the standards used most worldwide, and widespread consensus exists that non-financial information is very valuable for providing society and the firm's interest groups with transparency and ensuring trust at the level of Corporate ESG (Trevlopoulos et al., 2021). Research shows that having information on sustainability improves competitiveness and promotes disclosure on sustainability indicators on European stock exchanges (Taliento et al., 2019).

As to effect on companies' market value, Aouadi and Marsat (2018) found that ESG disputes have a greater impact on the market value of larger companies, which are located in developed and reputable countries. Demaria and Rigot (2021) analyze French companies' compliance with CAC 40 on environmental disclosure and its financial impact. Along similar lines, Gutiérrez-Ponce, González, and Serrat (2022) and Gutiérrez-Ponce, Serrat, and González (2022) find that publication of information on financial performance and debt helps to improve disclosure levels of ESG information in listed Spanish companies and Rivera et al. (2017) also find that there is a positive relationship between the CSR strategy and corporate economic and financial performance. Further, Nguyen et al. (2022) find that US companies with the best ESG practices improved their financial performance as measured by ROA, ROE, and Tobin's Q.

Most studies thus analyze sustainability from various perspectives, revealing the difficulty of comparing strategic ESG performance. Soriya and Rastogi (2022) suggest the need to increase case studies, perform more empirical research on insurance models, and harmonize sustainability indicators and standards. At the same time, business commitment to the SDGs is an increasingly important phenomenon. One way to provide information on companies' commitment to the SDGs is through SDG Compass, an initiative developed by the GRI, the United Nations Global Compact, and the World Business Council for Sustainable Development to help companies align their strategies and measure these strategies' contribution to the objectives (GRI & UN Global Compact, 2017, 2022). The SDG Compass maps each of the 17 SDGs, their targets, and their key business themes against various specific key performance indicators (KPIs) from different sustainability reporting frameworks and measurements. Of these frameworks, the GRI standards are the most comprehensive and widely applicable (Avrampou et al., 2019; Girella et al., 2019; KPMG, 2020). According to Adams and Abhayawansa (2022) the GRI standards adopt a dual materiality approach—impact materiality and financial materiality—that powers companies' commitment to the SDGs (Adams et al., 2021).

Researchers agree that research has been based mainly on the content of ESG analysis and reporting guidelines (e.g., Avrampou et al., 2019; Consolandi et al., 2020; Di Vaio & Varriale, 2020; Diaz-Sarachaga, 2021; Ionaşcu et al., 2020; Tsalis et al., 2020). Although the literature on the content and quality of sustainability reporting is extensive, little academic research evaluates companies' contributions to the SDGs in sustainability reports (Tsalis et al., 2020, 2022).

Empirical studies thus remain scarce and sometimes lack transparency on disclosure of the SDGs. Further research is needed to analyze and understand "how" and "to what extent" the SDGs can strengthen business strategy. More empirical research is also needed to measure companies' performance on integration of sustainability into their strategic planning process and commitment to the SDGs (Heras-Saizarbitoria et al., 2022). Pizzi et al. (2020, 2021) conclude that more research is needed from a country-level perspective. Rosati and Faria (2019b) and Arena et al. (2023) identify and analyze the country-level institutional factors that affect the decision to tackle the SDGs in sustainability reports.

Developing new knowledge of the SDGs thus requires the direct participation of academics, companies, and administration to unify business theories and practices on these matters. Along these lines, several academics stress the importance of positioning themselves in a multidisciplinary debate to increase global knowledge of firms' contribution to the SDGs (Bebbington & Unerman, 2018; Gutiérrez-Ponce, González, & Gomez, 2022; Hess, 2019; Kolk et al., 2017; van Zanten & van Tulder, 2018, 2021). Along the same lines, Gazzola et al. (2020) analyze the impact of the SDGs on Italian PIEs and agree on the need to investigate the relationship between sustainability and the 2030 Agenda objectives.

Similarly, research by Tsalis et al. (2020) and Whittingham et al. (2022) assesses the level of alignment between sustainability reporting and the scope of the SDGs, as well as how they are related. Hummel and Szekely (2022) argue that the quality of SDG disclosure in the annual reports of a sample of European companies listed on the STOXX Europe-600 index has increased significantly over time but is still very inaccurate, with much room for improvement.

According to the theoretical framework, there are several theories that could explain the decision of companies to report their sustainability reports. In this research, we pose our RQs in reference to three frameworks: legitimacy theory, stakeholder theory, and signaling theory (Hummel & Szekely, 2022). Based on the foregoing theoretical background, the literature review, and the research objectives, we formulate the following RQs:

RQ1. What level of GRI-ESG standards have Spanish firms provided in their sustainability reports since Spain's law on non-financial information went into effect?

RQ2. What degree of information on SDGs is found in the sustainability reports of firms from the different sectors?

RQ3. What level of performance on the SDGs/environmental, SDGs/social, and SDG/governance is contained in Spanish firms' sustainability reports?

RQ4. What connections and statistical associations exist between the GRI-ESG standards and level of performance on the SDGs/ESG in the sustainability reports?

This study thus focuses on the sustainability reports (GRI-ESG) of Spanish listed companies and these reports' connection to performance on the SDGs' TBL. It thus helps to fill the research gap indicated in previous studies and responds to the call by researchers, institutions, and companies to deepen this line of analysis to contribute to the literature and advance knowledge at regional and national level.

3 | METHODOLOGICAL FRAMEWORK

This section discusses the appropriate methodological framework for evaluating corporate sustainability reports and their relationship to each SDG (UN, 2015). We perform a qualitative study through exploratory, descriptive, analytical research on the sustainability reports of the 35 companies in the main Spanish stock index (IBEX35) to obtain a snapshot of the map of the Corporate Sustainability Reporting standards, GRI (2021) and their relationship with the progress toward the SDG of Spanish listed companies. In addition, this photograph will serve as a starting point for comparability for later studies.

The methodology followed is content analysis, defined as follows: "Qualitative content analysis is a research method for the subjective interpretation of the content of text data through the process of systematic classification, coding, and identification of themes or patterns" (Hsieh & Shannon, 2005, p. 1278). This methodology is widely adopted in studies of corporate disclosure (González-Teruel, 2015; Michelon et al., 2015; Romero et al., 2019; Seuring & Gold, 2012) and based on the framework for risk communication analysis developed by Beretta and Bozzolan (2004). We also use the Pearson correlation coefficient to answer RQ4 and determine the statistical correlation between the GRI-ESG variables and level of performance on the SDGs/ESG.

3.1 | Sources of ESG data

First, we identified the 35 companies in the Spanish IBEX35 selective index in May 2022 by their company name and tax identification number (NIF). Second, we classified the companies by sector, following the criteria established by the selective index itself.

To build the database, we first downloaded the annual reports of each of the 35 listed companies and captured the information from each report by filtering the phrases and words related to the 148 GRI standards, classified into 32 GRI environmental, 40 GRI social, and 22 governance GRIs, as well as 54 general GRIs and the 17 SDGs. This classification was performed by "RapidMiner" software (https://rapidminer.com/get-started/). A coding procedure was also established to capture the information, assigning a value of 1 if the report provided information and 0 otherwise. In addition, we reviewed whether the sustainability reports had been verified or assured by an independent entity. All data were transferred to an Excel spreadsheet for processing and study. A total of 3336 GRI-ESG records were obtained, answering RQ1 on level of ESG information from Spanish listed companies.

3.2 | Level of performance on SDGs

As indicated, first the reports were analyzed using content analysis methodology and "RapidMiner" software. Phrases and words related to the 17 SDGs were filtered, obtaining 595 records on the 17 SDGs in the 35 listed companies. Next, the SDGs were categorized based on the TBL philosophy for sustainability, following Jan et al. (2021) and Szennay et al. (2019) (see Table 1). This procedure enabled us to study and understand the gap between GRI-ESG information and SDG-ESG performance.

In line with Jan et al. (2021) and Szennay et al. (2019), 12 of the 17 SDGs were defined as pure in their classification of social, environmental, and economic issues. Five SDGs also showed interconnection with the three ESG categories. Using the schema described, we answered RQ2 by examining the 17 SDGs and determining the percentage of their average implementation by company and sector.

TABLE 1 The author.

SDG	Pure	Interconnected Governance-economic	Environmental	Social
SDG01	Social			
SDG02		Economic		Social
SDG03		Economic		Social
SDG04	Social			
SDG05	Social			
SDG06	Environmental			
SDG07	Environmental			
SDG08	Economic			
SDG09	Economic			
SDG10	Economic			
SDG11			Environmental	Social
SDG12			Environmental	Social
SDG13	Environmental			
SDG14	Environmental			
SDG15	Environmental			
SDG16	Social			
SDG17		Economic	Environmental	Social

To answer RQ3, we calculated the number and percentage of SDGs/environmental, SDGs/social, and SDGs/governmental in the sustainability reports, as well as the average for each company on the Spanish IBEX35 Stock Index. Next, we looked for connections and analogies between firms that disclosed the highest levels of ESG-GRI indicators and firms with the best performance on the SDGs/ESG. We ranked the firms by number of SDGs on which they reported and number of GRI standards and then analyzed the statistical correlations among the dependent variables by calculating the Pearson population correlation coefficient. For the SDG/ESG variables, we calculated SDG ranking, as well as the ESG-GRI and GRI rankings, determined the associations among the numerical values of these variables, and evaluated the sign and size of the trend (increasing or decreasing) in the data to answer RQ4.

4 | RESULTS AND DISCUSSION

4.1 | Descriptive statistics: Level of GRI-ESG information in sustainability reports

Since the 2019 tax year, Spain has required firms to present the "Non-Financial Statement" or Corporate Sustainability Report on ESG information. Analysis of the ESG information presented by the Spanish IBEX35 firms in 2021 shows that they followed the GRI standards and that the reports were verified by an independent verification company.

Table 2 presents the percentage results on GRI-ESG standards for the IBEX35 firms by sector classification on the main Spanish stock index. On average, companies belonging to the oil and energy sector present 80.8% of the GRI-Environmental, 70.7% GRI-Social and 57.8% GRI-Governance information. Only one firm score below 50% in presenting ESG reports. As to social information, one electric company presents 100% of GRI-S and two companies present 90% of this information. In the information on governance, three firms report on all indicators and 74.6% of firms present information on the universal GRI standards related to contextual information on the organization and management focus for each specific topic.

In the "Basic materials, industry, and construction" sector, the company Ferrovial reports on 100% of the ESG indicators. The company Acciona also presents ESG indicators on sustainability for over 95% of the GRI. Further, the results indicate that the average percentage of GRI in the sector is 61.7% of environmental, 65.3% of social, and 51.1% of governance GRI.

In the "Consumer goods" sector, companies present an average of 38.8% of the environmental GRI standards, 53.5% of those on social information, and only 4.5% on governance. In this group, the leading healthcare company, Grifols, and the textile manufacturing and distribution firm Inditex report over 50% of environmental and social GRIs. Farmacéuticos Rovi reports 65.0% of the 40 GRI social indicators.

Of the companies in the "Consumer services" sector, the Spanish public company Aena reports 100/% of social and governance GRI and 75% of GRI environmental indicators. The English-Spanish holding company International Consolidated Airlines Group (IAG), in contrast, reports only 40.6% of the environmental indicators and 30% of the social ones and does not report on governance. The Spanish hotel company Meliá Hotels International communicates 68.8% of environmental GRI, 80% of social, and 86.4% of governance indicators.

TABLE 2 Percentage of GRI-ESG Information in sustainability reports.

Sectors	IBEX35 companies	GRI-E (No.32)	GRI-S (No.40)	GRI-G (No.22)	GRI-U (54)
1. Petroleum and energy	Enagás	90.6%	77.5%	100%	100%
	Endesa	93.8%	100%	63.6%	98.1%
	Iberdrola	81.3%	40.0%	31.8%	18.5%
	NaturgyEnergy	84.4%	52.5%	4.5%	70.4%
	Repsol	90.6%	90.0%	100.0%	98.1%
	Solaria	34.4%	45.0%	4.5%	40.7%
	Red Eléctrica	90.6%	90.0%	100.0%	96.3%
Average, Sector 1.		80.8%	70.7%	57.8%	74.6%
2. Basic materials, industry, and construction	Acciona	93.8%	95.0%	100.0%	100.0%
	Acerinox	68.8%	62.5%	4.5%	90.7%
	ACS	78.1%	67.5%	13.6%	37.0%
	ArcelorMittal	43.8%	65.0%	9.1%	44.4%
	Cie_Automotive	31.3%	37.5%	77.3%	81.5%
	Ferrovial	100.0%	100.0%	100.0%	100.0%
	Fluidra	56.3%	82.5%	100.0%	90.7%
	Siemens_Gamesa	21.9%	12.5%	4.5%	57.4%
Average, Sector 2.		61.7%	65.3%	51.1%	75.2%
3. Consumer goods	Almirall	21.9%	60.0%	0.0%	38.9%
	Grifols	59.4%	55.0%	4.5%	85.2%
	Inditex	53.1%	67.5%	4.5%	44.4%
	PharmaMar	18.8%	20.0%	4.5%	38.9%
	Farmacéuticos Rovi	40.6%	65.0%	9.1%	46.3%
Average, Sector 3		38.8%	53.5%	4.5%	50.7%
4. Consumer services	Aena	75.0%	100.0%	100.0%	96.3%
	Meliá Hoteles	68.8%	80.0%	86.4%	96.3%
	Intern. Consol. Airlines Group, (IAG)	40.6%	30.0%	0.0%	42.6%
Average, Sector 4.		61.5%	70.0%	62.1%	78.4%
5. Financial services	Banco de Sabadell	37.5%	42.5%	0.0%	44.4%
	Banco-BVA (BBVA)	78.1%	100.0%	100.0%	100.0%
	CaixaBank	3.1%	75.0%	100.0%	96.3%
	Mapfre	56.3%	60.0%	0.0%	50.0%
	Bankinter	34.4%	50.0%	0.0%	35.2%
	Banco Santander	59.4%	87.5%	0.0%	59.3%
Average, Sector 5.		44.8%	69.2%	33.3%	64.2%
6. Technology and telecommunications	Amadeus	53.1%	47.5%	36.4%	87.0%
	Cellnex_Telecom	50.0%	55.0%	22.7%	50.0%
	Indra	93.8%	100.0%	100.0%	100.0%
	Telefónica	75.0%	77.5%	100.0%	90.7%
Average, Sector 6.		68.0%	70.0%	64.8%	81.9%
7. Real estate services	Colonial	100.0%	100.0%	100.0%	100.0%
	MerlinProperties	37.5%	55.0%	63.6%	88.9%
Average, Sector 7.		68.8%	77.5%	81.8%	94.4%

In the “Financial services” sector, the bank BBVA provides 78% of environmental GRI information and 100% of information on social and governance indicators. The Santander bank reports 59.4% of environmental GRI and 87.5% of social indicators. The sector average for governance is 33.3% of the 22 GRI indicators. In the “Technology and telecommunications” sector, firms present an average of 70% of

GRI ESG standards. Indra reports 100% of the social and governance GRI indicators and 93.8% of environmental ones. In the "Real estate services" sector, Colonial is distinguished by reporting 100% of GRI standards for ESG.

The descriptive results show that the average level of GRI-ESG information in corporate sustainability reports is 63.3%. Very significant differences exist, however, between companies in the different sectors. We also find differences between the levels of ESG information analyzed using the TBL philosophy. These results confirm Spain as an interesting case study because Spanish companies in general obtain high scores in various sustainability indices (García-Sánchez, 2021; Gutierrez-Ponce et al., 2022; Gutiérrez-Ponce, Chamizo-González, & Arimany-Serrat, 2022; KPMG, 2020; Sierra-Garcia et al., 2018; Tarquinio et al., 2018). Spain was also a pioneer in making external verification of sustainability reports mandatory.

5 | DEGREE OF INFORMATION ON THE SDGs IN THE CORPORATE REPORTS OF COMPANIES BY SECTOR

Table 3 displays the results for percentage of information on each of the 17 SDGs presented by the companies in each sector, as well as the general average by sector and the average information for each SDG. Note that 100% of these companies address the SDGs in their sustainability reports, a value higher than those obtained by Sierra García et al. (2022) and Martínez-Ferrero and García-Meca (2020).

In the "Petroleum and energy" sector, firms report 100% of performance on the following SDGs: clean affordable energy (SDG 7), decent work and economic growth (SDG 8), promoting sustainable inclusive industrialization and fostering innovation (SDG 9), fighting climate change and its effects (SDG 13), and implementing and reviving the Global Partnership for Sustainable Development (SDG 17). Still, only 43% of companies in this sector report on the SDGs related to eradication of world hunger, food security (SDG 2), or health and welfare (SDG 3). The sector average is 73% of the total.

Firms in the "Basic materials, industry, and construction" sector present an average of 63% of the total information on SDGs. All these companies report on performance on gender equality (SDG 5) and decent work and economic growth (SDG 8). It is striking, however, that only 13% of firms in this sector report on SDG 14 (conservation of marine life) and only 25% report on the SDGs on poverty and hunger.

The results for firms in the "Consumer goods" sector indicate that these firms on average report on 41% of the 17 SDGs. Of this total, the goals on both health and welfare (SDG 3) and quality education (SDG 4) show performance information at 80%. Only 20% of firms in this sector report, however, on the SDGs related to poverty, water, and sanitation for all, accessible non-polluting energy (SDG 7), more sustainable cities and communities (SDG 11), and action on the climate and life of terrestrial ecosystems. Similarly, firms in the "Consumer services" sector report on average on 61% of all SDGs. Firms in this sector report on 100% of SDG 3, SDG 4, SDG 8, and responsible

TABLE 3 Percentage level of performance on SDGs by sector and individual average.

Sector	SDG01	SDG02	SDG03	SDG04	SDG05	SDG06	SDG07	SDG08	SDG09	SDG10	SDG11	SDG12	SDG13	SDG14	SDG15	SDG16	SDG17	Average
1. Petroleum and energy	57%	43%	43%	71%	86%	57%	100%	100%	100%	57%	71%	57%	100%	57%	86%	57%	100%	73%
2. Basic mat., industr., constr.	25%	25%	75%	75%	100%	75%	75%	100%	75%	63%	63%	75%	75%	13%	38%	38%	88%	63%
3. Consumer goods	20%	40%	80%	80%	60%	20%	20%	60%	60%	40%	20%	40%	20%	40%	20%	40%	40%	41%
4. Consumer services	0%	0%	100%	100%	67%	33%	67%	100%	67%	33%	67%	100%	100%	33%	33%	67%	67%	61%
5. Financial services	67%	33%	50%	83%	67%	33%	67%	100%	67%	83%	50%	67%	100%	33%	33%	67%	67%	63%
6. Technol. and telecom.	50%	0%	50%	75%	75%	25%	75%	75%	100%	75%	75%	50%	100%	0%	25%	50%	75%	57%
7. Real estate services	0%	0%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	0%	50%	50%	50%	41%
Average for each SDG	31%	20%	64%	76%	72%	42%	65%	84%	74%	57%	57%	63%	78%	25%	41%	53%	69%	57%

consumption (SDGs 12 and 13), and not one company reports on the SDGs related to poverty and hunger.

The "Financial sector" presents on average information on 63% of all indicators for the 17 goals, and all companies report on SDGs 8 and 13. "Technology and telecommunications" firms present an average of 57% of SDGs, and all companies mention promoting decent work and economic growth (SDG 8) and fighting climate change and its effects (SDG 13). None of the companies reports, however, on SDG 2 or SDG 14. The "Real estate" sector firms present on average 41% of the information on the 17 goals. The "Consumer goods" and "Real estate" sectors have the lowest average of the sectors analyzed.

Comparison of the results in Table 2 (Percentage of GRI-ESG Information in sustainability reports) to those in Table 3 (Percentage of performance on SDGs by sector and individual average) shows similarities between companies that belong to the same sector. For example, companies in the oil and energy sector present the highest levels in both GRI-ESG and performance on the SDGs.

5.1 | Performance level on SDG-ESG categorized according to the TBL of sustainability

As indicated in the methodology, we analyzed the SDGs by categorizing them following the TBL sustainability approach and the categories used by Jan et al. (2021) and Szennay et al. (2019): 8 SDGs/environmental, 9 SDGs/social, and 6 SDGs/governance. Table 4 displays the percentage of SDGs for each firm and sector in each of the three categories, percentage of the 17 SDGs, and average for each of the three categories for each sector.

The results show that the "Petroleum and energy" sector firms report on average 78.6% of SDG-E. The four electric companies report on all environmental SDGs. As to information on the social and governance SDGs, the firms Iberdrola, Repsol, and NaturgyEnergy report 100%, but their average on SDG-S is 65.1% and on SDG-G 73.8%.

The "Basic materials, industry, and construction" sector's sustainability reports present less information on SDGs-E, SDGs-S, and SDGs-G. The average on environmental and social SDGs is 62.5, whereas the average on governance is 70.8%. In the "Consumer Goods" sector, Inditex stands out in providing information on 100% of the SDGs-ESG. The average of firms in this sector is barely 50% for information on governance and social SDGs, however, and only 27.5% on environmental ones.

Of firms in the "Consumer services" sector, the public firm Aena reports 100% of SDGs-E, 77.8% of SDGs-S, and 83.3% of SDGs-G. As to firms in the "Financial services sector," the insurance company Mapfre reports 100% of SDGs and the large Spanish banks report at lower levels. The average in the financial sector is 56.3% information for SDGs-E, 61.1% for SDGs-S, and 66.7% for SDGs-G. The results for technology and telecommunication firms show 50% of SDGs-ESG. In the "Real estate" sector, only Colonial presents approximately 80% of information in its reports on the three SDG categories.

These results show a substantial presence of SDGs in sustainability reports after Law 11/2018 (Le, 2018) requiring the assurance of sustainability reports went into effect, indicating these reports' importance for Spanish listed companies. The high levels of information on the SDGs are related to the corporate image these companies project to interest groups. Yet we must also continue to deepen research on their materiality and to determine how they materialize in quantitative terms.

5.2 | Statistical connections and associations between GRI-ESGs and level of performance on the SDGs/ESGs in sustainability reporting

Categorizing the TBL sustainability approach in the SDGs-ESG and GRI-ESG show significant relationships in Spanish companies from different economic sectors.

Ranking the firms from highest to lowest number of GRI indicators shows that only two firms in different sectors report on 100% of the GRI. Moreover, the results indicate that 25% of the IBEX35 firms present less than 50% of the GRI-ESG standards, but 80% of the firms' performance level on the SDGs/ESG exceeds 50%. In comparing information by sector, we see significant analogies on level of disclosure of GRI-ESG information and performance level on the SDGs/ESG (Table 5). Companies in the "Petroleum and energy" sector present on average 90.9% of GRI indicators and 73.1% on the SDGs.

Further, the results in Table 5 indicate that the average amount of information on SDGs in each sector composing the IBEX35 is very similar to the average GRI standards for sustainability. Companies in the "Technology and Telecommunications" sector, however, average 71% on GRI-ESG and only communicate 57.4% compliance with SDGs. The information level on SDGs for "Real estate services" is 20 points lower (42.4%), with an average of 80.6% on GRI-ESG. This difference is due to the firm MERLIN Properties, which does not report on any of the 17 SDGs. Further, the firms in Sector 4, "Consumer goods," show the lowest levels of information on both SDGs and GRI, and Airlines Group IAG presents the lowest level of GRI-ESG standards (36.8%).

Having found correspondences between the average values of the GRI and the SDGs, we deepened analysis by studying the degree of joint variation between two different variables using the Pearson correlation coefficient. Table 6 presents the statistical associations through parametric correlations between the values of the GRI-ESG variables and their classification, and the values of the SDG-ESG variables and their classification. Table 6 presents the statistical associations through parametric correlations between the values of the GRI-ESG variables and their ranking, and values of the SDG-ESG variables and their ranking.

The results show a correlation between the values of the variables GRI-E (positive correlation of 0.523) and a significance level of 0.001% with the SDGs-E. They also confirm a moderate correlation between the GRI-E and SDGs-G values, with a coefficient of 0.336 and a significance level of 0.048%; and a positive and moderate correlation (0.390) with all SDGs at a significance level of 0.021%.

TABLE 4 Level of compliance with SDGs/environmental, SDGs/social, and SDGs/governance in the sustainability reports of IBEX firms.

Sector	IBEX 35 Companies	% SDG E/8	% SDG S/9	% SDG G/6	% SDG/17
1. Petroleum and energy	Enagás	50.0%	22.2%	50.0%	41.2%
	Endesa	50.0%	33.3%	50.0%	41.2%
	Iberdrola	100.0%	100.0%	100.0%	100.0%
	Red Eléctrica	100.0%	77.8%	66.7%	88.2%
	Repsol	100.0%	100.0%	100.0%	100.0%
	Solaria	50.0%	22.2%	50.0%	41.2%
	NaturgyEnergy	100.0%	100.0%	100.0%	100.0%
Average, Sector 1		78.6%	65.1%	73.8%	73.1%
2. Basic mats., industry, and construction	Acciona	87.5%	77.8%	100.0%	82.4%
	Acerinox	50.0%	88.9%	83.3%	70.6%
	ACS	75.0%	66.7%	83.3%	70.6%
	ArcelorMittal	75.0%	55.6%	66.7%	58.8%
	Ferrovial	87.5%	66.7%	66.7%	70.6%
	Fluidra	50.0%	44.4%	66.7%	52.9%
	Cie_Automotive	25.0%	55.6%	83.3%	47.1%
	Siemens_Gamesa	50.0%	44.4%	16.7%	52.9%
Average, Sector 2		62.5%	62.5%	70.8%	63.2%
3. Consumer goods	Almirall	0.0%	44.4%	33.3%	23.5%
	Grifols	12.5%	55.6%	83.3%	47.1%
	Inditex	100.0%	100.0%	100.0%	100.0%
	PharmaMar	12.5%	0.0%	0.0%	5.9%
	Rovi	12.5%	33.3%	50.0%	29.4%
Average, Sector 3		27.5%	46.7%	53.3%	41.2%
4. Consumer services	Aena	100.0%	77.8%	83.3%	88.2%
	Airlines Group IAG	50.0%	55.6%	50.0%	52.9%
	Meliá_Hotels	37.5%	55.6%	50.0%	41.2%
Average, Sector		62.5%	63.0%	61.1%	60.8%
5. Financial services	Banco de Sabadell	50.0%	88.9%	83.3%	70.6%
	Bankinter	12.5%	11.1%	33.3%	23.5%
	BBVA	37.5%	11.1%	33.3%	29.4%
	CaixaBank	87.5%	88.9%	100.0%	94.1%
	Mapfre	100.0%	100.0%	100.0%	100.0%
	Banco Santander	50.0%	66.7%	50.0%	58.8%
Average, Sector 5		56.3%	61.1%	66.7%	62.7%
6. Technology and telecommunications	Amadeus	50.0%	77.8%	83.3%	70.6%
	Telefónica	62.5%	55.6%	50.0%	52.9%
	Cellnex_Telecom	37.5%	44.4%	66.7%	52.9%
	Indra	62.5%	44.4%	50.0%	52.9%
Average, Sector 6		53.1%	55.6%	62.5%	57.4%
7. Real estate services	Colonial	87.5%	77.8%	83.3%	82.4%
	MerlinProperties	0.0%	0.0%	0.0%	0.0%
Average, Sector 7		43.8%	38.9%	41.7%	42.4%

The 148 GRI standards are, in turn, moderately related to the environmental SDGs, with a Pearson coefficient of 0.368 and a significance level of 0.030%.

Further, we found a strong inverse association between the variable GRI-E (inverse correlation of −0.498) and the SDGs-E ranking, with a significance level of 0.002% (in this ranking, lower values are

TABLE 5 Relationships between performance on SDGs/ESG and compliance with GRI-ESG sustainability.

Sectors	% SDG E/8	% SDG S/9	% SDG G/6	Average SDG/17	GRI-E (N°32)	GRI-S (N°40)	GRI-G (N°22)	GRI-univ (54)	Average GRI
1. Petroleum and energy	78.6%	65.1%	73.8%	73.1%	80.8%	70.7%	57.8%	74.6%	70.9%
2. Basic mats., industry, and construction	62.5%	62.5%	70.8%	63.2%	61.7%	65.3%	51.1%	75.2%	63.2%
3. Consumer goods	25.5%	46.7%	53.3%	41.2%	38.8%	53.5%	4.5%	50.7%	36.8%
4. Consumer services	62.5	63.0	61.1	60.8%	61.5%	70.0%	62.1%	78.4%	68.0%
5. Financial services	56.3%	61.1%	66.7%	62.7%	44.8%	69.2%	33.3%	64.2%	52.8%
6. Technology and telecommunications	53.1%	55.6%	62.5%	57.4%	68.0%	70.0%	64.8%	81.9%	71.0%
7. Real estate services	43.8	38.9	41.7	42.4	68.8%	77.5%	81.8%	94.4%	80.6%

TABLE 6 Statistical association between GRI-ESG indicators and SDGs-ESG of the IBEX35 companies.

Correlations		% SDG-E (8)	% SDG-S (9)	% SDG-G (6)	% SDG all (17)	Ranking SDG-E	Ranking SDG-S	Ranking SDG-G	Ranking all SDGs
% GRI-E (32)	Pearson correlat.	.523[a]	0.287	.336[b]	.390[b]	−.498[a]	−0.279	−0.310	−.375[b]
	Sig. (2-tailed)	0.001	0.094	0.048	0.021	0.002	0.105	0.070	0.026
	N	35	35	35	35	35	35	35	35
% GRI-S (40)	Pearson correlat.	.382[b]	0.143	0.229	0.240	−0.326	−0.118	−0.176	−0.191
	Sig. (2-tailed)	0.023	0.413	0.187	0.165	0.056	0.498	0.312	0.271
	N	35	35	35	35	35	35	35	35
% GRI-G (22)	Pearson correlat.	0.260	0.030	0.060	0.116	−0.205	−0.034	−0.023	−0.075
	Sig. (2-tailed)	0.173	0.877	0.756	0.548	0.285	0.861	0.907	0.701
	N	29	29	29	29	29	29	29	29
% GRI-U (54)	Pearson correlat.	0.171	0.042	0.104	0.098	−0.135	−0.042	−0.102	−0.063
	Sig. (2-tailed)	0.327	0.810	0.551	0.574	0.440	0.811	0.559	0.719
	N	35	35	35	35	35	35	35	35
% GRI All (148)	Pearson correlat.	.368[b]	0.121	0.205	0.227	−0.315	−0.114	−0.181	−0.187
	Sig. (2-tailed)	0.030	0.487	0.237	0.189	0.066	0.515	0.297	0.282
	N	35	35	35	35	35	35	35	35
Ranking GRI-E	Pearson correlat.	−.542[a]	−0.302	−.347[b]	−.408[b]	.515[a]	0.290	0.322	.390[b]
	Sig. (2-tailed)	0.001	0.077	0.041	0.015	0.002	0.091	0.059	0.020
	N	35	35	35	35	35	35	35	35
Ranking GRI-S	Pearson correlat.	−.371[b]	−0.090	−0.148	−0.200	0.314	0.064	0.100	0.159
	Sig. (2-tailed)	0.028	0.608	0.395	0.249	0.066	0.714	0.566	0.362
	N	35	35	35	35	35	35	35	35
Ranking GRI-G	Pearson correlat.	−.374[b]	−0.032	−0.147	−0.198	0.308	0.032	0.137	0.166
	Sig. (2-tailed)	0.027	0.856	0.400	0.254	0.072	0.855	0.433	0.339
	N	35	35	35	35	35	35	35	35
Ranking GRI other	Pearson correlat.	−0.274	−0.060	−0.120	−0.156	0.225	0.050	0.106	0.118
	Sig. (2-tailed)	0.111	0.732	0.492	0.371	0.193	0.774	0.543	0.500
	N	35	35	35	35	35	35	35	35
Ranking GRI all	Pearson correlat.	−.383[b]	−0.175	−0.263	−0.267	0.321	0.171	0.244	0.234
	Sig. (2-tailed)	0.023	0.314	0.127	0.121	0.060	0.327	0.158	0.176
	N	35	35	35	35	35	35	35	35

[a]Correlation is significant at 0.01 level (2-tailed).
[b]Correlation is significant at 0.05 level (2-tailed).

better). That is, when the value of the variable GRI-E increases, the value of the ranking on environmental SDGs decreases and the firms achieve a better position in the ranking. We confirm a moderate inverse association between the GRI-E and ranking on all SDGs, with a Pearson coefficient of −0.375 and a significance level of 0.026%.

For the variable GRI-E ranking, we confirm a strong positive correlation with the variable SDG-E ranking, with a coefficient of 0.515 and a significance level of 0.002%. At the same time, the GRI-E ranking is strongly and inversely related to the environmental SDGs, with a coefficient of −0.542 and a significance level of 0.001%; and a moderate inverse association (coefficient of −0.408) with all SDGs. As the ranking of all GRI-S and GRI-G shows negative or inverse correlation with environmental SDGs, increasing one variable decreases the other.

6 | CONCLUSIONS

This study analyzes the ESG information from the NFIS or Corporate Sustainability Reports of the firms on the main Spanish stock exchange, within the model of change in strategic management of companies based on the 2030 Agenda. We also looked for connections or relationships between the sustainability standards and performance on SDGs as strategic issues in Spanish firms.

Since the 2019 tax year, Spanish firms are required to present the NFIS, verified by an independent entity, to comply with Law 11/2018 (Ley 11, 2018). Our exploratory, descriptive, analytic study of Corporate Sustainability Reports demonstrates regulatory compliance by all these firms, as well as their use of GRI standards. We observe differences, however, in the degree of ESG information among firms belonging to different activity sectors. Petroleum and energy firms present 20% more information on environmental GRI than firms in other sectors, such as real estate or technology and telecommunications. The findings also indicate that consumer goods firms communicate the least environmental information. As García-Sánchez (2021) and Taliento et al. (2019) indicate, some firms consider the impact of their business activity on environmental issues when reporting information and thus improve their reputation, global credibility, and competitiveness.

Pharmaceutical firms from the consumer goods sector, in contrast, seem relatively insensitive to the impact of their activity on the environment. Information on GRI on governance is also scarce or nonexistent, as shown by over half the firms in the "Financial services" sector. These firms thus seem to grant little importance to the role of corporate governance in sustainable development, as Campanella et al. (2021) argue. The potential influence of reporting on stakeholders could help to improve these firms' environmental policies and sustainable development (Simoni et al., 2020). Also Camilleri (2017) suggests that the main recipients of sustainability reports are investors and other financial stakeholders. The average level of social information for all sectors is above 50% on the GRI-S standards, as is the information on the 54 universal GRI indicators.

These findings enable us to answer RQ1 by concluding that the level of regulatory compliance on ESG information in Spanish IBEX35 firms is over 75%, and that the GRI is the sustainability standard used. These results align with those obtained by García-Sánchez (2021) and Gutiérrez-Ponce, Chamizo-González, and Arimany-Serrat (2022). We also conclude that the firms analyzed are prepared to adapt to the new requirements of Directive (EU, 2022) 2022/2464 of the European Parliament and of the Council on sustainability reporting but must adapt to the *European Sustainability Reporting Standards* (ESRS) once they are approved.

As to degree of information and performance on the SDGs (RQ2), we conclude that all firms contribute on average ∼57% of information on all goals and each of the 17 SDGs for the 2030 Agenda, and that 12 of the 17 SDGs reflect very significant performance levels higher than 50%. These findings suggest an increasingly broad pattern of companies changing their view of sustainability to go beyond sustainability reports. We see significant differences among the different SDGs, however. SDG 1 (End of poverty), SDG 2 (Zero hunger), SDG 6 (Clean water and sanitation), SDG 15 (Life of terrestrial ecosystems), and SDG16 (Peace, justice, and inclusive institutions) achieve performance levels of 20%–40%. In line with the conclusions of Whittingham et al. (2022), therefore, although the level of information available on SDGs has increased substantially, there is still significant room for improvement in the IBEX35 firms. The firms in the sector "Basic materials, industry, and construction" show similar performance on the SDGs for the three categories mentioned. The companies in the "Consumer goods" sector (composed primarily of pharmaceutical companies) and in the "Real estate" sector obtain performance levels of 41% on the SDGs-ESG, with striking performance of below 20% on the following: SDG 1 (End of poverty), SDG 6 (Clean water and sanitation), SDG 7 (Clean, affordable energy), SDG 11 (Sustainable cities and communities), and SDG 15 (Life of terrestrial ecosystems). These findings answer RQ3 and provide the scientific knowledge on SDGs and the IBEX35 business sector from a country-level perspective, as (Pizzi et al., 2020, 2021) suggest. The results obtained affirm, however, that business participation in performance on the SDGs remains limited and symbolic and very seldom materializes in concrete actions. Another study, of 2000 firms (van der Waal & Thijssens, 2020), also reached this conclusion.

As to connections or analogies between performance on the SDGs and corporate sustainability reports (RQ4), we found important analogies in level of disclosure of GRI-ESG information and level of performance on the SDGs/ESG. We also confirm a strong inverse association between environmental information (GRI-E) and the ranking on environmental SDGs provided in the Corporate Sustainability Reports. That is, the higher the level of information on environmental GRI standards, the higher the firm's ranking on environmental SDGs. We also confirm a moderate inverse association between GRI-E and the firm's position in the ranking of all SDGs. Finally, we conclude that the position in the ranking for social and governance GRI information in the sustainability reports is inversely related to firms' position on environmental SDGs.

In line with Gazzola et al. (2020), Tsalis et al. (2020), and Hummel and Szekely (2022), we thus conclude that the information on SDG performance in Spanish firms is associated primarily with commitment to other topics related to sustainability. The 2030 Agenda and its 17 SDGs pose new challenges and commitments for firms, however, as firms must adjust their operations and strategies to specific requirements. Evaluating the alignment of practices for preparing business sustainability reports to performance on the SDGs has become a strategic issue for companies that will help them to improve the information they provide on SDGs and give their stakeholders greater confidence in sustainability reports for their decisions.

6.1 | Theoretical implications of the research

Among the theoretical implications of this study, it should be noted that corporate sustainability behaviors are highly sensitive to the pressures and demands of interest groups, which ultimately are conditioned by the cultural environment. Consistently, stakeholder theory suggests that, to succeed, companies must address their stakeholders' expectations (Freeman, 1994) and according this theory, the greater the pressure imposed by stakeholders, the greater the need for companies to provide credibility in their sustainability reports (Simoni et al., 2020). Ultimately, strategies oriented to sustainability involve considering all possible environmental, social, and economic factors that impact the interested parties and the sustainable development proposed by the 2030 Agenda. As our results indicate that firms are tackling the SDGs in their strategies, this study provides a preliminary understanding of Spanish business practice, as well as clues to theorizing this research field, which has received little exploration.

Advances in the commitment of stakeholders to obtain information on the SDGs and ESG and, therefore, the recognition by companies of their disclosure as a source of competitive advantage in the design of long-term strategies can be explained through the theory of legitimacy. In particular, from the theory of legitimacy, it could be argued that in order for sustainability reports to be more credible, companies entrust their verification and assurance to an independent entity (Fernandez-Feijoo et al., 2016). Therefore, in line with Patten (2020) the theory of legitimacy, it seems to be fulfilled with respect to the level of information on the SDGs and ESG communicated by Spanish companies, since it goes beyond the legal compliance established by community directives or Spanish legislation.

In this investigation it has been found that all Spanish listed companies present their verified sustainability reports. In this sense, the signaling theory suggests that companies, when incurring in assurance service costs show stakeholders your commitment to high-quality disclosure of information. In other words, according to the signaling theory, Spanish companies are taking steps to certify that they and their stakeholders are aware of the need to act on issues related to sustainability.

6.2 | Practical implications and contributions of the research

This study has significant implications for stakeholders, those responsible for formulating ESG policies, academics, company directors, and the practice of disseminating ESG/SDGs. *For stakeholders*, it clarifies the relationship between dissemination of information on the SDGs and ESG through the reports required by the European and Spanish legal frameworks regulating Spanish listed companies. More specifically, our study suggests that it is important to publish information on topics related to the SDGs in corporate reports and that these reports are a valuable medium for communicating a firm's efforts to its stakeholders. *For investors*, our study reveals that sustainability reports by Spanish listed companies are assured by an independent entity, contributing to SDG reporting and risk reduction. For *policy formulators*, the study results provide new information on the impact and credibility of these companies' sustainability reports and improve our understanding of how and why organizations modify their sustainability practices. *For academics*, this study contributes to an emerging body of literature aligned with the SDGs. The 2030 Agenda urges companies to take active steps to include the SDGs in their sustainability reports to ensure that the companies are more sustainable, and this pressure justifies the need for more research to identify and measure the interactions among the 17 SDGs and the sustainability reports, inviting renovation of theoretical frameworks for accounting, as many critics argue (Bebbington & Unerman, 2018, 2020; Larrinaga et al., 2019). Our study provides directors with a more complete image and thus fuller understanding of the key factors that can help firms to achieve different SDGs. *From a practical perspective*, the results of this article contribute to understanding listed firms' commitment to the SDGs and the credibility of their efforts to achieve sustainable development. It also provides a preliminary understanding of Spanish business practices, as well as clues to theorizing this research field, which has received little exploration to date. Another interesting issue is the nature of voluntary vs. compulsory SDG information and the impact of each mode on the 17 goals and 169 objectives. Our study thus responds to the call by researchers, institutions, and companies to deepen this line of study to contribute to the literature and advance knowledge at regional and national level. The practical impact of our analysis is based on the exhaustiveness of our data set, which is clearly superior to that of other studies on disclosure and performance on SDGs associated with sustainability standards in Spanish firms. Our results also suggest that performance on SDGs can strengthen business strategies in firms that have stagnated and help them not to lose their place in the market, insofar as their stakeholders demand more transparency and progress.

To the best of our knowledge, no prior study has analyzed the connection between Corporate Sustainability Reports and the SDGs in Spanish firms from a country-level perspective. Our study fills this research gap for Spanish listed firms. The study is also especially important in covering the dimension of Corporate Sustainability Reports that enables us to understand "how" and "to what extent" the SDGs can strengthen business strategy and compliance with the Climate Change and Energy Transition Law, or the Spanish Circular Economy Strategy, based on the philosophy of the 2030 Agenda.

Further, our study has demonstrated that Spanish listed firms present on average 63.3% of GRI-ESG information in their Corporate Sustainability Reports. Significant differences exist, however, among the firms from different activity sectors. More specifically, petroleum and energy firms stand out in presenting 20% more of the environmental GRI information than do firms from other sectors, such as real estate and technology and telecommunications.

This study demonstrates that the levels of ESG information, analyzed based on the TBL philosophy, show significant differences among firms from different sectors. We obtain evidence that the firms analyzed are prepared to adapt to the new requirements of Directive (EU, 2022) 2022/2464 of the European Parliament and of the Council on sustainability reporting. They must, however, adapt to the ESRS once these are approved.

More specifically, our study has shown an association or analogy between level of GRI-ESG information and level of performance on the SDGs-ESG classified according to the TBL on sustainability. It also shows that introducing compulsory external verification of the sustainability reports in Spain after Law 11/2018 on this issue went into effect has motivated the presence of SDGs in reports on business sustainability. And we find that the higher the level of information on the GRI-environmental standards reported, the better the firm's position in the ranking on environmental SDGs. Further, our findings show that 100% of these firms tackle the SDGs in their sustainability reports—a higher value than those obtained in prior studies—and that high levels of information on the SDGs are related to the corporate image these firms project to stakeholders. We must, however, continue to deepen research on the concrete form the SDGs take to determine how in quantitative terms they materialize, since information on Spanish firms' performance on the SDGs is associated primarily with commitment to other topics related to sustainability.

Ultimately, our study sheds new light on the degree and scope of performance on the SDGs in Spanish listed firms' sustainability reports. This study is not, however, free of limitations, which open new and interesting paths for research. Firms' reporting on the SDGs is a novel topic, and dissemination is changing over time. We focused on large firms that compose the main Spanish stock index and the period of the past 3 years. The size of the firms analyzed is thus another limitation to obtaining a profile at country level, since our analysis does not cover SMEs. A more detailed analysis could focus on SMEs to evaluate their efforts for sustainability, as well as their performance on and materialization of the SDGs at regional and country level and in comparison to other fundamentally different environments. Our study could serve as a base line for expanding future studies.

ORCID

Herenia Gutiérrez-Ponce https://orcid.org/0000-0002-4894-7039

REFERENCES

Adams, C. A., & Abhayawansa, S. (2022). Connecting the COVID-19 pandemic, environmental, social and governance (ESG) investing and calls for 'harmonisation' of sustainability reporting. *Critical Perspectives on Accounting*, *82*, 102309. https://doi.org/10.1016/j.cpa.2021.102309

Adams, C. A., Alhamood, A., He, X., Wang, L., & Wang, Y. (2021). The double-materiality concept application and issues. *Global Reporting Initiative (GRI)*, 1–11.

Aouadi, A., & Marsat, S. (2018). Special issue on leadership and the creation of corporate social responsibility. *Source: Journal of Business Ethics*, *151*(4), 1027–1047. https://doi.org/10.1007/sl0551-016-3213-8

Arena, M., Azzone, G., Ratti, S., Urbano, V. M., & Vecchio, G. (2023). Sustainable development goals and corporate reporting: An empirical investigation of the oil and gas industry. *Sustainable Development*, *31*(1), 12–25. https://doi.org/10.1002/sd.2369

Avrampou, A., Skouloudis, A., Iliopoulos, G., & Khan, N. (2019). Advancing the sustainable development goals: Evidence from leading European banks. *Sustainable Development*, *27*(4), 743–757. https://doi.org/10.1002/sd.1938

Bebbington, J., & Unerman, J. (2018). Achieving the United Nations sustainable development goals. *Accounting, Auditing & Accountability Journal*, *31*(1), 2–24. https://doi.org/10.1108/aaaj-05-2017-2929

Bebbington, J., & Unerman, J. (2020). Advancing research into accounting and the UN sustainable development goals. *Accounting, Auditing and Accountability Journal*, *33*(7), 1657–1670. https://doi.org/10.1108/AAAJ-05-2020-4556

Beretta, S., & Bozzolan, S. (2004). A framework for the analysis of firm risk communication. *International Journal of Accounting*, *39*(3), 265–288. https://doi.org/10.1016/j.intacc.2004.06.006

Camilleri, M. A. (2017). Theoretical insights on integrated reporting: The inclusion of non-financial capitals in corporate disclosures. *Corporate Communications: An International Journal*, *23*(4), 567–581. https://doi.org/10.1108/CCIJ-01-2018-0016

Campanella, F., Serino, L., Crisci, A., & D'Ambra, A. (2021). The role of corporate governance in environmental policy disclosure and sustainable development: Generalized estimating equations in longitudinal count data analysis. *Corporate Social Responsibility and Environmental Management*, *28*(1), 474–484. https://doi.org/10.1002/csr.2062

Cheng, M. M., Green, W. J., & Ko, J. C. W. (2015). The impact of strategic relevance and assurance of sustainability indicators on investors' decisions. *Auditing*, *34*(1), 131–162. https://doi.org/10.2308/ajpt-50738

Cohen, J. R., & Simnett, R. (2015). CSR and assurance services: A research agenda. *Auditing*, *34*(1), 59–74. https://doi.org/10.2308/ajpt-50876

Consolandi, C., Phadke, H., Hawley, J., & Eccles, R. G. (2020). Material ESG outcomes and SDG externalities: Evaluating the health care sector's contribution to the SDGs. *Organization and Environment*, *33*(4), 511–533. https://doi.org/10.1177/1086026619899795

Demaria, S., & Rigot, S. (2021). Corporate environmental reporting: Are French firms compliant with the task force on climate financial disclosures' recommendations? *Business Strategy and the Environment*, *30*(1), 721–738. https://doi.org/10.1002/bse.2651

Di Vaio, A., & Varriale, L. (2020). SDGs and airport sustainable performance: Evidence from Italy on organisational, accounting and reporting practices through financial and non-financial disclosure. *Journal of Cleaner Production*, *249*, 119431. https://doi.org/10.1016/j.jclepro.2019.119431

Di Vaio, A., Varriale, L., Di Gregorio, A., & Adomako, S. (2022). Corporate social performance and non-financial reporting in the cruise industry: Paving the way towards UN Agenda 2030. *Corporate Social Responsibility and Environmental Management*, *29*(6), 1931–1953. https://doi.org/10.1002/csr.2292

Diaz-Sarachaga, J. M. (2021). Monetizing impacts of Spanish companies toward the sustainable development goals. *Corporate Social Responsibility and Environmental Management*, *28*(4), 1313–1323. https://doi.org/10.1002/csr.2149

Directiva 95. (2014). Por la que se modifica la Directiva 2013/34/UE en lo que respecta a la divulgación de información no financiera e información sobre diversidad por parte de determinadas grandes empresas y determinados grupos. *Diario Oficial de la Unión Europea*, *2014*(2), DOUE, 330, 1–9. https://boe.es/doue/2014/330/L00001-00009.pdf

Directiva (EU). (2022). 2464 *of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting*.

Fernandez-Feijoo, B., Romero, S., & Ruiz, S. (2016). The assurance market of sustainability reports: What do accounting firms do? *Journal of Cleaner Production*, *139*, 1128–1137. https://doi.org/10.1016/j.jclepro.2016.08.157

Freeman, R. E. (1994). The politics of stakeholder theory: Some future directions. *Business Ethics Quarterly*, *4*(4), 409–421. https://doi.org/10.2307/3857340

Galan, J. I., & Zuñiga-Vicente, J. A. (2023). Discovering the key factors behind multi-stakeholder partnerships for contributing to the achievement of sustainable development goals: Insights around the electric vehicle in Spain. *Corporate Social Responsibility and Environmental Management*, *30*(2), 829–845. https://doi.org/10.1002/csr.2391

García-Sánchez, I. M. (2021). Corporate social reporting and assurance: The state of the art. *Revista de Contabilidad-Spanish Accounting Review*, *24*(2), 241–269. https://doi.org/10.6018/RCSAR.409441

García-Sánchez, I. M., Aibar-Guzmán, B., Aibar-Guzmán, C., & Somohano-Rodríguez, F. M. (2022). The drivers of the integration of the sustainable development goals into the non-financial information system: Individual and joint analysis of their influence. *Sustainable Development*, *30*(4), 513–524. https://doi.org/10.1002/sd.2246

García-Sánchez, I.-M., Aibar-Guzman, B., & Aibar-Guzman, C. (2022). What sustainability assurance services do institutional investors demand and what value do they give them? *Sustainability Accounting. Management and Policy Journal*, *13*(1), 152–154. https://doi.org/10.1108/SAMPJ-06-2020-0199

Gazzola, P., Pezzetti, R., Amelio, S., & Grechi, D. (2020). Non-financial information disclosure in Italian public interest companies: A sustainability reporting perspective. *Sustainability (Switzerland)*, *12*(15), 1–16. https://doi.org/10.3390/su12156063

Gillet-Monjarret, C. (2018). Assurance reports included in the CSR reports of French firms: A longitudinal study. *Sustainability Accounting, Management and Policy Journal*, *9*(5), 570–594. https://doi.org/10.1108/SAMPJ-09-2017-0098

Girella, L., Zambon, S., & Rossi, P. (2019). Reporting on sustainable development: A comparison of three Italian small and medium-sized enterprises. *Corporate Social Responsibility and Environmental Management*, *26*(4), 981–996. https://doi.org/10.1002/csr.1738

Global Reporting Initiative (GRI) (2018). Business reporting on the SDGs. Retrieved from: www.globalreporting.org/information/SDGs/Pages/Reporting-on-the-SDGs.aspx

González-Teruel, A. (2015). Estrategias metodológicas para la investigación del usuario en los medios sociales: análisis de contenido, teoría fundamentada y análisis del discurso. *El Profesional de La Información*, *24*(3), 321. https://doi.org/10.3145/epi.2015.may.12

GRI. (2021). Consolidated set of the GRI standards. Global Reporting Initiative (GRI). A short introduction to the GRI standards. https://www.globalreporting.org/media/wtaf14tw/a-short-introduction-to-the-gristandards.pdf

Gutierrez-Ponce, H., Arimany-serrat, N., & Chamizo-gonzalez, J. (2022). Environmental, social and governance information disclosure strategy of the ten main Spanish listed companies. *Quality Innovation Prosperity*, *1745*, 88–111. https://doi.org/10.12776/QIP.V26I3.1766

Gutiérrez-Ponce, H., Chamizo-González, J., & Arimany-Serrat, N. (2022). Disclosure of environmental, social, and corporate governance information by Spanish companies: A compliance analysis. *Sustainability (Switzerland)*, *14*(6), 3254. https://doi.org/10.3390/su14063254

Gutiérrez-Ponce, H., González, J. C., & Gomez, J. P. (2022). Cumplimiento normativo sobre información sostenible de las empresas españolas y sus efectos en los avances de la Agenda 2030. *CIRIEC-Espana Revista de Economia Publica, Social y Cooperativa*, *105*, 289–318. https://doi.org/10.7203/CIRIEC-E.105.21991

Gutiérrez-Ponce, H., González, J. C., & Serrat, N. A. (2021). Spanish companies' website communication of environmental, social, and governance information. *Communications Society*, *34*(4), 117–133. https://doi.org/10.15581/003.34.4.117-133

Gutiérrez-Ponce, H., González, J. C., & Serrat, N. A. (2022). Transparencia de la información no financiera en las empresas del IBEX35 y del DAX30: el nuevo reporting integrado. *Contaduría y Administración*, *67*(1), 13. www.cya.unam.mx/index.php/cya

Gutiérrez-Ponce, H., Serrat, N. A., & González, J. C. (2022). WEB communication of non-financial information in the companies of four European stock indices. *Revista Espanola de Documentacion Cientifica*, *45*(3), 1–18. https://doi.org/10.3989/redc.2022.3.1883

Heras-Saizarbitoria, I., Urbieta, L., & Boiral, O. (2022). Organizations' engagement with sustainable development goals: From cherry-picking to SDG-washing? *Corporate Social Responsibility and Environmental Management*, *29*(2), 316–328. https://doi.org/10.1002/csr.2202

Hess, D. (2019). The transparency trap: Non-financial disclosure and the responsibility of business to respect human rights. *American Business Law Journal*, *56*(1), 5–53. https://doi.org/10.1111/ablj.12134

Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*(9), 1277–1288. https://doi.org/10.1177/1049732305276687

Hummel, K., & Szekely, M. (2022). Disclosure on the sustainable development goals—Evidence from Europe. *Accounting in Europe*, *19*(1), 152–189. https://doi.org/10.1080/17449480.2021.1894347

IBEX. (2022). IBEX35®, Reference stock index of the Spanish stock market. Retrieved from: https://www.bolsasymercados.es/bme-exchange/es/Indices/Ibex

Ionaşcu, E., Mironiuc, M., Anghel, I., & Huian, M. C. (2020). The involvement of real estate companies in sustainable development—An analysis from the SDGs reporting perspective. *Sustainability (Switzerland)*, *12*(3), 1–24. https://doi.org/10.3390/su12030798

Jackson, G., Bartosch, J., Avetisyan, E., Kinderman, D., & Knudsen, J. S. (2020). Mandatory non-financial disclosure and its influence on CSR: An international comparison. *Journal of Business Ethics*, *162*(2), 323–342. https://doi.org/10.1007/s10551-019-04200-0

Jan, A., Mata, M. N., Albinsson, P. A., Martins, J. M., Hassan, R. B., & Mata, P. N. (2021). Alignment of islamic banking sustainability indicators with sustainable development goals: Policy recommendations for addressing the covid-19 pandemic. *Sustainability (Switzerland)*, *13*(5), 1–38. https://doi.org/10.3390/su13052607

Jizi, M. (2017). The influence of board composition on sustainable development disclosure. *Business Strategy and the Environment*, *26*(5), 640–655. https://doi.org/10.1002/bse.1943

Junior, R. M., Best, P. J., & Cotter, J. (2014). Sustainability reporting and assurance: A historical analysis on a world-wide phenomenon. *Journal of Business Ethics*, *120*(1), 1–11. https://doi.org/10.1007/s10551-013-1637-y

Kinderman, D. (2020). The challenges of upward regulatory harmonization: The case of sustainability reporting in the European Union. *Regulation and Governance*, *14*(4), 674–697. https://doi.org/10.1111/rego.12240

Kolk, A., Kourula, A., & Pisani, N. (2017). Multinational enterprises and the sustainable development goals: What do we know and how to proceed? *Transnational Corporations*, *24*(3), 9–32. https://doi.org/10.18356/6f5fab5e-en

KPMG. (2020). The time has come: The KPMG survey of sustainability reporting 2020. https://www.home.kpmg/sustainabilityreporting

Krasodomska, J., & Cho, C. H. (2017). Corporate social responsibility disclosure: Perspectives from sell-side and buy-side financial analysts.

Sustainability Accounting, Management and Policy Journal, *8*(1), 2–19. https://doi.org/10.1108/SAMPJ-02-2016-0006

Lapsley, I., & Miller, P. (2019). Transforming the public sector: 1998–2018. *Accounting, Auditing and Accountability Journal*, *32*(8), 2211–2252. https://doi.org/10.1108/AAAJ-06-2018-3511

Larrinaga, C., Moneva, J. M., & Ortas, E. (2019). Twenty-five years of social and environmental accounting in Spain: Past, present and future. *Revista Espanola de Financiacion y Contabilidad*, *48*(4), 387–405. https://doi.org/10.1080/02102412.2019.1632020

Ley 11. (2018). Por la que se modifica el Código de Comercio, el texto refundido de la ley de Sociedades de Capital. In *Boletín Oficial del Estado*, 129833–129854. https://www.boe.es/buscar/doc.php?id=BOE-A-2018-17989

Lokuwaduge, C. S. D. S., & Heenetigala, K. (2017). Integrating environmental, social and governance (ESG) disclosure for a sustainable development: An Australian study. *Business Strategy and the Environment*, *26*(4), 438–450. https://doi.org/10.1002/bse.1927

Manes-Rossi, F., & Nicolo, G. (2022). Exploring sustainable development goals reporting practices: From symbolic to substantive approaches—Evidence from the energy sector. *Corporate Social Responsibility and Environmental Management*, *29*(5), 1799–1815. https://doi.org/10.1002/csr.2328

Martínez-Ferrero, J., & García-Meca, E. (2020). Internal corporate governance strength as a mechanism for achieving sustainable development goals. *Sustainable Development*, *28*(5), 1189–1198. https://doi.org/10.1002/sd.2068

Michelon, G., Pilonato, S., & Ricceri, F. (2015). CSR reporting practices and the quality of disclosure: An empirical analysis. *Critical Perspectives on Accounting*, *33*, 59–78. https://doi.org/10.1016/j.cpa.2014.10.003

Mio, C., Panfilo, S., & Blundo, B. (2020). Sustainable development goals and the strategic role of business: A systematic literature review. *Business Strategy and the Environment*, *29*(8), 3220–3245. https://doi.org/10.1002/bse.2568

Nguyen, D. T., Hoang, T. G., & Tran, H. G. (2022). Help or hurt? The impact of ESG on firm performance in S&P 500 non-financial firms. *Australasian Accounting, Business and Finance Journal*, *16*(2), 91–102. https://doi.org/10.14453/aabfj.v16i2.7

Patten, D. M. (2020). Seeking legitimacy. *Sustainability Accounting, Management and Policy Journal*, *11*(6), 1009–1021. https://doi.org/10.1108/SAMPJ-12-2018-0332

Perego, P., & Kolk, A. (2012). Multinationals' accountability on sustainability: The evolution of third-party assurance of sustainability reports. *Journal of Business Ethics*, *110*(2), 173–190. https://doi.org/10.1007/s10551-012-1420-5

Pflugrath, G., Roebuck, P., & Simnett, R. (2011). Impact of assurance and assurer's professional affiliation on financial analysts' assessment of credibility of corporate social responsibility information. *Auditing*, *30*(3), 239–254. https://doi.org/10.2308/ajpt-10047

Pizzi, S., Caputo, A., Corvino, A., & Venturelli, A. (2020). Management research and the UN sustainable development goals (SDGs): A bibliometric investigation and systematic review. *Journal of Cleaner Production*, *276*, 124033. https://doi.org/10.1016/j.jclepro.2020.124033

Pizzi, S., Rosati, F., & Venturelli, A. (2021). The determinants of business contribution to the 2030 Agenda: Introducing the SDG reporting score. *Business Strategy and the Environment*, *30*(1), 404–421. https://doi.org/10.1002/bse.2628

Reporting, G. I. (2022). Business reporting on the SDGs. Integrating the SDGs into corporate reporting: A practical guide. Retrieved from: https://www.unglobalcompact.org/library/5628

Reverte, C. (2021). Do investors value the voluntary assurance of sustainability information? Evidence from the Spanish stock market. *Sustainable Development*, *29*(5), 793–809. https://doi.org/10.1002/sd.2157

Rivera, J. M., Muñoz, M. J., & Moneva, J. M. (2017). Revisiting the relationship between corporate stakeholder commitment and social and financial performance. *Sustainable Development*, *25*(6), 482–494. https://doi.org/10.1002/sd.1664

Romero, S., Ruiz, S., & Fernandez-Feijoo, B. (2019). Sustainability reporting and stakeholder engagement in Spain: Different instruments, different quality. *Business Strategy and the Environment*, *28*(1), 221–232. https://doi.org/10.1002/bse.2251

Rosati, F., & Faria, L. G. D. (2019a). Addressing the SDGs in sustainability reports: The relationship with institutional factors. *Journal of Cleaner Production*, *215*, 1312–1326. https://doi.org/10.1016/j.jclepro.2018.12.107

Rosati, F., & Faria, L. G. D. (2019b). Business contribution to the sustainable development agenda: Organizational factors related to early adoption of SDG reporting. *Corporate Social Responsibility and Environmental Management*, *26*(3), 588–597. https://doi.org/10.1002/csr.1705

Seuring, S., & Gold, S. (2012). Conducting content-analysis based literature reviews in supply chain management. *Supply Chain Management*, *17*(5), 544–555. https://doi.org/10.1108/13598541211258609

Sierra García, L., Bollas-Araya, H. M., & García Benau, M. A. (2022). Sustainable development goals and assurance of non-financial information reporting in Spain. *Sustainability Accounting, Management and Policy Journal*, *13*(4), 878–898. https://doi.org/10.1108/SAMPJ-04-2021-0131

Sierra-Garcia, L., Garcia-Benau, M. A., & Bollas-Araya, H. M. (2018). Empirical analysis of non-financial reporting by Spanish companies. *Administrative Sciences*, *8*(3), 29. https://doi.org/10.3390/admsci8030029

Simoni, L., Bini, L., & Bellucci, M. (2020). Effects of social, environmental, and institutional factors on sustainability report assurance: Evidence from European countries. *Meditari Accountancy Research*, *28*(6), 1059–1087. https://doi.org/10.1108/MEDAR-03-2019-0462

Soriya, S., & Rastogi, P. (2022). A systematic literature review on integrated reporting from 2011 to 2020. *Journal of Financial Reporting and Accounting*, *20*(3–4), 558–579. https://doi.org/10.1108/JFRA-09-2020-0266

Szennay, Á., Szigeti, C., Kovács, N., & Szabo, D. R. (2019). Through the blurry looking glass—SDGs in the GRI reports. *Resources*, *8*(101), 1–17. https://doi.org/10.3390/resources8020101

Taliento, M., Favino, C., & Netti, A. (2019). Impact of environmental, social, and governance information on economic performance: Evidence of a corporate "sustainability advantage" from Europe. *Sustainability (Switzerland)*, *11*(6), 1738. https://doi.org/10.3390/su11061738

Tarquinio, L., Raucci, D., & Benedetti, R. (2018). An investigation of global reporting initiative performance indicators in corporate sustainability reports: Greek, Italian and Spanish evidence. *Sustainability (Switzerland)*, *10*(4), 897. https://doi.org/10.3390/su10040897

Trevlopoulos, N. S., Tsalis, T. A., Evangelinos, K. I., Tsagarakis, K. P., Vatalis, K. I., & Nikolaou, I. E. (2021). The influence of environmental regulations on business innovation, intellectual capital, environmental and economic performance. *Environment Systems and Decisions*, *41*(1), 163–178. https://doi.org/10.1007/s10669-021-09802-6

Tsalis, T. A., Malamateniou, K. E., Koulouriotis, D., & Nikolaou, I. E. (2020). New challenges for corporate sustainability reporting: United Nations' 2030 Agenda for sustainable development and the sustainable development goals. *Corporate Social Responsibility and Environmental Management*, *27*(4), 1617–1629. https://doi.org/10.1002/csr.1910

Tsalis, T. A., Terzaki, M., Koulouriotis, D., Tsagarakis, K. P., & Nikolaou, I. E. (2022). The nexus of United Nations' 2030 Agenda and corporate sustainability reports. *Sustainable Development*, 1–13. https://doi.org/10.1002/sd.2419

Tyson, T., & Adams, C. A. (2020). Increasing the scope of assurance research: New lines of inquiry and novel theoretical perspectives. *Sustainability Accounting, Management and Policy Journal*, *11*(2), 291–316. https://doi.org/10.1108/SAMPJ-03-2018-0067

UN. (2015). Transforming our world: The 2030 agenda for sustainable development Technical Report, United Nations. Retrived from: https://sdgs.un.org/publications/transforming-our-world-2030-agenda-sustainable-development-17981

United Nations Global Compact. (2018). Reporting on the SDGs – shape the future of corporate reporting on the SDGs. Retrived from: www.unglobalcompact.org/take-action/action/sdgreporting

United Nations Global Compact. (2020). SDG Ambition – Scaling Business Impact for the Decade of Action. Retrived from: https://unglobalcompact.org/library/5732

van der Waal, J. W. H., & Thijssens, T. (2020). Corporate involvement in sustainable development goals: Exploring the territory. *Journal of Cleaner Production*, *252*, 119625. https://doi.org/10.1016/j.jclepro.2019.119625

van Zanten, J. A., & van Tulder, R. (2018). Multinational enterprises and the sustainable development goals: An institutional approach to corporate engagement. *Journal of International Business Policy*, *1*(3–4), 208–233. https://doi.org/10.1057/s42214-018-0008-x

van Zanten, J. A., & van Tulder, R. (2021). Improving companies' impacts on sustainable development: A nexus approach to the SDGS. *Business Strategy and the Environment*, *30*(8), 3703–3720. https://doi.org/10.1002/bse.2835

Whittingham, K. L., Earle, A. G., Leyva-de la Hiz, D. I., & Argiolas, A. (2022). The impact of the United Nations sustainable development goals on corporate sustainability reporting. *BRQ Business Research Quarterly*, *26*, 45–61. https://doi.org/10.1177/23409444221085585

How to cite this article: Gutiérrez-Ponce, H. (2023). Sustainability as a strategy base in Spanish firms: Sustainability reports and performance on the sustainable development goals. *Sustainable Development*, 1–16. https://doi.org/10.1002/sd.2566