

CSR AS A PARADIGM SHIFT IN SUSTAINABILITY REPORTING: FROM VOLUNTARY PRACTICE TO LEGAL REQUIREMENT

Marian-Dragoş Manguic¹  and Meral Kagitci^{1*} 

¹⁾ Bucharest University of Economic Studies, Romania

Please cite this article like this:

Manguic, M.D., Kagitci, M., 2025. CSR as a Paradigm Shift in Sustainability Reporting: From Voluntary Practice to Legal Requirement. *Amfiteatru Economic*, 27(70), pp. 1193-1208.

DOI: <https://doi.org/10.24818/EA/2025/70/1193>

Article history:

Received: 12 March 2025

Reviewed: 28 May 2025

Accepted: 15 June 2025

Abstract

This paper discusses the evolution of sustainability reporting from voluntary to mandatory reporting under the European Corporate Sustainability Reporting Directive 2022/2464 (CSRD). The issues addressed are the evolution of sustainability reporting, the theoretical foundations that explain the regulation of this field and the technical issues raised by the implementation of the CSRD. The analysis contextualizes the paradigm shift represented by the CSRD using legitimacy theory, institutional theory and stakeholder theory, while exploring its implications for organizations and professionals. The proposed directions for future research underpin the institutional innovations needed to implement the CSRD and further develop sustainability reporting regulations.

Keywords: Sustainability reporting, sustainability indices, regulation, Corporate Sustainability Reporting Directive (EU) 2022/2464, European Sustainability Reporting Standards.

JEL Classification: M14, M48, Q01, G20

* Corresponding author, **Meral Kagitci** – e-mail: meral.kagitci@ase.ro



This is an Open Access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. © 2025 The Author(s).

Introduction

Sustainability reporting (SR) has changed significantly in recent years. Voluntary SR was initially promoted within social responsibility initiatives and evolved into more structured corporate reporting outlets, guided by independent bodies such as the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB), the International Integrated Reporting Council (IIRC), etc. SR facilitated the development of environmental, social and governance (ESG) reporting practices, but has been criticized for lack of comparability and reliability, greenwashing tactics (selective reporting of favourable information) and absence of assurance mechanisms.

As interest from the investment environment in sustainability has grown, various organizations and rating agencies (e.g. Bloomberg, Sustainalytics, MSCI, Refinitiv, etc.) have developed ESG indices according to their own methodologies for data collection and analysis, with the aim of assessing and comparing companies' performance from a sustainability perspective. In the absence of full and transparent information on data sources and assessment methodologies, ESG indices have also been criticized for lack of standardization, transparency, reliability, and comparability.

As a result of the limited usefulness of voluntary SR and ESG indices, the need for stricter regulation in the field of SR has emerged. Globally, there have been several initiatives in this regard. Soft-law instruments such as the UN Global Compact (UNGC), the OECD Guidelines for Multinational Enterprises (2011), the Task Force on Climate-related Financial Disclosures (TCFD), and the SR standards developed by the IFRS Foundation have marked the transition towards a systemic and structured approach. At present, the European SR legislation is aligned with the objectives of the European Green Deal and has at its core the Corporate Sustainability Reporting Directive (EU) 2022/2464 - CSRD (EP, 2022). Recently, the CSRD implementation calendar has been proposed for amendment (EC, 2025), in the sense of postponing some implementation deadlines, reducing its scope and making certain reporting voluntary. However, the CSRD and associated legislation, in particular the European Sustainability Reporting Standards – ESRS (EC, 2023) indicate that the EU has taken a global lead in the area of mandatory SR.

The aim of this paper is to critically analyse the CSRD as a paradigm shift in SR. To this end, the following research questions are formulated:

1. How has SR evolved from voluntary reporting to a legal requirement and what are the theoretical foundations that explain this evolution?
2. What are the arguments in support of the idea that CSRD is a systemic transformation of SR within the EU?
3. What are the most important challenges associated with the implementation of CSRD?
4. What are the implications of implementing CSRD for companies, professionals and other stakeholders?

This paper contributes to the understanding of how regulation can influence corporate behaviour in a reflexive governance system in which institutions are engaged in a feedback loop and respond to the negative consequences of progress by reforming the systems that produced those consequences. In this sense, SR regulation is analysed as an institutional

response to systemic failures in corporate governance, environmental responsibility and stakeholder engagement. The paper is structured as follows: Section 1 introduces voluntary SR frameworks, ESG indices and the CSRD, in the context of theories that explain the evolution of SR towards a regulated reporting system. Section 2 discusses technical aspects of CSRD implementation such as value chain reporting, integration of SR with financial reporting and digitalization of SR. Section 3 identifies and discusses implications of CSRD implementation for organizations and professionals. Conclusions summarize benefits and challenges of the CSRD and future research proposals for the development of SR.

1. Sustainability reporting: voluntary practices, ESG indices and regulation through the CSRD

1.1. Voluntary sustainability reporting

Voluntary SR is an important milestone in the evolution of corporate reporting, promoting transparency on ESG issues associated with business. From a theoretical point of view, the adoption of voluntary SR frameworks can be understood using legitimacy theory (Suchman, 1995): companies disclose information to align with certain social norms in search of legitimacy. From the stakeholder theory perspective (Freeman et al., 2010), consideration by corporate reporting of the informational needs of several categories of stakeholders, other than investors is relevant: employees, customers, regulators, communities, etc.

GRI (founded in 1997) develops the most commonly used standards in Europe and worldwide (KPMG, 2024), and has been adopted by over 10,000 companies. Some GRI standards are universal, applicable to all types of entities, while others are specific to certain topics (biodiversity, energy, water, emissions, local communities, etc.) or industries (oil and gas, coal, agriculture, aquaculture and fisheries, etc.) (GRI, 2025). The GRI Standards emphasize the significance of economic, environmental and social impacts of economic activity and have a multi-stakeholder-oriented approach.

SASB (founded in 2011) is one of the first organizations to issue industry-specific standards to support companies to disclose sustainability information as part of financial reporting. Unlike the GRI, SASB has prioritized the informational interests of investors and the financial materiality of sustainability disclosures. The SASB standards cover environmental, social capital, human capital, business model and innovation, leadership and governance issues in 77 industries with quantitative and qualitative indicators (SASB, 2020).

In 2013, the IIRC launched a conceptual framework for integrated reporting of financial and non-financial information (<IR> Framework - IIRF). Reporting under the IIRF is focused on disclosing how six types of capital (financial, manufactured, intellectual, human, social and relational, and natural) interact to create long-term value. Although it considers multiple stakeholder categories in a holistic approach, the IIRF holds the investors' informational interests at its centre (IFRS Foundation, 2022).

The IFRS Foundation, through the International Sustainability Standards Board (ISSB), assimilated and revised the IIRC in 2021, and in 2022 it also took over responsibility for SASB standard-setting. The IFRS Foundation also develops the International Financial

Reporting Standards - IFRS, which are relevant for listed entities. To date, the ISSB has developed IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information* and IFRS S2 *Climate-related Disclosures*.

Other voluntary SR initiatives and organizations include the TCFD (established in 2015), which has developed a comprehensive framework for reporting climate-related financial risks built on four pillars: governance, strategy, risk management, and metrics and targets (TCFD, 2017). The Carbon Disclosure Project (CDP, founded in 2000) has created a system of standardized questionnaires that help companies, local governments, states and regions to report their environmental impacts: climate, water and forests (CDP, 2025). The United Nations Sustainable Development Goals (2015) can be integrated by entities into their sustainability strategy. The UN Global Compact, to which more than 12,000 companies and 3,000 institutions have adhered, promotes sustainable business practices and reporting on human rights, labour, environment and fight against corruption (BSE, 2022).

The aforementioned (and other) SR frameworks developed by independent organizations have provided companies with tools for disclosing information that is relevant to different stakeholder groups, outside the scope of financial reporting. A representative feature of this stage in the evolution of SR is its diversity, which has manifested at several levels: ESG issues reported, reporting formats, stakeholders considered, vocabulary, quantitative and qualitative metrics, scope. SR has gained ground in investors' decision-making due to its ability to convey relevant information about companies' ethical and social performance, even in the absence of a unified regulatory framework (Erkens, Paugam and Stolowy, 2015). However, voluntary SR has been criticized for its lack of comparability (Albu et al., 2013; Cardoni, Kiseleva and Terzani, 2019), lack of reliability associated with selective reporting tactics (Cho et al., 2015; Einwiller and Carroll, 2020; Christensen, Hail and Leuz, 2021), and lack of assurance mechanisms (Simnet and Huggins, 2020). These drawbacks have limited its usefulness and ability to contribute to global sustainability goals (Buhr, Gray and Milne, 2014).

1.2. ESG rating agencies and ESG indices

Concurrently with the evolution of voluntary SR and against the backdrop of increased investor interest in sustainable business, ESG rating agencies and ESG indices have emerged to allow comparisons between entities included in the same peer group. ESG indices facilitate comparisons because they synthesize information and build sustainability and risk profiles of the companies analysed, allowing them to be ranked. The inclusion of a company in an ESG index is seen as a reputational asset, which strengthens its position with institutional investors and stakeholders.

The data used to compile ESG indices are collected from reports published by companies, from the business community, or directly from companies, through questionnaires. Thus, S&P Global uses specialized questionnaires by business area (23 topics and 110 questions) to collect economic, social and environmental information. In its questionnaires, CDP addresses, among others, governance, strategy, emissions, energy, biodiversity, and value chain issues. Refinitiv calculates an ESG score based on more than 450 indicators in 10 categories using publicly available data. MSCI and Sustainalytics rank companies based on ESG risk exposure and management performance, using data published by the companies and alternative sources such as news, proprietary and third-party databases.

The methodologies used to calculate ESG indices and rankings are published in full (CDP), in part (Euronext, Refinitiv, S&P Global), or are proprietary (Bloomberg, MSCI, Sustainalytics). Some providers offer subscription-based access to rankings and indices (Bloomberg, MSCI), others offer subscription-based full access and limited public access (Euronext, Refinitiv, Sustainalytics, S&P Global), but there are also providers that offer unlimited access to the developed indices (CDP).

Although they have contributed to legitimizing ESG issues within the financial market, ESG rating agencies and indices operate as a private and deregulated system. In addition, they offer different, sometimes even divergent results caused by the heterogeneity of methodologies, data, rating scales and calculation algorithms (Boiral et al., 2021; Berg, Kölbl and Rigobon, 2022). Since ESG indices are useful to the extent that they allow comparisons within a peer group, the definition of the group (universal or by industry) needs to be transparent (Kotsantonis and Serafeim, 2019). The opacity of the methodologies and algorithms has been intensely criticized, especially since the differences between indices have been proven to become more pronounced as companies provide more detailed reports (Christensen, Serafeim and Sikochi, 2022). In addition, it is relevant that ESG rating agencies and indices rely on information that is already present in the market, which they leverage for the benefit of their own clients from the investment community, with no intention of contributing to the development of companies' SR practices.

The use of ESG information in investment decisions is therefore constrained by features common to voluntary SR and ESG indices: lack of comparability across companies and over time, lack of ESG reporting standards, cost of collecting and analysing information, lack of quantifiable ESG information, lack of reliability in the absence of ESG audit and assurance mechanisms, and the volume of information that prevents the identification of material information (Amel-Zadeh and Serafeim, 2018). There are also concerns about the fragmentation of the global reporting landscape, complicating compliance for multinational corporations (Eccles, Krzus and Ribot, 2015). Stricter regulation of SR responds to the aforementioned criticisms with the features outlined in the following. However, mandatory SR regulated by the CSRD does not replace voluntary SR; instead, they currently coexist.

1.3. Mandatory sustainability reporting as regulated by the CSRD

Further analysis of recent EU regulations on SR is justified by the fact that they include conceptual and practical innovations while capitalizing on existing developments in the field of voluntary SR, are legally binding, and can also reach outside the EU jurisdiction for a variety of reasons, such as political reasons and the reality of global markets. Regulation is seen as a response to the need to unequivocally differentiate genuinely sustainable economic activities from attempts at selective reporting (greenwashing), so that funds are correctly directed to activities that represent genuine sustainable solutions (Inderst and Opp, 2025). Regulation is also instrumental in institutionalizing SR practices (Guşe et al., 2016; Dinu and Bunea, 2019).

EU regulations in the field of SR include several directives and standards, as follows:

- Non-financial Reporting Directive 2014/95/EU - NFRD (EP, 2014) has been transposed into the national legislation of member states. Having a limited scope, and in the absence of specific implementation standards, the NFRD has been replaced by the CSRD.

- Corporate Sustainability Reporting Directive (EU) 2022/2464 - CSRD (EP, 2022). CSRD significantly expands the scope of reporting, as compared to the NFRD, while introducing mandatory SR assurance requirements, SR standards, standardized SR layouts, the principle of double materiality and digital tagging of ESG information.

- The European Sustainability Reporting Standards - ESRS (EC, 2023) constitute the technical framework for SR under CSRD. They set out detailed, cross-cutting and topical ESG reporting requirements. The cross-cutting standards ESRS 1 and ESRS 2 set out the general requirements on SR. The topical standards ESRS E1 - ESRS E5 cover environmental issues (climate change, pollution, water and marine resources, biodiversity and ecosystems, resource use and circular economy), ESRS S1 - ESRS S4 cover social issues (own workforce and workers in the value chain, communities, consumers and end-users), and ESRS G1 covers governance issues (business conduct). Sector-specific standards are being developed, with SASB and GRI standards indicated by the EU communication as benchmarks. The ESRS establish that sustainability information must be disclosed in the sustainability statement.

- Regulation (EU) 2020/852 on the establishment of a framework to facilitate sustainable investment - EU Taxonomy (EP, 2020) introduces a ranking system for sustainable activities, setting performance thresholds based on six environmental objectives, with the aim of combating selective reporting of positive information. The objectives are linked to newer provisions of environmental standards ESRS E1 - ESRS E5.

- Directive (EU) 2024/1760 on corporate sustainability due diligence - CSDDD (EP, 2024) creates human rights and environmental due diligence obligations on companies and across the value chain.

At the heart of this regulatory architecture is the CSRD. The scope of the CSRD was initially extended from around 11,700 companies covered by the NFRD to an estimated 50,000 companies in the EU or outside the EU, but having a significant impact in the EU. Notably, in February 2025, the EU launched the Omnibus Package of propositions to delay the timetable for the implementation of the CSRD, narrow the scope of the CSRD and establish a voluntary basis for the SR by SMEs, as presented in Table no. 1 (EC, 2025).

Table no. 1. Scope of CSRD

Types of entities	First financial year of CSRD implementation	
	Initial calendar (CSRD)	Changes proposed by the 2025 Omnibus package
1. Large public interest entities in the EU with over 500 employees (covered by the NFRD)	2024	2024
2. Large EU entities and parent companies <ul style="list-style-type: none"> • Over 250 employees • Net turnover > 50 million euros • Total assets > 25 million euros 	2025	2027 <ul style="list-style-type: none"> • Over 1,000 employees
3. EU SMEs listed on a regulated market in the EU (except micro-entities), (small) credit and insurance institutions. They have the option not to report for the first two years.	2026	2028 <ul style="list-style-type: none"> • Voluntary implementation
4. Entities outside the EU but with <i>significant impact</i> in the EU	2028	2028

Types of entities	First financial year of CSRD implementation	
	Initial calendar (CSRD)	Changes proposed by the 2025 Omnibus package
<ul style="list-style-type: none"> Net turnover (EU) > 150 million euros, with at least one type 2 subsidiary in the EU and a net turnover > 40 million euros 		

Source: Developed by the authors, based on CSRD (EP, 2022) and Omnibus 1 (EC, 2025)

The elaboration of the Omnibus package is motivated with arguments about the need for the EU “economy to adapt and compete in an unstable and sometimes hostile geopolitical context” and “different approach undertaken by some other major jurisdictions regarding the regulation of corporate sustainability reporting” [...] having effects “on the competitive positioning of EU companies” (EC, 2025). Table no. 1 shows that, with the entry into force of the provisions targeting type 4 companies, the normative influence of CSRD will spread beyond EU borders, exporting European sustainability standards internationally. This phenomenon, known as the “Brussels effect”, accelerates the convergence of SR practices globally (Bradford, 2015). Another aspect contributing to this effect and outlined in the following is the CSRD provision regarding value chain reporting.

2. Specific aspects of CSRD implementation: Value chain reporting, integration of the sustainability statement with financial reporting, and digitalization

CSRD emphasizes the integration of the sustainability statement with traditional financial reporting, promoting a holistic view of corporate performance. This integration involves several practical and conceptual issues: value chain reporting, users of information, qualitative characteristics of information, materiality, auditing and assurance, reconciliation of sustainability reporting with financial statement information. The sustainability statement also involves managing a large amount of heterogeneous data, which raises the issue of the use of digital technologies. These issues are discussed in the following sections.

2.1. Value chain reporting

One of the main novelties that CSRD brings is **reporting across the EU and non-EU value chain**. Reporting information on “*significant* impacts, risks and opportunities” across the company’s entire value chain, downstream and upstream, regardless of the geographic or regulatory area of the entities that make up the value chain is one of the most complex and transformative features of CSRD and ESRS. It indicates a departure from the traditional reporting entity-centred approach and requires new mechanisms for data collection. However, according to ESRS 1 (EC, 2023, para. 63), the scope of the CSRD is extended beyond the EU jurisdiction, but not to all entities that make up the value chain of an EU company, but only to those that have a *significant impact* in the EU. ESRS 1 (para. 60) also specifies that due diligence should reflect the severity and likelihood of sustainability impacts on the value chain (EC, 2023). Challenges associated with value chain reporting include: limited availability of data from small and medium-sized entities (SMEs) and those outside the EU jurisdiction, verifiability and legal accountability for reported data, dialogue with suppliers and other entities that make up the value chain but have different levels of maturity of reporting practices, and the development of tools to assess ESG materiality.

From a theoretical standpoint, value chain transparency is a reflective governance tool that decentralizes accountability and institutionalizes feedback loops between companies. The expected results are a complete picture of a company's sustainability footprint and the advancement of sustainable practices of all entities that make up the value chain, including suppliers, distributors, and customers.

2.2. Integration of the sustainability statement with financial reporting

In terms of **information users** of the sustainability statement, similar to financial reporting, the CSRD (para. 9) places investors in a privileged position, alongside civil society actors (EP, 2022); business partners (customers), policy makers and environmental agencies, citizens and individual consumers are also mentioned. CSRD mentions that individual and institutional investors use third-party data providers. ESRS 1 (para. 22) makes a clearer link with financial reporting: the users of sustainability information are the primary users of general-purpose financial reporting as well as other users including the undertaking's business partners, trade unions and social partners, civil society and non-governmental organizations, public administration, analysts and academics (EC, 2023).

In describing the **qualitative characteristics** of sustainability information, ESRS 1 (para. 18) assumes a conceptual architecture similar to financial reporting (EC, 2023). Thus, relevance and faithful representation (fundamental characteristics), along with comparability, verifiability and understandability (enhancing characteristics) must be applied when preparing the sustainability statement (EC, 2023). A relevant aspect is the use of completeness, neutrality (including prudence), and correctness in support of faithful representation, the description of which is made in ESRS 1 in the spirit of avoiding the risks of selective or biased presentation and distortion of information. With regard to the comparability of information across entities and sectors, ESRS 1 mentions the need to make comparisons with target values, and within the same industry.

A new concept involved in the definition of relevance is the dual perspective on materiality (**double materiality concept**) that should be applied when an entity identifies and assesses the materiality of its impacts, risks and opportunities. This principle requires companies to assess: (i) how sustainability risks and uncertainties affect their "development, financial position, financial performance, cash flows, access to finance or cost of capital" (financial materiality), and (ii) how their own actions impact society and the environment (impact materiality) "over the short-, medium- or long-term" and across the value chain (EC, 2023, para. 43-49). Double materiality is at the heart of the conceptual construct of CSRD and ESRS and indicates an epistemological break from the traditional concept of financial materiality. Entities are experienced in applying financial materiality in financial reporting, but do not usually include it in SR, where they usually describe impact materiality (Dragomir et al., 2024). Double materiality aligns with stakeholder theory (Freeman et al., 2010) and reflects an inclusive view of corporate responsibility towards stakeholders.

By implementing the CSRD, entities are expected to disclose the interconnectedness between the sustainability statement and the financial statements, highlighting how ESG factors influence financial results and vice versa. According to ESRS 1 (para. 124-125), the **connectivity of the sustainability statement with the financial statements** can be achieved by (i) linking monetary or quantitative information from the sustainability statement to similar information in the financial statements, by cross-referencing relevant data points – direct connectivity; and (ii) reconciliation of monetary or quantitative

information in the sustainability statement derived by aggregating or disaggregating data from the financial statements by explaining the correlation between the information in the sustainability statement and the financial statements – indirect connectivity (EC, 2023). Examples of indicators presented in the topical standards and financial statements are: net revenue from activities in high climate impact sectors, net revenue used to calculate GHG intensity, significant amount of assets, liabilities, and net revenue (to either material physical risks or transition risks), operational expenditures (OpEx) and capital expenditures (CapEx) required for the implementation of action plans, etc. (EC, 2023).

To increase the reliability of information, the CSRD (para. 60) proposes “a progressive approach to enhancing the level of the assurance required” for the sustainability statement (EP, 2022). This is a particularly important institutional change. Starting from limited assurance, the long-term objective is to impose reasonable assurance for the sustainability statement, which would be comparable to financial audit, once adequate assurance standards are in place. This emphasizes the accountability and verifiability of SR.

Standardization through ESRS is another novel element in EU sustainability regulation. The indicators and data structures in the ESRS contribute to the comparability and completeness of data in the sustainability statement, which can thus be audited/assured by independent professionals. Standardization ensures consistency of EU policies in the field of SR.

2.3. Digitalization in EU sustainability reporting regulations

The CSRD and the associated regulatory framework address the digitalization of SR as a support system to ensure transparency, comparability and accessibility of ESG information.

The EU Taxonomy on Sustainable Activities (EP, 2020) mentions the supporting role of digitalization for increasing the sustainability of economic activities. This can be achieved through direct contributions (mitigating climate change by managing electricity grids with artificial intelligence systems), indirect contributions (increasing resource efficiency in transport, logistics, smart building management) or by complying with specific ICT requirements (sustainable data centres). The conclusion of the EU Taxonomy on digitalization is that the use of digital technologies does not automatically grant the “green activity” status, which is decided based on the economic activity’s ability to make a substantial social contribution and to have no significant harmful effects (EP, 2020).

CSRD and ESRS capture the enabling role of digitalization at the strategic level for transparent, efficient and impactful SR. A comparative analysis reveals that both regulations mention the importance of data quality, digital access to information and interoperability (EP, 2022; EC, 2023). However, they differ significantly in the extent to which they operationalize digitalization as an essential mechanism for achieving sustainability goals (Hummel and Jobst, 2024).

The CSRD proposes mandatory electronic reporting, based on the standardized digital format ESEF (European Single Electronic Format), enriched with a specific SR taxonomy, to expand the scope, level of detail and comparability of SR. The expected effects are to improve the ability of SR to be understood and analysed by software systems, the possibility to automatically perform temporal and geographical comparisons, and to achieve better integration of SR with financial reporting. CSRD describes digitalization as a fundamental element of sustainability governance, encouraging applications that enable

real-time SR. However, the role of digitalization in the CSRD is predominantly procedural rather than transformative: digitalization requirements are so far limited to reporting outcomes, with few suggestions on how companies should digitally structure their internal ESG data architectures, manage data sources, or integrate technologies such as IoT (Internet of Things), artificial intelligence or blockchain into sustainability processes, where digitalization could significantly advance impact monitoring and materiality assessments (Pizzi et al., 2022; Zhang et al., 2025).

ESRS E1 (par. 44, 45, 50) and ESRS G1 (par. 44, 45, 50) imply the need for data traceability, real-time monitoring and the use of digital tools for environmental impact management (EC, 2023). They also point to digital traceability as an increasingly relevant element for certain economic sector-specific standards (supply chain transparency, biodiversity impacts, etc.). The complexity and granularity of the ESRS reporting requirements, in particular the need for double materiality assessments, value chain reporting and prospective scenario analysis, implicitly require advanced digital infrastructures. ESRS is guiding companies towards the digital transformation of sustainability management systems, although it does not require it. ESRS notes that sustainability information is not static, and future revisions of the standard could incorporate dynamic reporting models facilitated by digital platforms. A limitation of the ESRS may be its technology-related neutrality: it does not prescribe, incentivize or strongly encourage the use of specific digital tools.

CSRD (Art. 29d) and ESRS (through ESRS Set 1 XBRL Taxonomy) implicitly recognize the potential of digitalization to transform SR from a retroactive reporting system into a proactive real-time sustainability management system. To capitalize on the potential offered by digitalization and related technologies, future versions of the standards could call for the integration of advanced digital tools into the governance of ESG reporting, define minimum digital infrastructures required for SR, and explicitly encourage innovations that lead to real-time sustainability monitoring, while also highlighting the digital risks generated by the new approach (EFRAG, 2024).

From an institutional perspective, digitalization reflects a broader EU objective to create a data-driven economy where ESG information is an infrastructural asset, not just a compliance tool.

In **conclusion**, the shift from voluntary to mandatory SR can be discussed in the context of institutional theory, in particular the concept of isomorphism (DiMaggio and Powell, 1983): organizations conform to normative and coercive pressures in order to acquire legitimacy. Voluntary SR illustrates normative isomorphism, being driven by societal expectations and investor preferences. With the adoption of the CSRD, coercive isomorphism dominates, where compliance is enforced by the state and supra-national authorities. The success of EU regulation in the field of SR is also probable due to the mobilization of several institutional drivers such as the voluntary regulatory bodies – GRI, SASB, IFRS Foundation – to develop sector-specific ESRS.

3. Implications of implementing CSRD for organizations and professionals

The implementation of the CSRD represents a fundamental transformation for **companies** operating in the EU. The Directive creates new and consistent reporting and management

obligations, since affected companies are required to disclose ESG information with an unprecedented level of sophistication (Bebbington et al., 2023). Therefore, it is necessary for the companies' governance systems to evolve, sustainability principles to be internalized into their organizational culture, and sustainability objectives to be integrated into decision-making processes. The most important transformation is the requirement for CEOs to pay the same attention to SR as they do to financial reporting, thus requiring them to have a higher level of SR literacy (KPMG, 2023). CSRD and ESRS require companies to engage in complex data collection, assurance and verification processes, which constitute significant endeavours especially for the SMEs included in the scope of the new regulations (EFRAG, 2022). Moreover, companies are forced to redesign their offers through a sustainability lens, as compliance with ESG principles will bring good reputation and attract investment, while neglecting them can damage their image and performance on the capital market (NewClimate Institute, 2022). With most companies lacking the technical expertise and resources to respond effectively to CSRD regulations, the risk of greenwashing will be high if the focus is on compliance rather than real change (Christensen, Hail and Leuz, 2021).

The integration of SR with financial reporting and the focus on assurance and digitalization suggest that **the accounting profession** is positioned as an institutional key player in the architecture of the EU's mandatory SR framework. The need to respond to the CSRD requirements is driving profound transformations in the accounting profession, such as the acquisition of multidisciplinary sustainability reporting skills, integrated thinking and the ability to provide assurance for SR (Christensen, Hail and Leuz, 2021). The need for significant investment in learning resources, certification, and curriculum updates within the profession emerges. An obvious change is the expansion of auditor accountability as the CSRD limits low assurance sustainability reporting, requiring reasonable assurance in the medium term, and placing the auditor at the centre of the SR validation process. Auditors will need to process heterogeneous data sources, forecasted datasets and qualitative indicators, all of which are challenges substantially different from financial audit practice. Increased pressure to provide assurance for SR may place auditors in ethical conflicts between the need to maintain good client relationships and preserve public trust in SR. As a result, professional and ethical standards need to help resolve such tensions, while protecting the auditor's role as an independent assurance provider of reliable and decision-useful information.

The consequences of CSRD adoption extend beyond companies and accounting professionals. For **investors**, improved SR enables more accurate risk assessments, the integration of ESG factors into the investment decision-making (Tettamanzi, Gotti Tedeschi and Murgolo, 2024), and reduced information asymmetry. These lead to a more efficient allocation of invested capital towards sustainable economic activities. **Regulatory bodies** benefit from a harmonized reporting framework that allows for more effective market oversight and coherent policy formulation. However, the CSRD imposes significant administrative burdens on supervisors, who need to develop skills and resources to effectively monitor compliance. **NGOs and civil society** will benefit from a powerful tool to hold companies accountable on their sustainability claims. Improved access to standardized and verified data supports environmental activism efforts and public scrutiny. There remains a risk, however, that complex and technical sustainability reports may limit the accessibility of information to an informed public, which could undermine the Directive's intention to democratize access to SR (Christensen, Hail and Leuz, 2021).

Conclusions

This paper summarizes the current regulatory context of SR, highlighting the advantages and limitations of voluntary SR and ESG indices. It highlights the contribution of voluntary SR to the creation and institutionalization of ESG reporting practices, as well as criticisms regarding the lack of standardization and comparability, selective reporting, lack of assurance, but most importantly failure to generate systemic change aligned with global sustainability objectives.

The analysis shows that EU regulation (particularly CSRD and ESRS) constitute a paradigm shift in SR, namely the evolution from a voluntary to a mandatory practice within a harmonized legislative framework. CSRD and ESRS are more than changes to EU regulation in the field of SR: they are components of a comprehensive and coherent infrastructure of binding SR regulation promoting comparability, reliability, and accountability. Setting ambitious targets regarding value chain reporting, double materiality, standardization through ESRS, assurance and digitalization suggest that the EU is committed to a long-term process of reducing fragmentation and harmonizing SR regulation. Global SR transparency standards will be redefined as a result of the CSRD implementation, positioning the EU as a global leader in SR regulation.

CSRD, on the other hand, brings complex changes that require new skills from professionals in different fields and significant transformations in business models and relationships between companies. Standards on assurance, digitalization and sector reporting are being developed, as well as updates of the European accounting and auditing directives. In this context, changing the CSRD implementation calendar and scope is a realistic approach to keep the EU on the trajectory set by the European Green Deal, while protecting companies from a reporting burden for which they are not fully equipped.

In light of these findings, it follows that CSRD provides fertile ground for future research and institutional innovations needed to align corporate reporting with global sustainability objectives. Evidence on the effects of the implementation of CSRD is needed to support the development of new standards and the updating of existing ones. In this respect, empirical studies on the implementation of CSRD and the companies' level of compliance may prove to be relevant: longitudinal studies to track the adaptation to CSRD of individual companies or sectors, comparative analysis in member states on the transposition of CSRD into national legislation, assessment of SMEs' involvement in SR on a (so far) voluntary basis. In the field of audit and assurance, studies are needed on the capacity of the profession to provide SR assurance, the skills required and the ethical challenges created by this new activity. Quantitative studies based on data from the financial markets could highlight the effects of changes in SR on the value of companies, the response of financial markets to these changes and how rating agencies and ESG indices incorporate CSRD-aligned SR. Comparative studies across different regulatory SR frameworks can help to align global standards in the area of SR, by analysing the compatibility of different taxonomies (especially for the benefit of multinational companies) and assessing the EU's regulatory power in the field of SR.

While CSRD promises significant progress on transparency, accountability and sustainability, its success depends on effective implementation, stakeholder involvement and continuous adaptation to emerging challenges.

References

- Albu, N., Albu, C.N., Dumitru, M. and Dumitru, V., 2013. Plurality or convergence in sustainability reporting standards? *Amfiteatru Economic*, 15(7), pp.729-742
- Amel-Zadeh, A. and Serafeim, G., 2018. Why and How Investors Use ESG Information: Evidence from a Global Survey, *Financial Analysts Journal*, 74(3), pp.87-103, <https://doi.org/10.2469/faj.v74.n3.2>
- Bebbington, J., Laine, M., Larrinaga, C. and Michelon, G., 2023. Environmental Accounting in the European Accounting Review: A Reflection, *European Accounting Review*, 32(5), pp.1107-1128, <https://doi.org/10.1080/09638180.2023.2254351>
- Berg, F., Kölbel, J. and Rigobon, R., 2022. Aggregate Confusion: The Divergence of ESG Ratings, *Review of Finance*, 26(6), pp.1315-1344. <https://doi.org/10.1093/rof/rfac033>
- Boiral, O., Talbot, D., Brotherton, M.C. and Heras-Saizarbitoria, I., 2021. Sustainability rating and moral fictionalism: opening the black box of nonfinancial agencies, *Accounting, Auditing & Accountability Journal*, 34(8), pp.1740-1768. <https://doi.org/10.1108/AAAJ-12-2019-4356>
- Bradford, A., 2015. Exporting standards: The externalization of the EU's regulatory power via markets, *International Review of Law and Economics*, 42, pp.158-173, <https://doi.org/10.1016/j.irle.2014.09.004>
- Buhr, N., Gray, R. and Milne, M.J., 2014. Histories, rationales, voluntary standards and future prospects for sustainability reporting: CSR, GRI, IIRC and beyond. In Bebbington, J., Unerman, J., and O'Dwyer, B. (Eds.), *Sustainability Accounting and Accountability* (2nd ed.), pp.51-71, London, UK: Routledge. <file:///D:/%23Down/30BuhrGrayMilne2014-2.pdf> [Accessed 28 March 2025]
- Bursa de Valori București (BVB), 2022. Ghid privind raportarea ESG. https://www.bvb.ro/info/Rapoarte/Ghiduri/Ghid_privind_raportarea_ESG.pdf [Accessed 28 March 2025]
- Carbon disclosure project (CDP), 2025. *Corporate Disclosure Key Changes for 2025*. <https://www.cdp.net/en/disclosure-2025> [Accessed 28 March 2025]
- Cardoni, A., Kiseleva, E. and Terzani, S., 2019. Evaluating the Intra-Industry Comparability of Sustainability Reports: The Case of the Oil and Gas Industry. *Sustainability*, 11(4), art. no. 1093, <https://doi.org/10.3390/su11041093>
- Cho, C.H., Laine, M., Roberts, R.W. and Rodrigue, M., 2015. Organized hypocrisy, organizational façades, and sustainability reporting, *Accounting, Organizations and Society*, 40, pp.78-94, <https://doi.org/10.1016/j.aos.2014.12.003>
- Christensen, D., Serafeim, G. and Sikochi, A., 2022. Why is Corporate Virtue in the Eye of The Beholder? The Case of ESG Ratings, *The Accounting Review*, 97(1), pp.147-175, <https://doi.org/10.2308/TAR-2019-0506>
- Christensen, H.B., Hail, L. and Leuz, C., 2021. Mandatory CSR and sustainability reporting: economic analysis and literature review, *Review of Accounting Studies*, 26(3), pp.1176-1248, <https://doi.org/10.1007/s11142-021-09609-5>
- DiMaggio, P.J. and Powell, W.W., 1983. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields, *American Sociological Review*, 48(2), pp.147-160, <https://doi.org/10.2307/2095101>

- Dragomir, V.D., Dumitru, M., Chersan, I.C., Gorgan, C., Păunescu, M., 2024. Double Materiality Disclosure as an Emerging Practice: The Assessment Process, Impacts, Risks, and Opportunities, *Accounting in Europe*, 22(1), pp.103-140, <https://doi.org/10.1080/17449480.2024.2339264>
- Dinu, V and Bunea, M., 2019. The corporate social responsibility of the Romanian banking system, *E & M Economie A Management* 22 (4), pp.119-133, <https://doi.org/10.15240/tul/001/2019-4-008>
- Eccles, R.G., Krzus, M.P. and Ribot, S., 2015. *The Integrated Reporting Movement. Meaning, Momentum, Motives, and Materiality*, Wiley, New Jersey
- EFRAG, 2024. ESRS Set 1 XBRL Taxonomy Explanatory note and basis for conclusions. <https://xbrl.efrag.org/downloads/ESRS-Set1-XBRL-Taxonomy-Explanatory-Note-and-Basis-for-Conclusions.pdf> [Accessed 6 February 2025]
- Einwiller, S.A. and Carroll, C.E. (2020), Negative disclosures in corporate social responsibility reporting, *Corporate Communications: An International Journal*, 25(2), pp.319-337. <https://doi.org/10.1108/CCIJ-05-2019-0054>
- Erkens, M., Paugam, L. and Stolowy, H., 2015. Non-financial information: State of the art and research perspectives based on a bibliometric study, *Comptabilité Contrôle Audit*, 21(3), pp.15-92, <https://doi.org/10.3917/cca.213.0015>
- European Commission (EC), 2023. *Commission Delegated Regulation (EU) 2023/2772 as regards sustainability reporting standards*, Official Journal of the European Union L.22.12.2023. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202302772 [Accessed 10 March 2025]
- European Commission (EC), 2025. *Proposal for a Directive of the European Parliament and of the Council amending Directives (EU) 2022/2464 and (EU) 2024/1760 as regards the dates from which Member States are to apply certain corporate sustainability reporting and due diligence requirements*. https://commission.europa.eu/document/download/0affa9a8-2ac5-46a9-98f8-19205bf61eb5_en?filename=COM_2025_80_EN.pdf [Accessed 5 March 2025]
- European Parliament and Council of the European Union (EP), 2014. *Directive 2014/95/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups*. Official Journal of the European Union L330/1. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0095> [Accessed 10 March 2025]
- European Parliament and Council of the European Union (EP), 2020. *Regulation (EU) 2020/852 on the establishment of a framework to facilitate sustainable investment*, Official Journal of the European Union L198/13. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020R0852> [Accessed 10 March 2025]
- European Parliament and Council of the European Union (EP), 2022. *Directive (EU) 2022/2464 of 14 December 2022 as Regards Corporate Sustainability Reporting*, Official Journal of the European Union, L322/15. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022L2464> [Accessed 15 March 2025]
- European Parliament and Council of the European Union (EP), 2024. *Directive (EU) 2024/176 on corporate sustainability due diligence*, Official Journal of the European Union L.05.7.2024. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202401760 [Accessed 10 March 2025]

- Freeman, E.R., Harrison, J.S., Wicks, A.C., Parmar, B.L. and de Colle, S., 2010. *Stakeholder Theory. The State of the Art*, New York: Cambridge University Press
- Global Reporting Initiative (GRI), 2025. GRI Standards 2025. <https://www.globalreporting.org/standards/download-the-standards/> [Accessed 10 March 2025]
- Gușe, G.R., Almășan, A., Circa, C. and Dumitru, M., 2016. The role of the stakeholders in the institutionalization of the CSR reporting in Romania, *Accounting and Management Information Systems*, 15(2), pp.304-340. https://online-cig.ase.ro/jcig/art/15_2_4.pdf [Accessed 10 March 2025]
- Hummel, K. and Jobst, D., 2024. An Overview of Corporate Sustainability Reporting Legislation in the European Union, *Accounting in Europe*, 21(3), pp.320-355, <https://doi.org/10.1080/17449480.2024.2312145>
- IFRS Foundation, 2022, The International <IR> Framework. <https://integratedreporting.ifrs.org/resource/international-ir-framework/> [Accessed 10 March 2025]
- Inderst, R. and Opp, M.M., Sustainable finance versus environmental policy: Does greenwashing justify a taxonomy for sustainable investments? *Journal of Financial Economics*, 163, art. no. 103954, <https://doi.org/10.1016/j.jfineco.2024.103954>
- Kotsantonis, S. and Serafeim, G., 2019. Four Things No One Will Tell You About ESG Data, *Journal of Applied Corporate Finance*, 31(2), 2019, pp.50-58. <https://doi.org/10.1111/jacf.12346>
- KPMG, 2023. *Get ready for the next wave of ESG reporting*. <https://assets.kpmg.com/content/dam/kpmg/br/pdf/2023/6/Get-ready-for-the-next-wave-of-ESG-reporting.pdf> / [Accessed 26 March 2025]
- KPMG, 2024. *The move to mandatory reporting. Survey on Sustainability Reporting 2024*. <https://kpmg.com/xx/en/our-insights/esg/the-move-to-mandatory-reporting.html> [Accessed 10 March 2025]
- NewClimate Institute & Carbon Market Watch, (2022), Corporate Climate Responsibility Monitor 2022. <https://newclimate.org/resources/publications/corporate-climate-responsibility-monitor-2022> [Accessed 26 February 2025]
- Pizzi, S., Caputo, A., Venturelli, A. and Caputo, F., 2022, Embedding and managing blockchain in sustainability reporting: a practical framework, *Sustainability Accounting, Management and Policy Journal*, 13(3), pp.545-567. <https://doi.org/10.1108/SAMPJ-07-2021-0288>
- Simnett, R. and Huggins, A.L., Integrated Reporting and Assurance: Where Can Research Add Value? *Sustainability Accounting, Management and Policy Journal*, 6(1), pp.29-53, <https://doi.org/10.1108/SAMPJ-09-2014-0053>
- Suchman, M.C., 1995. Managing Legitimacy: Strategic and Institutional Approaches, *Academy of Management Review*, 20(3), pp.571-610, <https://doi.org/10.2307/258788>
- Sustainability Accounting Standards Board (SASB), 2020. *SASB Standards Overview*. <https://www.sasb.org/standards/> [Accessed 10 March 2025]
- Task Force on Climate-related Financial Disclosures (TCFD), 2017. *Final Report. Recommendations of the Task Force on Climate-related Financial Disclosures*

Financial Stability Board. <https://www.fsb-tcfd.org/publications/final-recommendations-report/> [Accessed 10 March 2025]

Tettamanzi, P., Gotti Tedeschi, R. and Murgolo, M., 2024, The European Union (EU) green taxonomy: codifying sustainability to provide certainty to the markets. *Environment Development and Sustainability*, 26(11), pp.27111-27136, <https://doi.org/10.1007/s10668-023-03798-6>

Zhang, K.S., Ahmed, B., Wang, R.P. and Gu, B.Y., 2025. The Influence of Internal Governance and External Legitimacy on Greenwashing: A Digitalization Perspective, *Environment Development and Sustainability*, 27(2), pp.4881-4909, <https://doi.org/10.1007/s10668-023-04105-z>