

# INTEGRATING ZERO-WASTE MANAGEMENT INTO CORPORATE GOVERNANCE: AN APPLICATION OF THE MER MODEL OF INTEGRAL MANAGEMENT AND GOVERNANCE

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This paper examines how the MER model of integral management and governance (MER model) can be applied to assess the integration of zero-waste management into corporate governance. It evaluates whether waste reduction is addressed merely as an operational activity or embedded across political, strategic, and operational levels of management. Methodology: The study adopts a qualitative multiple case design based on content analysis of annual reports of selected companies. Waste-related disclosures (pursuant to ESRS requirements) were evaluated using the MER model to assess governance-level integration and cross-level coherence. Findings: The results indicate that companies predominantly address waste management at the operational level, while strategic integration and embedding at the political level remain limited. Value: The study demonstrates how the MER model can be applied to analyse zero-waste management as a governance issue rather than solely as a technical or environmental practice.

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## 1 Introduction

Corporate responsibility has evolved from focusing on moral obligations of business leaders (Bowen, 1953) to encompassing economic, legal, ethical, and discretionary responsibilities (Wood, 1991; Dahlsrud, 2008). Over time, CSR moved from voluntary actions to a more strategic, governance-oriented approach (Chandler & Werther, 2013; Latapí Agudelo et al., 2019).

Within this evolution, sustainability reporting has become a central mechanism for institutionalising corporate responsibility. The European Union has progressively strengthened non-financial disclosure requirements, moving from the Non-Financial Reporting Directive (NFRD) toward the Corporate Sustainability Reporting Directive (CSRD). This regulatory shift reflects a transition from transparency-focused disclosure toward structured, governance-integrated sustainability reporting (Björklund, 2021; Cuomo et al., 2022; Primec & Belak, 2022). Under the CSRD framework, sustainability is no longer treated as a peripheral reporting exercise but as a governance obligation embedded within corporate strategy, risk management, and oversight structures (Primec, 2024; Villiers, 2022).

In this broader regulatory and theoretical context, waste management represents a particularly illustrative field of analysis. Waste-related disclosures are commonly included in sustainability reports and environmental sections of annual reports. However, these disclosures often focus on quantitative indicators such as recycling rates, waste volumes, and efficiency improvements. While such measures are important, they may reflect predominantly operational compliance rather than systemic transformation. The zero-waste concept is frequently associated with operational waste reduction practices and circular production models aimed at minimising material disposal. However, in the context of corporate governance, zero-waste should not be understood solely as a technical environmental management approach. Rather, it represents a governance ambition that challenges firms to integrate resource responsibility into corporate purpose, strategic orientation, and operational execution. From this perspective, zero-waste does not necessarily imply the immediate elimination of all waste streams, but instead reflects the degree to which waste management is institutionally embedded within governance structures and aligned across managerial levels. Accordingly, this study does not evaluate the technical implementation of zero-waste systems or the

performance effectiveness of waste reduction measures. Instead, it assesses the extent to which waste management is vertically integrated within corporate governance architecture in line with the regulatory logic of ESRS E5. Zero-waste is therefore conceptualised as an indicator of governance coherence rather than as a purely operational environmental outcome. The zero-waste concept, rooted in sustainability and circular economy thinking, challenges firms to go beyond incremental waste reduction and redesign resource flows and business models in a systemic manner. From a governance perspective, zero-waste cannot be reduced to operational environmental management; it requires integration across corporate values, long-term strategic orientation, and operational processes. In other words, zero-waste implementation constitutes not merely an environmental initiative but a test of organisational coherence and governance alignment. Stakeholder theory further reinforces this perspective. Firms operate within networks of stakeholders whose expectations increasingly include responsible resource management and environmental stewardship (Freeman, 1984, 1994, 2001; Friedman & Miles, 2002). Contemporary approaches emphasise company stakeholder responsibility as an integrated governance philosophy rather than a reactive compliance mechanism. Consequently, waste management and circular practices become elements of stakeholder accountability rather than purely technical functions (Čufar & Primec, 2022; Freeman & Velamuri, 2021).

Despite the increasing regulatory pressure and normative expectations, prior research indicates that sustainability disclosures may remain symbolic or fragmented if not embedded within governance structures (Jamali & Mirshak, 2007; Sandhu & Kapoor, 2010). The transition from voluntary CSR toward mandatory sustainability reporting raises the question of whether companies are achieving genuine vertical integration of sustainability across managerial levels or whether reporting improvements mask structural fragmentation. This paper addresses this gap by applying the MER model of integral management and governance as an analytical framework to examine zero-waste integration. The MER model of integral management and governance distinguishes between political, strategic, and operational levels of management and emphasises the necessity of alignment among them for organisational coherence. When applied to sustainability governance, this framework enables systematic assessment of whether environmental initiatives are embedded in corporate purpose, strategic planning, and operational execution in a consistent manner. The aim of this paper is to examine how the MER model of

integral management and governance can be applied to analyse and enhance the integration of zero-waste management principles into corporate governance and business models. Empirically, the study focuses on nine Slovenian companies that fall within the initial scope of the CSRD applicability and currently disclose sustainability-related information in their annual or separate sustainability reports. Through qualitative content analysis, the research evaluates the scope and level of integration of waste-related disclosures within corporate reporting (Belak et al., 2014; Čufar et al., 2026; Primec, 2024; Villiers, 2022).

The study is guided by the following research questions:

- RQ1: To what extent do Slovenian companies report data and disclosures related to waste management in their annual and sustainability reports?
- RQ2: How can the application of a multi-level governance framework (political, strategic, and operational) contribute to assessing and enhancing the coherence of zero-waste integration within corporate governance structures?

By reframing zero-waste management as a governance coherence issue rather than merely an environmental performance indicator, this study contributes to the evolving literature on CSR institutionalisation and sustainability reporting. It also provides practical implications for companies navigating the transition from compliance-based disclosure toward structurally embedded sustainability governance (Primec, 2024; Villiers, 2022).

## 2 Theoretical background

### 2.1 Evolution of CSR and Institutionalisation of Sustainability Reporting

CSR has historically evolved from normative reflections on the moral obligations of business leaders toward society to structured governance and accountability frameworks. Bowen (1953) first articulated the idea that business decisions should be aligned with societal values and expectations, thereby positioning corporations as moral actors embedded in broader social systems. This early normative perspective conceptualised responsibility as an ethical duty rather than a strategic instrument. Later, Wood (1991) reconceptualised CSR through the lens of corporate social performance, distinguishing between principles of responsibility, processes of

responsiveness, and observable social outcomes. This shift transformed CSR from an abstract ethical aspiration into a structured organisational framework capable of assessment and evaluation (Bowen, 1953; Wood, 1991).

The conceptual expansion of CSR over time has resulted in a plurality of definitions encompassing environmental, social, stakeholder, economic, and voluntariness dimensions. Dahlsrud (2008), through an analysis of multiple CSR definitions, demonstrated that despite terminological diversity, stakeholder orientation and environmental responsibility consistently appear as core dimensions. This conceptual consolidation indicates that CSR gradually moved from discretionary philanthropy toward systemic integration of environmental and social considerations into business activities. The historical evolution further reflects a transition from peripheral corporate initiatives to governance-embedded sustainability management integrated into organisational decision-making structures (Dahlsrud, 2008; Latapí Agudelo et al., 2019). Stakeholder theory provided the theoretical foundation for this structural transition. Freeman (1984) introduced the stakeholder approach as a strategic management framework, arguing that firms must create value for a broad network of stakeholders rather than exclusively for shareholders. Subsequent developments extended stakeholder theory beyond strategic analysis into governance and accountability domains (Freeman, 1994, 2001). The recognition that corporations operate within complex stakeholder ecosystems implied that sustainability issues (including environmental responsibility) could not remain peripheral operational concerns. Rather, they became integral to corporate legitimacy and long-term viability. Later conceptualisations framed company stakeholder responsibility as a governance philosophy embedded in strategic decision-making and organisational identity (Freeman & Velamuri, 2021; Friedman & Miles, 2002).

The institutionalisation of CSR accelerated as regulatory actors increasingly formalised expectations regarding corporate transparency and accountability. At the European level, CSR was initially promoted as a voluntary concept. The European Commission's Green Paper (2001) defined CSR as the voluntary integration of social and environmental concerns into business operations and stakeholder interactions. This framing reflected the prevailing assumption that corporate responsibility should remain self-regulated and market-driven. However, the growing recognition of environmental challenges, financial crises, and governance failures gradually shifted

the debate toward the need for structured disclosure obligations and regulatory oversight (European Commission, 2001; Björklund, 2021). The introduction of the NFRD marked a turning point in this evolution, as it transformed CSR from a voluntary commitment into a mandatory disclosure requirement for large public-interest entities. The NFRD required companies to disclose information on environmental, social, and governance matters, thereby institutionalising sustainability reporting within corporate accountability frameworks. Nevertheless, empirical studies reveal that the NFRD produced heterogeneous reporting practices and limited comparability across firms, partly due to flexibility in interpretation and the absence of uniform standards (Cuomo et al., 2022; Björklund, 2021). The transition toward the CSRD represents a qualitative regulatory shift from transparency-oriented reporting toward governance-integrated sustainability management. The CSRD strengthens standardisation, expands the scope of obligated entities, and explicitly connects sustainability disclosures to strategy, risk management, and governance oversight. In doing so, it reinforces the expectation that sustainability issues (such as environmental resource management and waste reduction) must be embedded within corporate governance structures rather than addressed solely at the operational level (Primec & Belak, 2022; Primec, 2024; Villiers, 2022). This regulatory evolution reflects the broader theoretical transformation of CSR from political level responsibility to institutionalised governance architecture. Sustainability reporting is no longer conceived merely as a reputational communication tool but as a structural mechanism through which corporate governance systems are evaluated, monitored, and aligned with societal expectations. Consequently, contemporary CSR is increasingly understood as a governance-integrated framework that links corporate purpose, strategic orientation, and operational implementation within a coherent accountability system (Čufar, 2025; Latapí Agudelo et al., 2019; Primec & Belak, 2022).

## **2.2 Corporate Governance and Strategic CSR Integration**

Strategic CSR literature emphasises that sustainability must be integrated into long-term value creation and competitive positioning rather than treated as an ancillary compliance activity. Porter and Kramer (2006) argue that CSR can contribute to competitive advantage when aligned with core corporate strategy, particularly when firms identify intersections between societal needs and business opportunities. In this perspective, sustainability initiatives are not external constraints but potential

sources of innovation, differentiation, and productivity improvement. Chandler and Werther (2013) further highlight that stakeholder considerations must be embedded within strategic management processes, as long-term organisational performance depends on maintaining legitimacy and trust across stakeholder networks. Strategic CSR thus represents a shift from reactive responsibility toward proactive integration within competitive strategy (Porter & Kramer, 2006; Chandler & Werther, 2013). From a managerial perspective, corporate sustainability creates value when incorporated into organisational decision-making systems and accountability mechanisms. Camilleri (2014) argues that sustainability strategies are effective only when they are supported by structured planning processes and measurable performance indicators. In a later contribution, Camilleri (2017) emphasises that sustainability must be aligned with corporate governance systems, managerial incentives, and business model design to ensure consistency between declared commitments and operational realities. Without integration into planning, budgeting, and performance management systems, sustainability remains symbolically endorsed but operationally marginal. This implies that strategic CSR requires not only goal-setting but also systemic embedding within organisational control structures (Camilleri, 2014; Camilleri, 2017). The distinction between substantive and symbolic integration is particularly relevant in sustainability reporting research. Empirical studies demonstrate that corporate disclosures may be motivated by legitimacy concerns rather than by transformative intent. Jamali and Mirshak (2007) show that CSR initiatives in developing contexts often remain fragmented when not supported by internal governance mechanisms and strategic alignment. Similarly, Sandhu and Kapoor (2010) find that voluntary CSR disclosures may function as reputational signalling tools, especially in the absence of formalised governance accountability. These findings indicate that the presence of sustainability reporting does not necessarily imply strategic integration, rather, it may reflect external pressure management or impression management strategies (Jamali & Mirshak, 2007; Sandhu & Kapoor, 2010). The strengthening of sustainability reporting requirements under the CSRD aims to reduce such fragmentation by embedding sustainability within governance oversight, risk management structures, and strategic accountability mechanisms. Primec and Belak (2022) argue that the CSRD introduces legal and managerial demands that extend beyond disclosure volume toward systemic integration within corporate governance. Similarly, Primec (2023) emphasises that sustainability reporting under the new EU framework functions as a legal instrument shaping governance practices rather than merely

documenting performance. Villiers (2022) further highlights that the evolving EU regulatory framework reflects increasing complexity and interconnection between reporting, due diligence, and accountability mechanisms. This institutionalisation signifies a broader evolution from voluntary CSR initiatives toward governance-integrated sustainability architecture embedded within corporate oversight and strategic management systems (Čufar et al., 2025; Primec & Belak, 2022; Primec, 2024; Villiers, 2022).

### **2.3 Multi-Level Governance in Political, Strategic, and Operational Alignment**

From a governance perspective, sustainability integration requires vertical alignment across managerial levels, ensuring coherence between corporate purpose, long-term strategic orientation, and day-to-day operational implementation. Sustainability becomes structurally embedded only when it is reflected consistently across these interconnected governance dimensions rather than confined to isolated environmental initiatives. Vertical alignment represents a core condition for organisational legitimacy and long-term viability within stakeholder-oriented governance systems (Freeman, 1984; Freeman, 2001). At the political level, corporate purpose, values, and governance principles define the legitimacy of business activities within society. Bowen (1953) conceptualised corporate responsibility as alignment between business decisions and societal expectations, thereby establishing the moral foundation of corporate governance. Wood (1991) further developed this perspective by linking principles of corporate responsibility with institutional legitimacy and public accountability. Political integration implies that sustainability principles are explicitly embedded in corporate mission statements, codes of conduct, governance charters, and board-level commitments. When sustainability is anchored at this level, it becomes part of organisational identity rather than a reactive response to regulatory pressure (Bowen, 1953; Wood, 1991). Within the MER model of integral management and governance, the political level refers to corporate purpose, fundamental governance orientation, and value-based legitimacy structures. Integration on the political level also reflects stakeholder-oriented governance logic. If sustainability considerations are incorporated into corporate purpose, they signal recognition of broader stakeholder claims and long-term societal responsibilities. Such embedding transforms sustainability from a discretionary initiative into a foundational governance principle

aligned with stakeholder accountability frameworks (Freeman, 1994; Freeman & Velamuri, 2021).

At the strategic level, sustainability is translated into long-term objectives, competitive positioning, and resource allocation decisions. Strategic CSR frameworks emphasise that sustainability must be integrated into corporate strategies, supported by measurable targets, and aligned with stakeholder expectations to generate long-term value (Porter & Kramer, 2006; Chandler & Werther, 2013). Strategic integration ensures that environmental and social objectives influence capital investment decisions, innovation priorities, supply chain design, and performance management systems. Without such integration, sustainability remains peripheral to core business logic. Strategic alignment further implies that sustainability risks and opportunities are embedded within corporate planning and governance oversight structures. When sustainability objectives are formally incorporated into strategic roadmaps and performance indicators, they gain institutional weight and managerial accountability. In this sense, strategic integration functions as a bridge between political commitments and operational execution, translating values into measurable and actionable corporate objectives (Chandler & Werther, 2013; Porter & Kramer, 2006).

At the operational level, sustainability is implemented through concrete processes, procedures, and measurable indicators. Environmental disclosures such as waste volumes, recycling rates, resource efficiency measures, and emission reductions typically reflect operational integration. These disclosures provide transparency regarding performance outcomes and compliance with regulatory requirements (Sandhu & Kapoor, 2010). Recent reporting research further shows that operational environmental indicators often dominate sustainability reports due to their measurability and comparability (Matuszak-Flejszman et al., 2023).

However, operational measures, while necessary, do not in themselves guarantee strategic or political coherence. The existence of quantitative environmental data does not necessarily imply that sustainability objectives influence corporate purpose or long-term strategic orientation. Operational integration may therefore reflect compliance-based environmental management rather than governance-embedded sustainability transformation (Jamali & Mirshak, 2007). The absence of alignment across political, strategic, and operational levels may result in fragmented

sustainability governance. In such cases, companies report environmental performance indicators without corresponding strategic direction or explicit commitment at the political level. This fragmentation can produce inconsistencies between declared corporate values and observable managerial practices, potentially undermining stakeholder trust and organisational legitimacy (Jamali & Mirshak, 2007; Sandhu & Kapoor, 2010). From an institutional perspective, achieving vertical coherence requires that sustainability considerations permeate governance architecture rather than remain confined to reporting functions. Only when sustainability principles are simultaneously reflected in corporate purpose, strategic objectives, and operational practices can they be considered structurally integrated within corporate governance systems (Primec & Belak, 2022).

## **2.4 Zero-Waste as a Governance Integration**

Waste management provides an illustrative and analytically valuable context for examining multi-level sustainability integration within corporate governance systems. As an environmental issue, waste management is highly measurable, operationally visible, and commonly disclosed in corporate sustainability reporting. Companies frequently present waste-related data in environmental sections of annual or sustainability reports, including total waste volumes, recycling rates, hazardous waste treatment, and efficiency improvements. However, prior research on non-financial reporting indicates that such disclosures often emphasise quantitative metrics and compliance with regulatory requirements rather than demonstrating strategic or governance-level embedding (Björklund, 2021; Cuomo et al., 2022). The dominance of quantitative environmental indicators reflects a broader reporting logic shaped by earlier regulatory frameworks, particularly under the NFRD, where flexibility and comparability limitations encouraged descriptive and performance-oriented disclosures (Björklund, 2021). As a result, waste management is frequently communicated as an environmental management activity aimed at demonstrating transparency and regulatory compliance rather than as a strategic transformation mechanism. This pattern suggests that the presence of waste-related data alone cannot be interpreted as evidence of systemic sustainability integration (Cuomo et al., 2022). If waste management is confined to operational indicators (such as reporting tonnes of waste generated or percentages recycled), it primarily reflects performance reporting rather than governance integration. Operational disclosures demonstrate implementation capacity but do not necessarily indicate

alignment with long-term strategic priorities or corporate purpose. In this sense, operational reporting may signal environmental responsiveness without confirming strategic or embedding (Sandhu & Kapoor, 2010). Strategic integration of waste management would require articulation of long-term waste-reduction objectives, incorporation of circular economy principles into corporate strategy, and alignment of resource efficiency initiatives with value creation logic. Porter and Kramer (2006) argue that sustainability initiatives generate competitive advantage when embedded within strategic positioning and linked to business opportunities. Similarly, Camilleri (2017) emphasises that corporate sustainability must be aligned with business model innovation and long-term planning to create shared value. Therefore, strategic waste integration would imply that resource management influences investment decisions, innovation priorities, and supply chain configuration (Porter & Kramer, 2006; Camilleri, 2017).

Political level integration represents an even deeper level of embedding. It would require explicit recognition of resource stewardship and environmental responsibility within corporate mission statements, governance codes, and board-level commitments. Bowen (1953) conceptualised corporate responsibility as alignment between business conduct and societal expectations, implying that environmental responsibility forms part of corporate legitimacy. Wood (1991) further emphasised that principles of responsibility must be institutionalised within governance systems to ensure coherence between values and performance. Political level integration of waste management would therefore signal that resource efficiency is not merely an operational concern but a foundational governance principle (Bowen, 1953; Wood, 1991). The central analytical challenge, therefore, lies in assessing whether waste-related disclosures represent vertically integrated sustainability governance rather than fragmented environmental reporting. The evolution toward the CSRD strengthens expectations that sustainability matters be embedded within governance oversight, strategic planning, and risk management structures. Primec and Belak (2022) argue that the new EU framework introduces managerial and legal obligations that go beyond disclosure volume toward structural integration. Primec (2023) further emphasises that sustainability reporting under the CSRD functions as a governance instrument shaping corporate accountability mechanisms. Consequently, examining waste management through a multi-level governance lens provides insight into whether companies are transitioning from compliance-oriented reporting toward institutionally embedded sustainability

governance consistent with the regulatory evolution (Primec & Belak, 2022; Primec, 2024).

## **2.5 ESRS E5 as a Normative Benchmark for Assessing Waste-Related Disclosures**

The evolution from voluntary CSR toward governance-integrated sustainability reporting culminates in the adoption of the European Sustainability Reporting Standards (ESRS) under the CSRD framework. Within this architecture, ESRS E5 – Resource Use and Circular Economy establishes a structured and detailed disclosure framework specifically addressing resource inflows, circular economy practices, product design, and waste management (EFRAG, 2025). The objective of ESRS E5 is to ensure that undertakings disclose information necessary to understand their impacts, risks, and opportunities related to resource use and the circular economy. The standard explicitly links environmental resource management with broader governance and risk management obligations under ESRS 1 and ESRS 2 (EFRAG, 2025, p. 3). This linkage reinforces the shift from environmental performance reporting toward governance-integrated sustainability disclosure, consistent with the regulatory transition described by Primec and Belak (2022) and Primec (2023).

Importantly, ESRS E5 structures disclosure requirements across three major dimensions (Rimmel et al., 2025):

1. Policies (DR E5-1)
2. Actions and resources (DR E5-2)
3. Metrics and targets (DR E5-3, E5-4, E5-5)

These dimensions directly correspond to the multi-level governance logic discussed earlier. Disclosure Requirement E5-1 requires companies to describe their policies related to resource use and circular economy, including integration of eco-design and circular principles into key products and services (EFRAG, 2025, p. 4). This requirement reflects the political level, as it concerns formal commitments and governance orientation. Disclosure Requirement E5-2 addresses actions and resource allocation related to circular economy practices (EFRAG, 2025, p. 4). This connects to the strategic level, where sustainability commitments are translated into organisational measures and managerial decision-making structures. Disclosure

Requirements E5-3 to E5-5 introduce measurable targets and quantitative indicators, including (EFRAG, 2025, pp. 4–5; Rimmel et al., 2025):

- Targets related to resource use and circular economy (E5-3),
- Resource inflows, including key materials and secondary resources (E5-4),
- Resource outflows, including product durability, recyclability, and waste streams (E5-5).

Particularly relevant for this study is DR E5-5, which requires disclosure of total waste generated, breakdown between hazardous and non-hazardous waste, proportion of waste diverted from disposal, proportion directed to disposal, and specification of recovery and disposal. The detailed specification of metrics (such as waste streams, diversion rates, and final destination) provides a structured benchmark for evaluating the completeness and depth of corporate waste-related disclosures operations (EFRAG, 2025, p. 5). Furthermore, ESRS E5 explicitly situates the circular economy within broader EU regulatory frameworks, including the Waste Framework Directive and the Circular Economy Action Plan. This demonstrates that waste management is no longer an isolated environmental issue but a regulated governance domain embedded within European industrial and sustainability policy architecture (EFRAG, 2025, p. 3).

From a theoretical standpoint, ESRS E5 operationalises the transition from political level CSR to institutionalised sustainability governance. While earlier CSR frameworks emphasised voluntary alignment with societal expectations (Bowen, 1953; Wood, 1991), ESRS E5 introduces legally anchored, standardised disclosure obligations that structure how sustainability must be reported. This regulatory formalisation strengthens comparability and reduces discretionary interpretative flexibility that characterised earlier reporting regimes under the NFRD (Björklund, 2021; Cuomo et al., 2022). Consequently, ESRS E5 provides not merely a reporting checklist but a normative benchmark for assessing governance integration. In the context of this study, the standard serves as the analytical reference point for evaluating the extent to which Slovenian companies disclose information related to waste management in their annual and sustainability reports. The central empirical objective is therefore not only to identify whether waste-related information is

disclosed, but to assess how comprehensively such disclosures align with the structured requirements of ESRS E5, particularly with regard to (EFRAG, 2025):

- existence of formal policies (E5-1),
- articulation of actions and resource allocation (E5-2),
- presence of targets (E5-3),
- disclosure of resource inflows (E5-4),
- detailed reporting on waste streams and diversion/disposal rates (E5-5).

By positioning ESRS E5 as the evaluative framework, the study bridges governance theory and regulatory practice, enabling systematic assessment of the degree to which corporate waste management reporting reflects emerging EU standards (EFRAG, 2025). Recent empirical evidence suggests that the implementation of ESRS E5 does not automatically result in governance-integrated circular economy management. Reporting practices remain predominantly focused on waste reduction and recycling indicators, while more advanced elements such as value-chain integration, scenario analysis, and financial implications are only partially addressed.

These findings indicate that formal compliance with ESRS E5 disclosure requirements does not necessarily ensure vertical coherence across political, strategic, and operational governance levels. Consequently, a distinction must be made between disclosure completeness and governance maturity. In this context, ESRS E5 functions not only as a reporting framework but also as a diagnostic tool for assessing the depth of circular economy integration within corporate governance structures. While the standard provides a structured disclosure architecture, it does not guarantee that circular economy principles are embedded in corporate purpose or strategic decision-making. Therefore, evaluating waste-related disclosures through a multi-level governance lens enables differentiation between procedural compliance and substantive integration. This reinforces the importance of vertical coherence as a key condition for achieving meaningful circular transformation. (Maas et al., 2025; Wieteska-Rosiak, 2025).

### **3 Methodology**

This study adopts a qualitative multiple case study design to examine the extent and structure of waste management disclosures in relation to the requirements of ESRS E5 (resource use and circular economy). Case study methodology is particularly appropriate for investigating complex organisational phenomena embedded within institutional and regulatory contexts, especially when the aim is analytical rather than statistical generalisation (Yin, 2009). Given that sustainability reporting under the CSRD represents a governance-integrated regulatory framework, qualitative cross-case analysis enables systematic comparison of disclosure practices across companies (Voss, Tsikriktsis, & Frohlich, 2002).

The empirical focus is on nine Slovenian companies that would fall within the initial scope of CSRD applicability and that currently disclose sustainability-related information in their annual or sustainability reports. The regulatory context is central to the research design. The transition from the NFRD toward the CSRD reflects a structural shift from transparency-oriented disclosure toward standardised, governance-integrated sustainability reporting (Björklund, 2021; Primec & Belak, 2022). The CSRD, implemented through the ESRS framework, introduces structured disclosure requirements that connect sustainability information with governance oversight, strategy, and risk management (Primec, 2024; Villiers, 2022).

The analytical benchmark of this study is ESRS E5, which specifies disclosure requirements related to policies (E5-1), actions and resources (E5-2), targets (E5-3), resource inflows (E5-4), and resource outflows, including waste management (E5-5) (EFRAG, 2025). These requirements provide a structured normative framework for assessing the scope and depth of corporate waste-related disclosures. The study relies on publicly available annual reports and sustainability reports for the year 2024. Corporate reports constitute formal accountability instruments through which undertakings communicate sustainability commitments and governance structures to stakeholders (Sandhu & Kapoor, 2010). Content analysis of such reports is widely applied in CSR and sustainability research to evaluate disclosure quality, scope, and managerial orientation (Lajili & Zéghal, 2005).

A qualitative content analysis approach was applied to assess the extent to which companies disclose information corresponding to the individual disclosure requirements of ESRS E5. Each report was systematically examined against the standard's structured requirements, particularly (EFRAG, 2025; Lajili & Zéghal, 2005; Sandhu & Kapoor, 2010):

- existence of formal policies related to resource use and circular economy (E5-1),
- disclosure of actions and resource allocation (E5-2),
- articulation of measurable targets (E5-3),
- reporting of resource inflows (E5-4),
- detailed reporting on waste streams, diversion rates, and disposal practices (E5-5).

To deepen the analytical interpretation, disclosures were additionally categorised according to a three-level governance logic pursuant to the MER model of integral management and governance (political, strategic, operational) (Belak & Duh, 2012). The political level captures policy statements and governance commitments. The strategic level captures long-term objectives and integration into corporate strategy. The operational level captures quantitative waste indicators and implementation measures. This dual-layer framework enables assessment not only of whether companies report required information, but also of how deeply such reporting is embedded within governance architecture (Porter & Kramer, 2006; Sandhu & Kapoor, 2010). Analytical generalisation is pursued by evaluating structural alignment between corporate disclosures and the regulatory expectations embedded in ESRS E5. The objective is to determine whether waste-related disclosures demonstrate emerging compliance with the structured CSRD reporting regime or remain limited to operational environmental reporting (Belak & Duh, 2015; Yin, 2009).

To ensure analytical consistency and transparency, a structured coding scheme was applied. Each company report was systematically evaluated against the disclosure requirements of ESRS E5 (E5-1 to E5-5). Disclosures were classified using a two-level scale: (1) explicitly disclosed and aligned with ESRS requirements and (2) not disclosed. In addition, all identified disclosures were categorised according to the

three governance levels of the MER model of integral management and governance. Disclosures referring to formal policies, governance commitments, or corporate values were classified at the political level. Disclosures related to long-term objectives, targets, and integration into corporate strategy were classified at the strategic level. Quantitative indicators, operational measures, and implementation practices were classified at the operational level. This dual coding approach enabled a systematic comparison across cases and facilitated the assessment of vertical coherence between governance levels. (Čufar et al., 2024; Jamali & Mirshak, 2007).

Several methodological limitations must be acknowledged. The study relies exclusively on publicly disclosed documents and therefore evaluates communicated governance structures rather than internal managerial processes. Prior research indicates that sustainability disclosures may be influenced by legitimacy considerations or impression management dynamics (Jamali & Mirshak, 2007). Furthermore, the study is limited to Slovenian companies and does not pursue cross-country comparison. However, by using ESRS E5 as an explicit analytical benchmark, the research provides a structured assessment of the degree to which corporate waste management reporting aligns with emerging European sustainability reporting standards (Čufar et al., 2024).

## **4 Results**

### **4.1 Extent of Waste-Related Disclosures (RQ1)**

The qualitative content analysis of annual and sustainability reports of nine Slovenian companies within the initial scope of the CSRD reveals substantial sectoral differences in the extent of waste-related disclosures. The analysed sample includes companies operating in the following sectors: reinsurance (2 companies), banking (2 companies), telecommunications (1 company), pharmaceuticals (1 company), chemicals and industrial production (1 company), energy and fuel distribution (1 company), and logistics (1 company). This sectoral diversity enables cross-case comparison between materially intensive industries and service-oriented financial institutions, thereby allowing assessment of whether the degree of waste-related governance integration is conditioned by sectoral materiality. Reinsurance and banking companies provide limited and predominantly indirect disclosures related to waste management. Reporting is primarily focused on general ESG commitments,

greenhouse gas emissions (Scope 1 and Scope 2), sustainable finance instruments, and governance structures related to climate risk. Quantitative indicators concerning total waste generation, hazardous waste, recycling rates, or waste treatment methods are either absent or presented in a highly aggregated manner. In these cases, waste management does not appear as a material or strategically prioritised reporting category.

In contrast, industrial and logistics companies provide substantially more extensive waste-related disclosures. These organisations report quantitative data on total waste volumes, hazardous and non-hazardous waste, recycling rates, waste recovery processes, and circular economy initiatives. In several cases, waste indicators are systematically structured and aligned with ESRS E5 logic, including differentiation between waste streams and treatment methods. The level of granularity and transparency suggests that waste management represents a materially significant operational issue in these sectors.

Companies operating in telecommunications and pharmaceuticals occupy an intermediate position. They report quantitative waste data and certain environmental initiatives, however, disclosures remain predominantly operational in nature and less integrated into strategic or governance frameworks. While structured data are present, explicit linkage to long-term circular economy objectives or governance-level oversight mechanisms is less pronounced compared to heavy industrial sectors. Overall, the findings indicate that the extent of waste-related disclosures correlates strongly with sectoral materiality. Companies whose core operations generate significant physical outputs and by-products provide more comprehensive reporting, whereas service-oriented financial institutions demonstrate minimal direct waste reporting.

#### **4.2 Level of Governance Integration of Waste Management (RQ2)**

Beyond the mere extent of disclosures, the study systematically examined the vertical integration of waste management across political, strategic, and operational levels of governance. This multi-level analysis allows for assessing whether waste-related reporting reflects isolated environmental practices or coherent governance embedding consistent with the logic of integrated sustainability management.

## **Political Level**

At the political level, most companies articulate broad sustainability commitments within their mission statements, value systems, corporate governance codes, or board-level charters. Environmental responsibility is frequently presented as part of organisational identity, ethical conduct, or long-term societal responsibility. ESG principles are often formally embedded within corporate governance structures, including supervisory board oversight, sustainability committees, and updated codes of conduct. However, explicit political level commitment to circular economy principles, resource responsibility, or systematic waste reduction as a defining element of corporate purpose remains limited across the sample. In most cases, environmental stewardship is framed in general terms (such as climate responsibility, sustainable growth, or environmental awareness) without direct reference to material flow management or waste minimisation as foundational corporate values. Industrial and logistics companies demonstrate comparatively stronger embedding when sustainability statements explicitly refer to resource efficiency, circularity, or responsible material use. In these cases, environmental considerations are linked to the organisation's production philosophy and long-term legitimacy within the broader socio-economic system. Waste management is more clearly positioned as part of the company's licence to operate. In contrast, financial institutions exhibit high levels of general ESG institutionalisation, including strong governance frameworks, sustainability committees, and external commitments. Nevertheless, waste management as such is not normatively articulated as a governance priority. Instead, environmental legitimacy is framed primarily through climate risk, green financing, and portfolio decarbonisation, leaving internal resource use and waste practices largely peripheral at the political level. Overall, integration of waste management on the political level remains implicit rather than explicit in most cases, indicating that waste is rarely conceptualised as a core dimension of corporate identity.

## **Strategic Level**

Strategic integration varies considerably across cases and represents the most differentiating governance dimension. Only a minority of companies define explicit long-term waste reduction targets, measurable circular economy objectives, or strategic waste-related KPIs embedded within corporate strategy documents. Where

such targets exist, they are predominantly found in industrial and energy-related companies, where waste generation directly affects production efficiency, regulatory exposure, cost structures, and stakeholder scrutiny. In these sectors, waste management is occasionally translated into measurable objectives (such as increasing recycling rates, reducing hazardous waste intensity, or improving material recovery performance), suggesting alignment between sustainability ambitions and business strategy. However, in the majority of cases, sustainability strategies prioritise decarbonisation, energy transition, climate risk management, and green investment portfolios. Waste management is either subsumed under broader environmental efficiency initiatives or addressed indirectly through operational optimisation. Explicit articulation of circular economy strategy, closed-loop systems, or material productivity frameworks remains rare. This pattern suggests that strategic prioritisation of waste is uneven and strongly conditioned by sectoral materiality. Where waste materially influences operational performance, strategic embedding is more pronounced. Where environmental impact is perceived as indirect or reputational, waste management remains secondary within sustainability strategies. Consequently, while a sustainability strategy is present across nearly all analysed companies, its translation into structured waste-related strategic commitments is limited.

### **Operational Level**

Operational integration is the most consistently observed dimension across the sample. Several companies provide quantitative indicators concerning total waste generation, hazardous and non-hazardous waste, recycling volumes, recovery rates, and disposal methods. In some cases, disclosures are aligned with recognised reporting standards and include year-on-year comparisons. Operational initiatives frequently include:

- Process optimisation aimed at reducing material losses
- Waste separation programmes across facilities
- Internal waste tracking mechanisms
- Investments in recycling infrastructure
- Efficiency improvements in logistics and packaging

These measures demonstrate that waste management is actively addressed at the implementation level, particularly in sectors characterised by physical production and material throughput. However, the presence of operational indicators does not automatically imply governance integration. In numerous cases, operational reporting appears disconnected from explicit strategic objectives or normative commitments. Waste data are presented descriptively, without clear linkage to long-term targets, board oversight, or performance-based accountability mechanisms. This disconnection suggests a form of fragmented sustainability governance, where environmental performance is monitored at the implementation level but not fully embedded within strategic planning or corporate purpose. Operational performance may therefore reflect compliance or efficiency considerations rather than deliberate strategic transformation toward.

### **4.3 Patterns of Vertical Coherence**

When examining the three levels collectively, the analysis reveals that full vertical alignment is relatively rare. Most companies demonstrate strength at one or two levels but lack comprehensive integration across all three. Financial institutions show strong ESG governance at the political level but weak operational waste reporting. Industrial companies show strong operational integration but variable normative articulation. Telecommunications and pharmaceutical firms demonstrate operational reporting without consistent strategic embedding. These findings indicate that waste management, despite being a clearly defined disclosure category under ESRS E5, remains predominantly operational in character. Strategic integration and embedding at the political level depend heavily on sector-specific materiality and regulatory anticipation rather than on uniformly integrated governance logic. The findings demonstrate that vertical coherence across governance levels remains limited across the sample. Full integration is observed only in a small number of materially intensive sectors.

### **4.4 Implications for ESRS E5 Alignment**

When assessed against the disclosure logic of ESRS E5, the majority of analysed companies demonstrate partial alignment, primarily concentrated at the operational disclosure level. Quantitative information on waste volumes, separation rates, or recycling performance is frequently provided, particularly in materially intensive

sectors. However, such disclosures are often not accompanied by clearly articulated waste-specific policies, long-term strategic targets, or explicit board-level oversight mechanisms. As a result, compliance appears procedural rather than structurally embedded within governance architecture. The absence of systematic linkage between operational metrics and higher-level governance structures suggests that waste management is still predominantly conceptualised as an environmental performance category rather than as a strategically governed resource management issue. While companies increasingly adopt ESG frameworks and sustainability strategies, the translation of these commitments into circular economy logic remains uneven and frequently implicit. The findings further indicate that the depth of integration is strongly conditioned by sectoral materiality. Companies operating in heavy industry, logistics, or energy sectors exhibit comparatively stronger alignment with ESRS E5 components. In contrast, service-based and financial institutions, despite demonstrating advanced ESG institutionalisation, provide limited substantive engagement with resource use and waste flows. This pattern suggests that, prior to the full enforcement of the CSRD and mandatory ESRS reporting standards, corporate adaptation has been largely driven by perceived material risk and operational relevance rather than by anticipatory harmonisation with the comprehensive governance logic embedded in ESRS E5. In other words, regulatory transformation toward governance-integrated sustainability has not yet produced uniform structural alignment across sectors. Instead, reporting practices reflect incremental and sector-dependent adjustments, revealing a transitional phase between voluntary ESG-oriented transparency and fully institutionalised, standardised sustainability governance.

## **5 Discussion**

The findings of this study indicate that waste management remains predominantly operational in nature across the analysed companies, even when assessed within the structured disclosure logic of ESRS E5, which requires reporting on policies, actions, targets, resource inflows, and waste outflows. Although several companies provide quantitative data on waste generation, recycling rates, and recovery processes, these disclosures are frequently not embedded within a coherent governance architecture. In most cases, operational indicators are presented without clear strategic targets, explicit commitments on the political level, or systematic board-level oversight. As a result, alignment with ESRS E5 appears partial and uneven, suggesting procedural

adaptation rather than fully institutionalised governance integration. From the perspective of integral management, sustainability requires vertical coherence across political, strategic, and operational levels. Integration on the political level implies that corporate purpose, values, and governance principles explicitly recognise resource responsibility and circular economy logic as part of organisational identity and legitimacy. Strategic integration requires translation of these principles into measurable long-term objectives, investment priorities, and risk management structures. Operational integration involves implementation through processes, metrics, monitoring systems, and performance evaluation. The empirical analysis demonstrates that this vertical alignment is rarely fully realised in the domain of waste management. Instead, companies tend to exhibit strength at one level while remaining underdeveloped at others. Operational reporting is relatively common, strategic articulation is selective and sector-dependent, and embedding of circular economy principles on the political level remains largely implicit. Stakeholder theory helps explain this pattern.

Corporate responsiveness to sustainability issues is influenced by stakeholder salience and perceived materiality. In sectors where waste generation directly affects regulatory compliance, operational efficiency, or reputational exposure (such as heavy industry, logistics, and energy), waste management becomes strategically relevant and more deeply integrated. In contrast, financial institutions, despite demonstrating advanced ESG institutionalisation and strong governance frameworks, rarely treat internal waste management as a strategic priority. Their sustainability focus is directed toward climate risk, green financing, and portfolio decarbonisation, reflecting the expectations of investors, regulators, and capital markets rather than operational resource flows. This divergence illustrates that ESG commitment on the political level does not automatically translate into issue-specific governance integration. Waste becomes strategically embedded primarily when it intersects directly with economic performance, regulatory pressure, or stakeholder scrutiny. The results further suggest that sectoral materiality strongly conditions the degree of ESRS E5 alignment. Industrial and logistics companies display more comprehensive reporting structures, often including differentiated waste streams, recovery mechanisms, and quantitative indicators aligned with circular economy objectives. In these contexts, waste management is closely linked to cost structures, risk exposure, and operational continuity, thereby facilitating deeper governance embedding. By contrast, service-oriented and financial firms exhibit limited direct

engagement with material flows and provide minimal structured reporting on waste, even when their ESG governance frameworks are otherwise robust. This indicates that, prior to full CSRD enforcement, corporate adaptation remains primarily reactive and sector-driven rather than uniformly aligned with the comprehensive governance logic embedded in ESRS. The transition from the NFRD to the CSRD represents a qualitative regulatory shift from transparency-oriented disclosure toward governance-embedded accountability. Under the earlier regime, sustainability reporting often remained descriptive, heterogeneous, and loosely connected to strategic management. The present findings suggest that many companies are still operating within this transitional paradigm. Waste-related disclosures, where present, frequently reflect compliance with environmental management practices rather than integrated strategic positioning. The implications for corporate governance under CSRD are significant. ESRS E5 explicitly requires structured disclosure on resource use and circular economy, thereby institutionalising waste management within the broader sustainability governance architecture. If implemented rigorously, the directive may reduce current sectoral variability and promote more consistent vertical integration. However, the present analysis indicates that, before full regulatory enforcement, corporate responses are shaped more by sector-specific exposure and perceived materiality than by comprehensive anticipatory alignment with the new governance model. Waste management thus serves as a revealing diagnostic indicator of governance maturity. Where vertical coherence exists, sustainability approaches integral management, where it does not, ESG remains partially institutionalised but strategically incomplete. In theoretical terms, the study demonstrates that waste management can function as a lens for assessing the depth of sustainability integration within corporate governance structures. Rather than evaluating environmental performance outcomes alone, the analysis highlights the importance of structural alignment between corporate purpose, strategic intent, and operational execution. The findings reinforce the proposition that sustainability integration cannot be achieved through disclosure mechanisms in isolation. It requires systemic embedding across governance levels.

From the perspective of the renewed MER model of integral management and governance, sustainability governance requires not only vertical coherence between political, strategic, and operational levels, but also process, instrumental, and institutional integration within a consistently functioning whole. The empirical

findings of this study indicate that waste management within the analysed companies rarely achieves such multi-dimensional integration. While operational processes and quantitative indicators are frequently present, they are often not systematically connected to political-level policy formulation or to strategic decision-making structures. Moreover, the instrumental dimension (values, guiding principles, and management styles) seldom explicitly incorporates circular economy logic. In addition, the institutional dimension does not consistently demonstrate clearly assigned governance responsibilities for resource stewardship. Waste management is addressed functionally, but not integrally aligned with enterprise policy, strategic development, and long-term competitiveness. The absence of holistic ecological orientation, understood in the MER model of integral management and governance as a key success factor, therefore, explains why waste disclosures tend to remain administratively compliant rather than constitutive elements of integral governance. Integrating zero-waste management into corporate governance consequently requires systemic alignment across all MER dimensions, ensuring that political commitments guide strategies, strategies structure operational execution, and ecological responsibility becomes embedded within the enterprise's core philosophy, culture, and decision-making structure.

## **6 Conclusions**

This study examined the extent and depth of waste management integration within the corporate governance structures of nine Slovenian companies. Applying a multi-level analytical framework grounded in the MER model of integral management and governance (political, strategic, and operational levels), the research assessed whether waste management is treated as a peripheral environmental reporting issue or structurally embedded within governance architecture in alignment with ESRS E5 requirements. The findings reveal that waste management remains predominantly operational in character, with only limited vertical coherence across political, strategic, and operational levels. While several companies disclose quantitative indicators related to waste generation, recycling rates, and recovery practices, these measures are rarely supported by explicit political-level commitments or systematically translated into long-term strategic objectives. The observed patterns suggest partial governance integration rather than fully coherent integral management. The results further indicate that, prior to full CSRD implementation, corporate adaptation is driven primarily by sectoral materiality rather than by

comprehensive anticipatory alignment with the governance logic embedded in ESRS E5. Waste management continues to be framed largely as an environmental performance and reporting category, rather than as a strategically governed resource management challenge integrated into corporate purpose and long-term value creation. The depth of integration, therefore, depends significantly on operational exposure and regulatory risk, rather than on uniform governance embedding across sectors. From a theoretical perspective, the study contributes by applying a vertical integration lens to assess sustainability governance maturity. The findings indicate that genuine integration requires structural coherence between corporate purpose on the political level, strategic objectives, and operational performance indicators. In the absence of such alignment, sustainability risks remain fragmented, despite increasing regulatory formalisation and expanding disclosure requirements.

Beyond the empirical assessment of reporting practices, the study demonstrates how integrating zero-waste management into corporate governance can be systematically approached through the application of the MER model of integral management and governance. The MER model of integral management and governance provides a structured architecture for evaluating whether environmental initiatives are anchored in corporate political, strategic, and operational levels of management. In this sense, integrating zero-waste management into corporate governance does not merely imply expanding environmental disclosure but requires achieving vertical coherence across governance levels. The application of the MER model of integral management and governance thus offers both an analytical and managerial pathway for transforming waste management from an operational environmental activity into a structurally embedded governance principle consistent with the evolving CSRD and ESRS framework. Future research may adopt a longitudinal perspective following full CSRD enforcement to examine whether regulatory standardisation fosters deeper governance embedding of circular economy principles and strengthens vertical alignment across corporate governance levels.

## References

- Belak, J., & Duh, M. (2012). Integral management: key success factors in the MER model. *Acta Polytechnica Hungarica*, 9(3), 5-26.
- Belak, J., & Duh, M. (2015). Renewed MER model of integral management. *LogForum*, 11(4).
- BELAK, Janko, BELAK, Jernej, DUH, Mojca. *Integral management and governance : basic features of MER model*. Saarbrücken: Lambert Academic Publishing, 2014.

- Björklund, J. (2021). *Reviewing the Non-Financial Reporting Directive: An analysis de lege lata and de lege ferenda concerning sustainability reporting obligations for undertakings in the EU*.
- Bowen, H. R. (1953). *Social responsibilities of the businessman*. University of Iowa Press.
- Camilleri, M. A. (2014). Advancing the sustainable tourism agenda through strategic CSR perspectives. *Tourism Planning & Development*, 11(1), 42–56.
- Camilleri, M. A. (2017). Corporate sustainability and responsibility: Creating value for business, society and the environment. *Asian Journal of Sustainability and Social Responsibility*, 2(1), 59–74.
- Chandler, D., & Werther, W. B. (2013). *Strategic corporate social responsibility: Stakeholders, globalization, and sustainable value creation* (3rd ed.). SAGE Publications.
- Commission of the European Communities. (2001). *Green paper: Promoting a European framework for corporate social responsibility*.
- Čufar, M. (2025). *Vpliv nefinančnega poročanja na trajnostno korporativno upravljanje* (Doctoral dissertation, University of Maribor (Slovenia)).
- Čufar, M., & Primec, A. (2022). Key stakeholder identification and channels of dialogue used for their engagement. In *The 17th IRDO International Scientific Conference Social Responsibility and Current Challenges.: Green, Digital and Inclusive Transition: How to Make it Happen?: 2-3 June 2022, Slovenia: Maribor, European Union, online performance*.
- Čufar, M., Belak, J., & Primec, A. (2024). Beyond compliance: Leveraging Nfrd and CsrD for transformative Csr reporting and stakeholder empowerment in corporate governance. In *Corporate governance and CSR strategies for sustainability* (pp. 233-261). IGI Global Scientific Publishing.
- Čufar, M., Belak, J., & Primec, A. (2026). Exploring the Role of ESG Reporting in CSR-Driven Corporate Governance to Mitigate Risks and Uncertainty: An Analysis of Legal Reports. In *Investigating Directors' Accountability in Promoting Corporate Social Responsibility* (pp. 215-246). IGI Global Scientific Publishing.
- Čufar, M., Primec, A., & Belak, J. (2025). Inovativni poslovni modeli in vpliv trajnostne zakonodaje na uspešno trajnostno poslovanje podjetij. *Usmerjanje trajnostnega razvoja podjetja*, 67-102.
- Cuomo, F., Gaia, S., Girardone, C., & Piserà, S. (2022). The effects of the EU non-financial reporting directive on corporate social responsibility. *The European Journal of Finance*, 1–27.
- Dahlsrud, A. (2008). How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15(1), 1–13.
- EFRAG. (2025). *European Sustainability Reporting Standards (ESRS E5 – Resource Use and Circular Economy)*.
- European Commission. (2011). *Corporate social responsibility: A new definition, a new agenda for action* (MEMO/11/730).
- European Commission. (2019). *Communication from the Commission Guidelines on Non-Financial Reporting: Supplement on Reporting Climate-Related Information*. Off. J. Eur. Union, C209.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.
- Freeman, R. E. (1994). The politics of stakeholder theory: Some future directions. *Business Ethics Quarterly*, 4(4), 409–421.
- Freeman, R. E. (2001). A stakeholder theory of the modern corporation. *Perspectives in Business Ethics* *Sie*, 3, 144.
- Freeman, R. E., & Velamuri, S. R. (2021). A new approach to CSR: Company stakeholder responsibility. In *The Routledge Companion to Corporate Social Responsibility* (pp. 203–213). Routledge.
- Friedman, A. L., & Miles, S. (2002). Developing stakeholder theory. *Journal of Management Studies*, 39(1), 1–21.
- Jamali, D., & Mirshak, R. (2007). Corporate social responsibility (CSR): Theory and practice in a developing country context. *Journal of Business Ethics*, 72, 243–262.
- Lajili, K., & Zéghal, D. (2005). A content analysis of risk management disclosures in Canadian annual reports. *Canadian Journal of Administrative Sciences*, 22(2), 125–142.

- Latapí Agudelo, M. A., Jóhannsdóttir, L., & Davídsdóttir, B. (2019). A literature review of the history and evolution of corporate social responsibility. *International Journal of Corporate Social Responsibility*, 4(1), 1–23.
- Maas, K., Zandee, D., & Groesbeek, M. J. (2025). Reporting in circles? How public firms navigate ESRS E5 on the circular economy. *Maandblad voor Accountancy en Bedrijfsconomie*, 99(5), 281–294.
- Matuszak-Flejszman, A., Łukaszewski, S., & Budna, K. (2023). Reporting sustainable development in Polish commercial banks. *Engineering Management in Production and Services*, 15(3), 42–52.
- Porter, M. E., & Kramer, M. R. (2006). The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12), 78–92.
- Primec, A. (2024). Catalyzing sustainable corporate governance: A legal examination of the CSR reporting. In *Corporate governance and CSR strategies for sustainability* (pp. 100-130). IGI Global Scientific Publishing.
- Primec, A., & Belak, J. (2022). Sustainable CSR: Legal and managerial demands of the new EU legislation (CSRD) for the future corporate governance practices. *Sustainability*, 14(24), 16648.
- Rimmel, G., Ram, R., & Afolabi, H. (2025). European Sustainability Reporting Standards (ESRS). In *Accounting for Sustainability* (pp. 192-217). Routledge.
- Sandhu, H. S., & Kapoor, S. (2010). Corporate social responsibility initiatives: An analysis of voluntary corporate disclosure. *South Asian Journal of Management*, 17(2), 47.
- Villiers, C. (2022). New directions in the European Union's regulatory framework for corporate reporting, due diligence and accountability: The challenge of complexity. *European Journal of Risk Regulation*, 13(4), 548-566.
- Yin, R. K. (2009). *Case study research: Design and methods* (Vol. 5). sage.
- Wieteska-Rosiak, B. (2025). Integrating the circular economy into ESG in the real estate sector: Current practices, challenges, and pathways to standardization. *Real Estate Management and Valuation*, 33(2), 109-122.