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SUSTAINABILITY AS PART OF THE INFORMATION POLICY OF ENTERPRISES: AN ASSESSMENT

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ABSTRACT: Purpose: Integrating sustainability into the information policy of enterprises involves embedding sustainable practices into an organisation's communication strategies, data management, and reporting mechanisms. There is a perceived need for research into how companies integrate sustainability into their information policies. Methodology/approach: Against this background, this paper examines the integration of sustainability into enterprises' information policy, highlighting its significance for contemporary business practices. The increased attention being given to environmental and corporate social responsibility (CSR) means that businesses are becoming more active in incorporating sustainability into their strategic objectives. Findings: This study assesses how enterprises adopt and implement sustainable practices within their information policies, focusing on the mechanisms and frameworks that support this integration. Some approaches used to incorporate sustainability into information policies have been identified by analysing case studies across various industries. Originality/value: The paper concludes by identifying the key factors influencing the successful incorporation of sustainability into information policies, including leadership commitment, stakeholder engagement, and regulatory compliance.

KEYWORDS: sustainability, sustainability reports, information policy, multinational companies

Introduction: Sustainability and Business Operations

Sustainability has become a significant concern for modern business operations, influencing practices and strategies across industries (Goni et al., 2021). It refers to the ability to meet present needs without compromising the ability of future generations to meet their own needs, encompassing environmental, social, and economic dimensions (Hariram et al., 2023). Businesses today are increasingly recognising that sustainable practices are not only ethically imperative but also beneficial for long-term profitability and competitiveness (Brillinger et al., 2020). Sustainability has 3 major aspects, which are vital to its implementation.

The first one is environmental sustainability. In business operations, this involves reducing the ecological footprint of companies. This includes minimising waste, reducing greenhouse gas emissions, conserving water, and using resources more efficiently (Mahapatra et al., 2021). Many businesses adopt practices like recycling, using renewable energy sources, and implementing energy-efficient technologies. For example, companies in manufacturing may redesign processes to reduce waste and emissions, while those in retail might focus on sustainable sourcing and supply chain management (Vadakkepatt et al., 2021). At present, a significant trend in environmental sustainability is the circular economy, where businesses aim to reuse, refurbish, and recycle materials to create a closed-loop system. This approach reduces the need for raw materials and minimises waste (Mishra et al., 2023). Companies like Patagonia and IKEA are pioneers in this area, offering programs to recycle products or resell used items (Korra, 2022).

The second one is social sustainability. This focuses on the impact of business operations on people and society. This includes fair labour practices, community engagement, and ensuring the well-being of employees and other stakeholders (Macassa et al., 2020). Companies committed to social sustainability often invest in their workforce through training, fair wages, and safe working conditions (Lu et al., 2021). They also engage in corporate social responsibility (CSR) initiatives, supporting local communities and contributing to social causes. For instance, businesses like Ben & Jerry's and TOMS Shoes integrate social sustainability into their core operations (Dhanesh, 2024). Ben & Jerry's focuses on fair trade practices and social activism, while TOMS donates a pair of shoes to a person in need for every pair sold. Such practices not only enhance brand reputation but also foster customer loyalty and employee satisfaction (Dhanesh, 2024; Jan 2020).

The third element is economic sustainability. It involves practices that ensure long-term business viability and financial performance (Bartolacci et al., 2020). It requires balancing short-term profitability with long-term growth and stability (Haessler, 2020). Businesses achieve economic sustainability by adopting innovative practices, improving efficiency, and exploring new market opportunities (Ch'ng et al., 2021; Chiappetta Jabbour et al., 2020). This includes investing in research and development, adopting new technologies, and creating sustainable products and services (Shahzad et al., 2022). Companies that prioritise economic sustainability often experience increased resilience to market fluctuations and better risk management. For example, businesses investing in areas related to sustainable supply chains can reduce the chances of suffering from resource scarcity or regulatory changes. Moreover, sustainable business practices can open up new revenue streams, as consumers increasingly demand environmentally and socially responsible products (Broccardo et al., 2020; Kelling et al., 2021).

But in order to fully leverage the benefits of sustainability, businesses need to integrate environmental, social, and economic considerations into their overall strategy (Chan et al., 2020; D'Amato et al., 2021). This involves setting clear sustainability goals, measuring performance, and reporting progress transparently. Many companies now publish annual sustainability reports, detailing their efforts and achievements in various areas of sustainability (Opferkuch et al., 2022).

In this context, leadership commitment is important in integrating sustainability into business operations. Top executives and board directors need to prioritise sustainability and allocate resources to relevant initiatives (Aguilera et al., 2021). Companies like Unilever and Tesla have demonstrated that strong leadership in sustainability can drive significant business transformation and innovation (Kumar et al., 2024).

The adoption of more sustainable procedures and practices offers numerous benefits to businesses. It enhances brand reputation and strengthens customer relationships, as consumers increasingly prefer companies with strong environmental and social credentials. Sustainability also attracts

investors, as more investment funds focus on environmental, social, and governance (ESG) criteria (Ekins et al., 2021; Islam et al., 2021).

Operational efficiency is another key benefit. Sustainable practices often lead to cost savings through improved resource use, energy efficiency, and waste reduction. For example, reducing energy consumption lowers utility bills, while efficient supply chain management can reduce logistics costs (Dey et al., 2020; Hafez et al., 2023).

Moreover, sustainability fosters innovation. Businesses that prioritise sustainability are more likely to develop new products and services that meet emerging market needs. This can provide a competitive edge and open up new business opportunities. Sustainable companies also tend to attract and retain top talent, as employees increasingly seek to work for organisations that align with their values (Al Aina et al., 2020; Kumar et al., 2020; Maier et al., 2020).

Despite the benefits, businesses face challenges in implementing sustainability (Tsalis et al., 2020). These include initial costs, complexity in measuring sustainability outcomes, and organisational resistance to change. However, these challenges can be addressed through strategic planning, stakeholder engagement, and leveraging technological advancements (Ekins & Zenghelis, 2021; Tsalis et al., 2020; van Lieshout et al., 2021).

Businesses can overcome financial barriers by viewing sustainability investments as long-term commitments that yield returns over time (Escoto et al., 2022). Collaborating with stakeholders, including suppliers, customers, and local communities, can help identify practical solutions and gain support for sustainability initiatives (Journeault et al., 2021). Technological innovations, such as digital tools for monitoring and reporting sustainability metrics, can streamline the implementation process and provide valuable insights (Braglia et al., 2022).

The future of sustainability in business operations is likely to be shaped by several trends. Increasing regulatory pressures will compel businesses to adopt more sustainable practices (Hu et al., 2022). For instance, stricter environmental regulations and carbon pricing mechanisms will drive companies to reduce emissions and improve energy efficiency (Khurshid et al., 2023). Consumer demand for transparency and accountability will also grow. Businesses will need to provide clear and credible information about their sustainability practices and performance (Crossley et al., 2021; Opferkuch et al., 2022). This will drive advancements in sustainability reporting and the adoption of standards like the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB) (Khakimovna et al., 2022).

Technology will play a pivotal role in advancing sustainability. Innovations in renewable energy, energy storage, and smart grids will enable businesses to reduce their carbon footprint. Additionally, digital technologies like blockchain can enhance supply chain transparency, ensuring that sustainable practices are maintained throughout the production process (Alotaibi et al., 2020; Javaid et al., 2022; Xu et al., 2021).

As the focus on environmental stewardship and corporate social responsibility (CSR) intensifies, companies are progressively integrating sustainability into their strategic goals. However, the question of how companies integrate sustainability as part of their information policies remains a research gap.

Against this background, this paper examines the integration of sustainability into enterprises' information policy, highlighting its significance for contemporary business practices. It seeks to examine how enterprises integrate sustainability into their information policies, assessing the extent to which corporate communication aligns with environmental, social, and governance (ESG) principles. The primary objective is to evaluate the role of information policy in promoting transparency, accountability, and stakeholder engagement in sustainability efforts. Specifically, the study aims to identify the key components of sustainability-related information disclosure, analyse the drivers behind corporate sustainability reporting, and assess the challenges companies face in effectively communicating their sustainability initiatives.

The research also explores whether enterprises use their information policies as a strategic tool to enhance their sustainability reputation or merely as a compliance requirement. Additionally, it investigates how different industries vary in their approaches to sustainability communication and whether regulatory frameworks influence the quality and consistency of disclosed information.

The central research question guiding this study is: *How do enterprises incorporate sustainability into their information policies, and what factors determine the effectiveness of such integration?*

By addressing this question, the paper contributes to the broader discourse on corporate sustainability communication, offering insights for businesses seeking to improve their ESG transparency and for policymakers aiming to strengthen sustainability reporting standards.

The paper is structured as follows: Section 2 presents an analysis of sustainability in the context of information policies at enterprises. Section 3 describes the methods used in the paper. Using the multiple case studies, we assess the adoption of sustainable practices into the information policy of enterprises, with emphasis on the mechanisms and frameworks that support this integration. Section 4 presents and discusses the results of the analyses. Section 5 presents the main conclusions from the study.

Sustainability and Information Policy at Enterprises

Corporate sustainability is a business model that aims to achieve long-term goals and is attentive to maintaining the balance of the ecosystem. This goal links the concepts of CSR and sustainability, which are characterised by a strong synergy (Strand et al., 2015). In fact, CSR also enables a better reputation of the company towards third parties and more support from institutions. Enterprises operating in sectors that are very attentive to environmental protection tend to do fewer greenwashing practices, which also results in higher-quality sustainability reporting (Ruiz-Blanco et al., 2022). Pragmatic sustainability differs from ideological sustainability as it relies on evidence-based analysis across its three core dimensions. An effective political strategy must adopt a stakeholder-driven approach, focusing on sustainable development and creating opportunities for future generations (D'Adamo et al., 2025). Management tends more toward humans and seeks to counter bad practices such as green economy rebound, circular economy rebound, and greenwashing

This aspect harkens back to the school of human relations, which emphasised that the needs of the organisation should coincide with those of the individual, who can be a key player in this process. Clearly, the flow of information becomes as crucial in internal as in external communications. The global environment is more complex, leading to a change in the understanding of value creation. Geopolitical, organisational, and market tensions combined with digitisation are pushing multinational companies to change their asset (George and Schillebeeckx, 2022). Firms' performance has benefited from the digital economy, and in particular, the greatest increases are seen in terms of innovation (Peng & Tao, 2022). However, digital transformation requires skilled labour, and government intervention is needed to build digital infrastructure (Skare et al., 2023). Ethical aspects are basic in identifying the right trade-off between sustainability and digitisation, whose activities must progress toward improving business accounts and consumer expectations without worsening the quality of ecosystems. Such an aspect would, in fact, contradict the principles of CSR. Similarly, another aspect that diverges from CSR is the too-frequent changes in regional economic policies that tend to weaken the green innovation capacity of firms (Zhou et al., 2022).

New sustainable and digital challenges are also pushing small and medium-sized enterprises to implement changes, overcoming critical issues such as a lack of resources and adequate information (Cantele & Zardini, 2020). The same enterprises that could advertise themselves more proactively when they turn out to be ESG-compliant. This would allow them to be more visible (Stevens et al., 2024), but each enterprise probably knows its characteristics. So, where such principles are an order winner, and enterprises do not use them, they implement an unsuitable strategy; where they have room for improvement and/or are weak, they implement a neutral stance in order to avoid overexposure that could lead to negative spillovers.

Green innovation and sustainability readiness significantly impact enterprise performance, but such analyses must also take into account firm size (Schrank & Kijkasiwat, 2024). Larger enterprises tend to opt for assurance of their sustainability reports more frequently, and corporate managers should increase their efforts to achieve the Sustainable Development Goals (SDGs), (Krasodomska et al., 2024). No generalisation about the results is also confirmed in other studies that emphasise the different impacts of ESG on operational performance, financial performance, and market performance (TQ) in the different industries examined (Al Hawaj & Buallay, 2022).

How much does information policy in enterprises affect sustainable aspects? Some results show that from the data available on the website, enterprises report management systems and quality management systems more frequently than environmental management systems and occupational

health and safety systems (Carvalho et al., 2020). The network formation process, which includes incentives for sharing information and knowledge, is an important factor in explaining intellectual capital in its three dimensions, namely human, relational, and structural capital (Jordão & Novas, 2024). This aspect recalls the previously proposed concept of the school of human relations and is amplified by the vision of a business strategy based on the concept of the sustainable hand, based on the involvement of all stakeholders. A pragmatic aspect that could have more robust methodologies (e.g. Analytic Hierarchy Process) included within sustainability reports (D'Adamo, 2023). This approach is based on participatory models, and the information to be transferred is that of a dynamic system in which external and internal corporate worlds confront and improve each other.

The added value of partnerships toward the SDGs (Leal Filho et al., 2024), the environmental behaviours of businesses that promote community sustainability (Ao et al., 2023), and a social model that goes beyond individualism, focusing on a collective mission (D'Adamo, 2025), emphasise how sustainable communities require collaboration among all stakeholders. Some enterprises have made great gains by focusing on the natural resources used rather than fossil fuels, yet when direct control over production abroad is lost, there is a risk of permanent damage to the firm's image (Debellis et al., 2024). Enterprises that are ready to adapt to market changes from the outset can reap benefits in the presence of organisational culture, workforce skills, and strategic partnerships (Bella et al., 2024). Some studies show that enterprises active in the most environmentally sensitive sectors provided more information about their circular economy models to meet stakeholder demands, but also because there was a concomitant increase in business performance by virtue of zero waste and resource efficiency (Kuo & Chang, 2021). Similarly, sustainable integration among supply chain actors, from suppliers to customers, fosters green managerial and process innovations resulting in business performance benefits (Junaid et al., 2022). The pragmatic model of sustainability emphasises that where only environmental protection exists, the goal of sustainability has not been achieved, as it is critical that the balance point with the other two dimensions, represented by economic opportunity and social welfare, emerges.

Research methods

This study was based on a narrative literature review and an instrumental multiple case study. The narrative literature review is the comprehensive synthesis of previously published studies, usually summarising their findings in a condensed format (Green et al., 2006). This type of literature review usually uses a selective search strategy, including both conceptual and critical studies. Findings analysis is usually provided in a narrative form (Paré et al., 2014). Our literature review focused on trends in sustainability reporting among multinational companies.

We decided to use the case study approach as it can serve as a foundation for generalisation and is useful for building theories (Flyvbjerg, 2006). Our approach is instrumental – each case was chosen not because of the interest in the case itself, but to gain a deeper understanding of a wider phenomenon by examining a specific case (Stake, 2005). Following Eisenhardt (1991), we decided to study multiple instances because including more than one case in the analysis allows for a more complete theoretical picture, emphasising complementary aspects of the phenomenon, and avoiding random associations in favour of seeing patterns. Thus, our cases are typical and, in consequence, representative (Seawright & Gerring, 2008).

The selection of the ten companies examined in this study was guided by several key criteria. First, each company operates within one of five distinct industries – Information Technology, Chemicals, Automotive, Food, and Aviation – allowing for a cross-sectoral analysis of sustainability communication practices. Within each industry, two multinational corporations were chosen: Microsoft and Apple (IT), BASF and DOW (Chemicals), Daimler and Volkswagen (Automotive), Nestlé and Danone (Food), and Lufthansa and American Airlines (Aviation). These companies were selected due to their global visibility, significant environmental and social impact, and active engagement in communicating sustainability initiatives. As multinational entities, they are subject to a broad spectrum of international regulations and public scrutiny, positioning them as influential actors whose practices may set precedents for smaller firms. Their prominence and proactive sustainability discourse make them particularly suitable for examining how corporate sustainability is articulated and perceived across different industrial contexts.

Our instrumental multiple case study aimed to show the information policies a sample of 10 multi-national companies deploy to communicate sustainability, by means of a qualitative content analysis of sustainability reports. Following Patton (2002), we define content analysis as a “qualitative data reduction and sense-making effort that takes a volume of qualitative material and attempts to identify core consistencies and meanings”. In this study, we used a directed approach with top-down coding and a priori codes formulated on the basis of a literature review.

Case studies on sustainability communication are very useful in providing both theoretical and practical insights into the challenges and opportunities of communicating sustainability issues. Against this background, this paper uses a set of 10 case studies which illustrate some of the current trends in this field. To investigate the implementation of sustainability trends into information policy, we have studied our cases using their sustainability reports.

The methodological approach of this study involved a qualitative analysis of corporate sustainability documents published by the selected companies. Each document was examined in detail with particular attention to its thematic focus, intended audience, and structural composition. This close reading allowed for the identification of key topics addressed within the texts as well as the communicative strategies employed. Based on this analysis, a concise summary was produced for each document, outlining its scope, target stakeholders, and principal areas of emphasis, which is presented in Table 1. The results of cross-case analysis are discussed below.

Table 1. Case Studies on sustainability as part of information policies among multinational companies

Case study & Sector	Scope	Source
BASF, Germany (Chemicals)	Communication with external organizations streamlined via a dedicated combined management’s report with a special section on ESG.	BASF (2024). Rethinking Chemistry
Dow Chemicals (Chemicals)	Communication to improve the sustainability and circularity of the markets it serves, encompassed in the annual report.	Dow Chemicals (2023). Annual Report
Microsoft (IT)	Communication with external organizations streamlined via a dedicated report. The scope of the 2024 Environmental Sustainability Report t primarily revolves around Microsoft’s sustainability efforts and commitments towards achieving a more sustainable future by 2030. Additional key data published in the separate fact sheet.	Microsoft (2024). 2024 Environmental Sustainability Report; Microsoft (2024) 2024 Environmental Sustainability Report: Data Fact Sheet
Apple (IT)	Communication with external organizations and stakeholders streamlined via a dedicated report. The scope of Apple 2024 Environmental Progress Report this note is to communicate Apple’s environmental initiatives and progress towards its 2030 carbon neutrality goal.	Apple (2024). Environmental Progress Report
Daimler AG (Automobiles)	Communication with external organizations and stakeholders through a dedicated section of a combined report. The scope of the Combined Management Report with Non-Financial Statement encompasses the commitment of a leading global manufacturer of commercial vehicles to sustainability and its integration into the core aspects of its business.	Daimler (2024). 2023 Annual Report
Volkswagen AG (Automobiles)	Communication with external organizations and stakeholders through a dedicated report. The document highlights that the scope of the communication on ESG encompasses the Volkswagen Group’s comprehensive approach to sustainability across various facets, including their impact on nature, people, society, and value-adding entrepreneurship. Communication with external organizations and stakeholders through a combined document, reporting financial and non financial information. The document outlines Nestlé’s commitments and achievements in addressing societal challenges, fostering sustainability, and enhancing corporate responsibility throughout 2023.	Volkswagen (2024). Sustainability Report 2023
Nestlé (Food)	Communication with external organizations and stakeholders through a combined document, reporting financial and non financial information. The document outlines Nestlé’s commitments and achievements in addressing societal challenges, fostering sustainability, and enhancing corporate responsibility throughout 2023.	Nestle (2024). Creating Shared Value and Sustainability Report 2023. Advancing regenerative food systems at scale

Case study & Sector	Scope	Source
Danone (Food)	Communication with external organizations and stakeholders through an integrated report, covering financial and non-financial information. In corporate communication on sustainability Danone outlines its strategic initiatives, achievements, and future outlook within the framework of its "renew program", emphasizing sustainability, innovation, and growth.	Danone (2024). Annual Integrated Report 2023. Danone's sustainability performance
Lufthansa (Aviation)	Communication on sustainability is concentrated in a few pages of the annual report. The scope of these page consists in outlining the Lufthansa Group's approach to sustainable value creation, centered around a value-based system of management focusing on the return on capital. The key data is published in the fact sheet.	Lufthansa (2024). Annual Report 2023. Connecting people, cultures and economies in a sustainable way; Lufthansa (2024). Sustainability 2023 Fact Sheet
American Airlines (Aviation)	Communication on sustainability is provided to stakeholders and external organizations through a dedicated document. According to the Sustainability Report 2023, American Airlines is committed to providing regular and transparent information about our strategies and performance on the sustainability issues.	American Airlines (2024). Sustainability report 2023

Results and discussion

Trends in Sustainability Reporting

A literature review revealed ten emerging trends in sustainability reporting, summarised in Table 2. These trends pertain to both individuals and organisations, as well as various types of (re)sources.

Table 2. Case studies on sustainability as part of information policies among multinational companies

Trend	Source	Implications
Collaboration and partnerships	Riegler et al. (2023)	Showcases the importance of relations
Carbon risk disclosure	Adhikari & Zhou (2021)	Demonstrate the value of open information
Circular economy initiatives	Shevchenko et al. (2024)	Shows efforts to maximize the use of resources
Waste management	Derhab, Elkhwesky (2023)	Prevents waste and when not possible, reduces the amount
Suppliers sustainability assessments	Matthess et al. (2022)	Ensures sustainability across the supply chain
Net zero commitments	Fankhauser et al. (2022)	Illustrates full engagement on emissions' reductions
Materiality assessments	Jørgensen, Mjøs, Pedersen (2022)	Presents sustainability priorities of enterprise
Human rights assessments	Götzmann, Vanclay, Seier (2015)	Caters for ethical aspects
Workforce diversity, equity, and inclusion (DEI)	Baker, French, Ali (2021)	Ensures inclusiveness in the operations
Stakeholder involvement	Kujala et al. (2022)	Gives all stakeholders a voice

The review indicates that modern sustainability reporting must encompass both environmental and social dimensions. Emphasising materiality assessments signals a conscious approach to management and goal orientation. Companies communicating their sustainability efforts are expected to highlight their net-zero commitments, circular economy practices, and waste management strategies. Carbon risk disclosure is viewed as a marker of transparency and accountability.

Given the global nature of today's economy, assessing not only internal sustainability but also that of suppliers is essential. Supply chain transparency and human rights assessments reflect corpo-

rate awareness and responsibility. Moreover, companies are increasingly expected to promote workforce diversity, equity, and inclusion (DEI), engage stakeholders in decision-making processes, and maintain partnerships that extend beyond the company and into its broader global ecosystem.

Implementation of Sustainability Reporting Trends in Information Policies

The ten trends are listed below, analysed separately in this section, with the points of contact highlighted in the next section.

Collaboration and Partnerships

All analysed cases emphasised the importance of collaboration with external entities such as businesses, governments, NGOs, and academic institutions. Global partnership, enshrined in SDG 17, is a key target for companies aligning with the UN Sustainable Development Goals. Collaborating with the scientific community enhances credibility and helps build stakeholder trust. Such partnerships are often presented in dedicated sections of sustainability reports and support both societal and environmental objectives.

For instance, Danone reported that its collaboration with suppliers led to the integration of decarbonization targets, resulting in actual emissions reductions. While details of such collaborations may be restricted by information security policies (Soto Corpuz, 2011), it is clear that the communication of sustainability-oriented partnerships has become an established element of multinational companies' information policies.

Carbon Risk Disclosure

Carbon risk disclosure practices vary among companies. Some organisations (e.g., Apple, BASF) report product and corporate emissions separately to ensure transparency and clarity (Adhikari & Zhou, 2021). However, such information is not always included in main reports and is sometimes available only through supplementary sources like websites or data sheets (e.g., Lufthansa, Microsoft).

A notable trend is the comparison of emissions over time – either with the previous year or across multiple years (e.g., Nestlé and BASF provide data dating back to 2018). Future research could explore why some companies opt for shorter time spans. In some cases, only general reduction data (e.g., in kilotons or percentages) is reported (e.g., Danone).

Companies also frequently mention the lack of innovative technologies as a barrier to achieving decarbonization goals. Organisations such as Apple, Microsoft, and American Airlines emphasise that both industry and governments must step up efforts to support emission reduction. While companies are eager to communicate their decarbonization efforts, they are often less transparent about the associated risks. Notable exceptions include Lufthansa, which refers to a “medium ESG risk rating due to high CO₂ relevance,” and others such as Volkswagen, DOW, Nestlé, and American Airlines, which provide detailed accounts of risks including carbon pricing, climate-related litigation, and emissions regulations.

Circular Economy Initiatives

Sustainability reports commonly emphasise circularity efforts, including goals, actions, and challenges in areas such as biodiversity, energy, emissions, renewable materials, waste, and water. Companies typically report progress using a baseline, defined targets, and performance data.

Two main strategies for reporting financial aspects of circularity were identified: investment and sales. Some companies (e.g., Apple, Microsoft) disclosed general financial investments in circular economy initiatives, while others (e.g., BASF) reported on sales of circular solutions. For example, BASF stated, “By 2030, we want to double our sales of solutions for the circular economy to €17 billion (baseline: 2020)” (BASF, 2024).

Reduction emerged as the most frequently communicated circular initiative, followed by recycling.

Waste Management

Waste management, as part of circular economy efforts, is frequently addressed – though reporting depth varies. In some instances (e.g., Lufthansa), the term “waste management” is mentioned without supporting data.

Three trends were observed:

Separate reporting of hazardous and non-hazardous waste (Microsoft, BASF, Daimler, Volkswagen, Nestlé).

Different time-based reporting approaches:

- a) no year-to-year comparisons (e.g., DOW, Lufthansa),
- b) general references to improvements (e.g., Danone),
- c) full year-by-year disclosure (e.g., Apple, Microsoft, BASF, Daimler, Volkswagen, American Airlines, Nestlé).

Companies that provide full disclosure often detail waste categories, including reused, recycled, composted, recovered, or landfilled waste (e.g., Microsoft, BASF).

Supplier Sustainability Assessments

The analysis identified common reporting issues related to supplier sustainability assessments, including environmental impact, data estimation, regulatory compliance, certification, and traceability.

Reports tend to focus on environmental impacts of supply chains, especially emissions and biodiversity (e.g., Microsoft, BASF). However, progress data is often lacking, and methodological details for estimations are usually omitted. Regulatory challenges are frequently cited, reflecting the complexities of operating across multiple jurisdictions. Certifications are presented as tools for facilitating supplier evaluations, and traceability is emphasised as critical for ensuring transparency and maintaining high standards – especially regarding labour conditions.

Net Zero Commitments

All reviewed companies declared net zero goals, with notable sectoral differences: IT companies aim for 2030, while others target 2050. The level of detail also varies. Some companies provide only overarching goals, while others include interim targets. For example, Volkswagen not only commits to carbon neutrality by 2050 but also outlines reduction milestones for its dealer network: 30% by 2030, 55% by 2040, and 75% by 2050 (baseline: 2020).

Companies often describe collaborations in their pursuit of net zero, including academic and industrial partners (e.g., BASF and Lufthansa). Specific initiatives include green product launches (BASF, Daimler), logistics emissions reduction (Nestlé), and investments in renewable energy (Danone). Some reports include financial data (e.g., Apple, American Airlines), while others use vague language, such as Volkswagen’s reference to a “target pathway confirmed by the competent committee” without specifying the committee’s composition or authority.

Materiality Assessments

All cases include materiality assessments that outline key impact areas and describe company commitments to related goals. Environmental issues, especially climate change, are emphasised across all reports, alongside decarbonization, pollution prevention, and resource efficiency. Social priorities such as diversity, inclusion, and human rights are also commonly reported.

Materiality assessments reflect an enterprise’s priorities, which vary based on sector, market presence, and operational footprint. Even within the same industry, companies may differ in their material impacts. However, similar material themes across cases may result from their multinational nature, where headquarters decisions carry global implications.

Human Rights Assessments

Human rights assessment is a critical component of sustainable development (Woods, 2010; Hawkins, 2010). For multinational corporations, the challenge lies in adapting to various legal sys-

tems and cultural contexts. Nonetheless, these companies are expected to uphold global human rights standards.

Reports frequently mention human rights policies and codes of conduct (e.g., Apple, BASF, Daimler, Lufthansa, Nestlé), participation in global initiatives (e.g., Daimler, Volkswagen), and awareness campaigns (e.g., DOW). Several companies highlight the role of control systems (e.g., BASF, Daimler), external expert collaboration (e.g., Microsoft, Volkswagen), and training programs (e.g., Danone) as tools for effective human rights assessment.

Workforce Diversity, Equity, and Inclusion (DEI)

The integration of DEI policies was observed across most companies, except in the IT sector. Microsoft's report did not mention DEI, and Apple referenced only its Racial Equity and Justice Initiative. This may reflect the nature of the sampled reports, which were focused on environmental issues.

Other companies provided workforce and management diversity statistics and implemented various initiatives, including DEI committees (Lufthansa, American Airlines), recruitment policies (BASF, Daimler, Volkswagen), participation in external programs (BASF, Nestlé), internal programs (BASF, Nestlé), pay gap analyses (DOW), corporate policies (Daimler), and external collaborations (Volkswagen). Except for DOW (which published data online), all companies reported on DEI-related training and education.

Stakeholder Engagement

All companies reported on their engagement with key stakeholders: customers, employees, business partners, suppliers, governments, NGOs, academics, and investors. A notable observation is the absence of the term "shareholder" in Apple's report.

Companies described specific actions to engage stakeholders, often through multi-stakeholder initiatives aimed at achieving sustainability goals.

Discussion

Sustainability reporting in multinational companies is increasingly grounded in an integrated approach, where environmental, social, and governance dimensions are interconnected and mutually reinforcing. At the core of this process lies stakeholder engagement, which plays a key role in materiality assessments and in defining strategic priorities with transparency and accountability.

Climate change remains one of the most urgent challenges, addressed through carbon risk disclosure and firm commitments to climate neutrality. These efforts are closely tied to circular economy initiatives and effective waste management, aiming to minimise environmental impact and encourage responsible use of resources. Meeting these goals requires strong collaboration between public and private actors, alongside rigorous assessments of supplier sustainability, extending accountability across the entire value chain. At the same time, modern reporting places increasing emphasis on social dimensions, particularly the protection of human rights and the implementation of diversity, equity, and inclusion policies. Together, these components form a coherent and credible sustainability narrative, enhancing transparency, stakeholder trust, and alignment with the SDGs in an increasingly complex global environment.

Ultimately, facing the sustainability challenge calls for a global partnership built on pragmatic vision and shared responsibility – one that prioritises solutions designed to maximise the well-being of all stakeholders. In this context, integrating product life cycle analysis and a comprehensive view of sustainability into corporate strategies is essential, both in everyday practices and in the ability to communicate them effectively. This complex transition, further shaped by digital transformation, requires new, specialised skills that higher education institutions must be ready to foster. Universities should serve as laboratories for experimentation and empowerment, equipping younger generations to become active agents of change. The next crucial step will be to define a forward-looking, inclusive communication strategy that engages all sectors of society – an approach that is vital for the health of both the planet and human communities.

The concept frames sustainability reporting as a strategic information policy grounded in the integration of environmental, social, and governance dimensions. By actively engaging stakeholders

and conducting materiality assessments, companies can identify and communicate key issues with transparency and relevance. The disclosure of data on climate change, circular economy practices, human rights, DEI, and supply chain sustainability builds trust and ensures alignment with the SDGs. Beyond compliance, this approach fosters a culture of awareness, supports education and capacity building, and positions communication as a key driver of change management.

Conclusions

As this paper has shown, sustainability is no longer a niche concern but a fundamental aspect of business operations. By integrating environmental, social, and economic sustainability into their strategies, businesses can enhance their competitiveness, build resilience, and contribute to a more sustainable future.

The results from this paper allow some conclusions to be drawn. The first one is that the integration of sustainability into the information policies of enterprises is increasingly being seen as essential. It emphasises the fact that sustainability is no longer just a peripheral concern but a core element of corporate strategy, reflecting the growing importance of environmental, social, and governance factors.

The study also highlights the fact that companies which effectively incorporate sustainability into their information policies tend to experience various benefits, such as enhanced reputation, improved stakeholder relations, and even financial performance. Transparent communication of sustainability efforts can lead to increased trust among consumers, investors, and other stakeholders.

There are some challenges that enterprises face in incorporating sustainability into their information policies. These include issues such as the complexity of sustainability reporting, the need for accurate and comprehensive data, and the potential for greenwashing if not done properly.

This study has some limitations. First, its focus on a narrow sample of enterprises restricts generalizability across industries and regions. Second, the reliance on self-reported data introduces potential biases in sustainability disclosures. Third, the analysis lacks longitudinal data, limiting insights into how sustainability integration evolves over time. Finally, the paper does not sufficiently address the role of regulatory frameworks in shaping corporate information policies, which may significantly influence sustainability reporting practices. Despite these constraints, the paper advances theoretical understanding by linking information policy with corporate sustainability, offering a framework for assessing how enterprises communicate environmental and social commitments. Practically, it provides actionable insights for businesses seeking to align sustainability reporting with broader information strategies. By identifying gaps between policy formulation and implementation, the study helps organisations improve transparency and stakeholder engagement.

Some recommendations for enterprises on how to effectively integrate sustainability into their information policies may include:

- a) adopting international standards for sustainability reporting,
- b) using technology to improve data collection and transparency,
- c) training employees on the importance of sustainability in corporate communication, and
- d) fostering the inclusion of young people and creating sustainable communities with more experienced profiles by going beyond their corporate boundaries.

Further studies may examine cross-cultural differences in sustainability reporting, which could reveal how regional norms shape information policies. Also, investigating the impact of digital technologies, such as AI and blockchain, on sustainability disclosures may address emerging trends. Moreover, a deeper exploration of small and medium enterprises (SMEs) may highlight unique challenges in adopting sustainability policies. Research on regulatory influences could also clarify how compliance drives or hinders transparency. Finally, longitudinal studies tracking policy implementation over time would provide valuable insights into long-term sustainability integration.

The journey towards sustainability requires commitment, innovation, pragmatism and collaboration, but the benefits far outweigh the challenges. As businesses continue to evolve and adapt, sustainability will undoubtedly remain a critical driver of success and a cornerstone of responsible business practice.

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The contribution of the authors

Conceptualisation, W.L.F., literature review, W.L.F., B.C., I.D. and B.C.; methodology, W.L.F., and B.C.; formal analysis, W.L.F., and B.C.; writing, W.L.F., B.C., I.D. and B.C.; conclusions and discussion, W.L.F., and B.C.

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