A NEW CHALLENGE IN THE RISK MANAGEMENT: SUSTAINABILITY RISKS

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Abstract
Sustainability risk management has become increasingly pertinent in the modern corporate landscape. It recognizes that environmental, social, and governance (ESG) factors are pivotal in shaping a company's long-term viability. Sustainability risks encompass a broad spectrum of issues, ranging from climate change and resource scarcity to labor practices and supply chain disruptions. These risks can have a significant impact on a company's financial performance, reputation, and stakeholder relationships. This paper examines the fundamental concepts and methodologies related to sustainability risk management, offering a structured framework for identifying, assessing, and mitigating such risks effectively. This process involves evaluating both existing and potential sustainability risks that could affect the company in the future. Additionally, the paper explores the potential role of accounting professionals in these efforts. Accounting professionals bring a unique skill set that can be instrumental in sustainability risk management. Their expertise in financial reporting, data analysis, and compliance is critical for ESG reporting and risk evaluation. They can aid in developing key performance indicators (KPIs) aligned with sustainability goals and assist in crafting comprehensive sustainability reports for stakeholders. Their involvement is essential for ensuring transparent and accurate ESG reporting, thereby bolstering the company's credibility and attractiveness to responsible investors. In summary, sustainability risk management is a crucial aspect of contemporary corporate strategy, addressing the growing impact of ESG factors on business success. Engaging accounting professionals in sustainability risk management is a strategic move that can drive long-term value and contribute to a more sustainable and equitable future for businesses and society as a whole.

Keywords
sustainability risks, sustainability risk management, general frameworks for sustainability risk management, accounting professionals.

JEL Classification
G32, Q01, G23, M41

Introduction

As the issue of sustainability becomes increasingly pressing worldwide, companies must anticipate the consequences of global sustainability challenges such as climate change, the emergence of disruptive technologies and emerging business models on their sustainability. The impact of climate change is an increasingly important consideration when making investment decisions and when determining company value. ESG goals have created new scientific and managerial challenges for a wide spectrum of organizational and managerial topics (Landi, Iandolo, Renzi, & Rey, 2022). One of these concerns is risk management models: ESG objectives have gained increasing importance in aligning the risk management framework in an economic context increasingly influenced by issues related to corporate social responsibility (RSC). According to (Korkmaz, 2022) risks have radically moved from traditional economic and financial risks to those represented by environmental and social factors. Developments in the field of business activity (climate change, the growing relationship between society and businesses through shareholders and partners) have led to an increase in the number and diversity of risks faced by businesses.

The organizational risk management function plays a critical role in monitoring and managing risks and opportunities arising from the action of internal and external forces that may affect the profitability, success or even survival of the company. From this perspective, (Settembre-Blundo, González-Sánchez, Medina-Salgado, & García-Muiña, 2021) argue that if internal risks occur during the normal operations of the company, so that they can be predicted with some reliability by management, mitigating their effects, external business risks appear as a consequence of the general and competitive context in which the company operates and how it is obliged to adapt to these conditions. And therefore, management cannot control them easily. Risk management experts in the academic and consulting world alike perceive that the impact of economic and legal risks on a business and society is constantly generated by a range of existing and emerging social and environmental risks (WBCSD, 2017). It should be noted that emerging risks appear in new or unknown conditions that have not been sufficiently investigated and quantified, but have a high potential for impact (Settembre-Blundo, González-Sánchez, Medina-Salgado, & García-Muiña, 2021). In recent scientific works, the relationship between CSR and risk has deepened in terms of reworking traditional models of risk management (Landi, Iandolo, Renzi, & Rey, 2022). This means that a collaborative approach between sustainability functions and risk management systems is crucial to formulating and implementing stronger, sustainability-focused strategies – these will ensure that businesses are resilient to future challenges and can thrive in the long term in future.

The concept of double materiality is important in understanding the concept of sustainability risk (Robeco, 2022). Sustainability risk refers to the potential financial impact on companies, while primary negative impact reflects the negative effect that companies can have on society (societal impact). Sustainability risks can therefore be viewed from different perspectives (Schulte & Hallstedt, 2018). From a societal perspective, the economic system is only a means to achieve social and ecological sustainability, but it is not a necessity to reach a sustainable state. Based on this perspective, societal sustainability risks are primarily threats and opportunities related to the ability of ecological and social systems to support the satisfaction of human needs, for example in terms of access to clean water, climate stability or biodiversity. From the company's perspective, the main objective is to support the company within the economic system by creating value for stakeholders. From this perspective, it is primarily about the risk of the societal sustainability transition on the company's objectives, which means that the sustainability transition is a source of uncertainty (Schulte & Hallstedt, 2018). Sustainability considerations must be integrated into a proactive management approach and many researches have shown that the integration of sustainability into risk management has proven to be successful in organizational risk management (Korkmaz, 2022).

1. Review of the scientific literature

Company-wide risk management is the complex process of identifying, assessing, and controlling threats to capital, earnings, and operations. Risks arise from a variety of sources, including financial uncertainties, legal liabilities, technological problems, strategic management errors, accidents, and natural disasters (TechTarget, 2021). Also, „risk management can help an organization to determine its material ESG metrics, to design and deploy appropriate responses, and to measure and control progress, thereby increasing its ESG performance over time" (Deloitte, 2019). A rigorous risk management framework would make a positive contribution to achieving high performance, accountability and social responsibility (Shad et al., 2019).

Grouping risks into categories is useful to manage risk. COSO (2020) uses the following four categories:

- strategic risk (e.g., customer relations, reputation, technical innovations);
- financial and reporting risk (e.g., credit, tax, market);
- compliance and governance risk (e.g., regulatory, international trade, ethics, privacy); and
- operational risk (e.g., supply chain, IT security, privacy, natural disasters, labor issues).

Although managers have traditionally focused primarily on the governance element (G), today they are increasingly calling for an integrative view of the interrelationships between strategy, risk and corporate sustainability, which takes into account environmental (E) and social factors (S) (Deloitte, 2019). Uncertain incidents that can disrupt the economic-social-environmental operations of a system represent sustainability risks (Choudhary, Kumar & Huo, 2023, Shafiq et al., 2017, Bahamonde-Birke, 2020, Heldt and Beske-Janssen, 2023).

Sustainability risks can be viewed from different perspectives (Schulte, & Hallstedt, 2018). From a societal perspective, the economic system is not a necessity to reach a sustainable state, it is only a means to achieve social and ecological sustainability. So, based on this perspective, societal sustainability risks primarily represent threats and opportunities related to the ability of ecological and social systems to support the satisfaction of human needs. From the company's perspective, the main objective is to ensure sustainability within the economic system by creating value for stakeholders, so, in this perspective, it is about the impact of the societal sustainability transition risk on the company's objectives, which means that the sustainability transition it is a source of uncertainty (Schulte, & Hallstedt, 2018).

Sustainability risk management (SRM) is a business strategy that aligns profit goals with a company's environmental policies. ESG focuses on and documents the company's impact on the environment and various stakeholders, its approach to governance, and assesses potential business risks and opportunities in each of the three areas. Figure no. 1 shows a breakdown of the key ESG factors to consider at a company level.

Figure no. 1: The pillars of ESG

Source: TechTarget (2023) https://www.techtarget.com/sustainability/feature/ESG-audit-checklist-steps-for-success

FERMA (2021) makes the following observations regarding the relationship between risk management and sustainability:

- A corporate culture that integrates enterprise-wide risk management is a fundamental factor in determining how organizations approach sustainability.
- Managing sustainability issues requires mature risk management as a long-term concern to ensure resilience and to take advantage of the opportunities generated by the ecological transition.
- Risk management can help identify and communicate sustainability issues that are specific to the company.
- Risk management is in a favorable position about the in-depth knowledge of the activities and operations within the enterprise and the methods of dealing with the risk.
- Risk management can facilitate communication within the organization.
- The organizational risk management framework can provide a consolidated model of good governance and practices that can enable the successful integration of sustainability into risk management.

Schulte & Hallstedt (2018) show that while the transition to sustainability is primarily a source of uncertainty from the company's perspective, it remains unclear which approach is more effective for putting sustainability risk management into practice. Either sustainability risks could constitute a new risk category, or a sustainability perspective could be integrated and applied to all existing risk categories, which would highlight the links between the company's contribution or lack of contribution to sustainable strategic development and the achievement of organizational objectives.

A Sustainability Risk Management Framework summarizes the impact vectors on the prosperity and resilience of the organization. For example, The Deloitte Sustainability Risk Management Framework focuses on the key elements that can ensure the maximization of stakeholder value and organizational performance. This framework, shown in Figure 2, underpins corporate strategy so that sustainability information is more relevant to business and investor decisions. Various ESG trends, practices and ideas should be included by the company in its organizational strategy and plans: creating more responsible and sustainable supply chains, reducing greenhouse gas emissions, implementing climate adaptation measures, etc. Adopting a circular economy model also belongs to an ESG strategy, aiming to reuse the components and materials of products instead of throwing them away or recycling them.

Company →

Corporate Strategy	**Value chain drivers**	**Risk exposure**	**Response design**	**Outcomes**	**Performance (ESG)**
Value drivers Internal environment External environment Value propositions Profitability Governance	The 17 Sustainable Development Goals (SDGs)	Strategic Operations Reporting Compliance Cyber/IT	Risk capacity Mitigation strategy Change management. Business continuity Capacity building Partnership mobilization	Value creation Value protection Value for people Value for money	Environmental Social Governance

← **Investors**

Figure no. 2: The Deloitte Sustainability Risk Management Framework
Source: Deloitte (2019)

Schulte & Hallstedt (2018) suggest that sustainability risks need to be managed against a multitude of diverse objectives at all organizational levels, meaning that there is a need to assess how sustainability issues can affect stakeholder value, both internal stakeholder value and stakeholder value external interests.

Sustainability risk management frameworks

The most well-known sustainability risk management frameworks are presented below.

● ISO 31000 - Risk management - Principles and guidelines: This standard provides a general framework for risk management, which can also be applied to sustainability risks. It provides principles and guidelines for the identification, assessment and management of risks, as well as their communication and monitoring.

● TCFD (Task Force on Climate-related Financial Disclosures) - Recommendations on climate-related financial reporting: These recommendations provide a methodology for disclosing the risks and opportunities related to climate change in financial reporting. They mainly focus on the financial risks associated with climate change: transition risk and physical risk. Physical risks are related to the physical impact of climate change. Some physical risks are acute, caused by certain extreme weather events such as hurricanes, floods, fires or drought. Others are chronic, associated with long-term changes in climate patterns, such as continued increases in temperatures, rising sea levels, and longer and more frequent heat waves. Physical hazards can have sudden and significant financial impacts if they affect operations, transportation, supply chains, or employee or customer safety. Transition risks are risks inherent in the transition to a low-carbon economy. These include risks associated with evolving climate-related policies, regulations and disclosure requirements on issues such as greenhouse gas (GHG) emissions, net zero carbon initiatives, carbon pricing policies, energy costs and fuel and national or global energy policies. These risks can have an ongoing direct financial impact and can also damage an organization's reputation. Although the TCFD recommendations were initially voluntary reporting guidelines, they quickly became part of the mandatory regulatory framework in many jurisdictions, the European Union, Singapore, Canada, Japan and South Africa, New Zealand and the United Kingdom also require climate risk disclosures under the TCFD framework by 2023 and 2025, respectively. In March 2022, the U.S. The Securities and Exchange Commission (SEC) has published a proposed rule on climate risk disclosures that incorporates key aspects of the TCFD framework (IBM, 2023). The purpose of this reporting framework is to bring transparency to companies' climate-related risks. Disclosure of climate-related financial risks enables more informed investment, credit and insurance decisions and can help facilitate the transition to a more sustainable, low-carbon economy.

● The COSO Enterprise Risk Management Framework is a risk management framework developed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) (COSO, 2020). It provides a systematic and integrated approach to risk management in organizations to improve the performance and effectiveness of the organization in achieving its objectives. The COSO ERM Framework is a flexible framework that can be applied at the level of the entire organization or at the level of specific departments, as well as in different areas of activity, such as financial, operational, compliance or sustainability. It has become a global standard for risk management and is used around the world by organizations of different sizes and in different sectors.

● Sustainability Risk Management Framework (SRMF) is a sustainability risk management framework developed by the Global Reporting Initiative - GRI) in collaboration with the World Economic Forum and Deloitte. This framework is designed to help organizations integrate sustainability risk management into their decision-making process so that they can identify and manage sustainability risks and opportunities (Deloitte, 2019). The SRMF is a flexible and adaptable framework to the specifics of the organization and its sustainability risk management needs. It can be applied at the level of the whole organization or at the level of specific departments, as well as in different areas of activity, such as climate change, human rights or the health and safety of the employee.

Although from the company's perspective, the transition to sustainability is a source of uncertainty, it remains unclear which approach is more effective for putting sustainability risk management into practice: either sustainability risks could constitute a new risk category, or a sustainability perspective could be integrated and applied to all existing risk categories, which would highlight the links between the company's contribution or lack of contribution to sustainable strategic development and achievement Sustainable Development Goals (Schulte & Hallstedt, 2018).

2. Research methodology

In this study, we attempted to answer the following research question: What is the impact of sustainability risk management on integrated performance and stakeholder relations in the contemporary corporate environment?

Background of the Problem

In recent decades, sustainability concerns have evolved beyond mere regulatory compliance and become an essential part of organizational strategies. In this changing framework, our research question aims at a deeper understanding of how sustainability risk management influences two key aspects:

Integrated performance: We analyse how sustainability risk management decisions and practices impact companies' integrated performance. In an increasingly complex and interconnected business environment, it is essential to assess how sustainability strategies significantly affect corporate performance from an integrated perspective.

Stakeholder Relations: How sustainability risk management influences the organization's relationships with various stakeholders, including customers, investors, employees and the community, is analyzed. The research conducted seeks to validate that the sustainability approach can help build stronger and more sustainable relationships with these groups, positively influencing the company's reputation and social responsibility.

By addressing this research question, we aim to contribute to a better understanding of the role and impact of sustainability risk management among organizations, providing clear insights into how these practices can be integrated into corporate strategies to drive both financial success, as well as positive relationships with stakeholders. This development provides a more detailed perspective on the research question, highlighting the importance and complexity of the connections between sustainability risk management, integrated performance and stakeholder relations in the contemporary business context.

- Case Analysis

To bring an applied and concrete perspective to our research on the impact of sustainability risk management on integrated performance, we conducted a qualitative analysis based on a relevant case study. We selected the OMV Petrom Group, the OMV Petrom Group is the largest integrated energy company in South-Eastern Europe, According to the 2022 Annual Report (OMV Petrom, 2022) the OMV Petrom Group has reported sales revenues of 61.3 billion lei in 2022 , with a CAPEX of 3.6 billion lei. The OMV Petrom Group operates along the entire energy value chain: from the exploration and production of crude oil and natural gas to the refining and distribution of fuels and further to the production and trading of gas and energy.
This phase of the research aimed to illustrate how the company approached and implemented sustainability risk management strategies, highlighting innovative practices and tangible results.
Analysis of Adopted Practices
In the case study, we identified and highlighted significant and innovative practices adopted by the studied company, OMV Petrom. This concerned:
Implementation of Integrated Strategies: We examined how companies have integrated sustainability risk management into their overall business strategies. We analysed whether these strategies were aligned with organizational values and stakeholder expectations. In 2022, OMV Petrom started the implementation of the 2030 Strategy with the aim of leading the energy transition in South-Eastern Europe, by capitalizing on the opportunities in emerging markets. OMV Petrom's 2030 strategy is based on a strong sustainability framework, with a clear commitment to responsible operations, promoting people and communities, and harnessing innovation and digitization.
Company-wide risk management: We assessed the methods by which the company measured and monitored the impact of sustainability risk management on corporate performance. Enterprise-Wide Risk Management (EWRM)

- The main purpose of OMV Petrom's Enterprise Risk Management (EWRM) system is to add value by managing and making decisions based on risk assessment which is ensured by applying a "three-line defence model": 1. management business, 2. risk management and supervisory functions, 3. internal audit. OMV Petrom's EWRM system is in accordance with the international risk management standard ISO 31000.
- OMV Petrom uses quantitative stochastic models to measure the potential losses associated with the Company's risk portfolio. The process is facilitated by a Group-wide IT system that supports the individual steps of the process: identification, analysis, assessment, treatment, reporting and review of risks by continuously monitoring changes in the risk profile. The overall risk resulting from the bottom-up risk management process is calculated using Monte Carlo simulations (for a 95% confidence level) and compared to planning data over a three-year time horizon. Identified risks are analysed according to their nature, taking into account causes, consequences, historical trends, volatility and potential impact on cash flow.

Stakeholder Engagement: We analyzed how the company managed and engaged various stakeholders in the sustainability risk management process. This included working with employees, customers, suppliers and local communities.

At OMV Petrom, achieving business and climate objectives, prioritizing the health and safety of employees, customers and business partners, aims at efficient use of resources and environmental protection, acting with integrity and transparency towards all stakeholders. Seamless integration and the achievement of operational objectives in a responsible manner are matters of strategic importance for the long-term performance of the group and the supply chain. On an ongoing basis, measures are taken to prevent or mitigate the negative impact of operations. The Group applies production management practices involving the protection of health, safety, security and the environment, as well as business principles and supply chain management.
Risk categories (taxonomy) at OMV Petrom
Like the entire oil and gas industry, OMV Petrom is exposed to a variety of risks – including market and financial risks, as well as operational and strategic risks. The group's risk management processes focus on the identification, analysis and assessment of such risks and their impact on the group's financial stability and profitability, as well as their impact on sustainability issues (OMV Petrom 2022). Risk is defined as uncertainty about objectives measured by the combination of the probability or frequency of an event and its consequences, which may result in opportunities (advantage) or threats (disadvantage). The risks within OMV Petrom's EWRM system are organized into the following categories: market and financial risk, operational risk and strategic risk (Figure no. 3).

Market and financial risks	**Specification**	**Ways to reduce/counteract**
commodity price risk	Generated by the natural exposure to the volatility of cash flows induced by price changes generated by the activities of production, refining and trading of crude oil, derived petroleum products, natural gas, electricity and CO_2 certificates.	hedging instruments: margin hedges, and stock hedges executed using financial instruments. A trading and hedging optimization system defines clear mandates, including risk thresholds for such activities. Emissions compliance management ensures a balanced position of emission allowances by covering the need using a structured approach.

currency exchange risk	Generated by the exposure of the business to the volatility of the RON currency in relation to USD and EUR, respectively, with direct effects on cash flow.	Derivative financial instruments can be used to manage exposure to tradable commodity prices and currency risk
commercial credit risk	the risk that a partner will not fulfil its contractual obligations, which could lead to financial losses for OMV Petrom	The credit risks of the group's partners are assessed, monitored and managed at the Company level using predetermined limits for certain countries, banks, customers and suppliers. Based on their creditworthiness and available rating information, all partners are assigned maximum exposures in terms of credit limits (amounts and maturities), and the credit ratings and limits granted are reviewed regularly.
Interest rate risk	Volatility in EURIBOR and ROBOR may trigger reduced or additional cash flow.	Risk and volatility that can influence cash flows are low.
Operational risks		**Ways of reduction**
Risks associated with new major projects	The execution of major onshore and offshore projects can be affected by changes in the regulatory or fiscal frameworks, by the unavailability of contractors or by the lack of qualified personnel. Adverse Effects: Project costs may be adversely affected by price inflation, labour shortages or the disruption or reorganization of supply chains. The effect	Low-probability and high-impact risks associated with operational activity (e.g. eruptions, explosions, earthquakes, etc.) are identified and incident scenarios are developed and assessed for each of them.

	of these risks may have a material adverse impact on OMV Petrom's business, results of operations and financial condition.	
IT risks	disruptions due to major cyber events.	security controls are implemented across the Group to protect information and IT assets that store and process information.
Regulatory compliance risks	increase in legislative volatility with influence on the general business environment. the implementation of additional regulatory measures such as subsidy schemes, gas and electricity price caps and surtax.	annual strategic risk assessment
Strategic risks	refers to both external and internal risks (climate change, traditional businesses, regional development of natural gas exploitation, human capital and communities, political and regulatory framework)	annual strategic risk assessment

Figure no. 3: Taxonomy of risks at OMV Petrom
Source: OMV Petrom sustainability report, 2022

Assessing sustainability risks involves identifying and assessing the potential impact of environmental, social and governance (ESG) factors on organizational performance and its ability to achieve sustainability goals. ESG risks are addressed in OMV Petrom through material sustainability themes: climate change and energy transition, environment, supply chain, health, safety and security, business principles and economic impact, employees, community relations and human rights. In terms of climate change risk management, climate change risks and opportunities are integrated into OMV Petrom's EWRM process, which aims to identify, assess and manage business risks. Climate change risks could reflect the potential impact of acute or chronic events, such as more frequent extreme weather events or systemic changes to our business as a result of changing legal frameworks and changing customer behaviour. Acute risks are analysed from the perspective of their impact on the Company's three-year financial plan. The effects of chronic risks are assessed based on a qualitative analysis, taking into account a wider range of uncertainty. Climate change risks are assessed using the standardized methodology of the EWRM process. OMV Petrom supports the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), OMV Petrom considers and addresses risks related to climate change according to TCFD recommendations, as well as the double materiality perspective proposed by the European Union Non-Financial Reporting Directive.

3. Results and discussions

The case study provided a detailed look at how the company navigates the complexity of managing sustainability risks and their impact on integrated corporate performance. We identified tangible results such as improvements in operational efficiency, brand growth and stakeholder satisfaction. Managing sustainability risks in the contemporary corporate environment can have a significant impact on integrated performance and stakeholder relations. Here are some key aspects of this impact, contested following case analysis at OMV Petrom:

- Financial Performance and Resilience: Sustainability risk management helps prevent significant financial impacts associated with unforeseen environmental, social or governance (ESG) events.
- Investors are increasingly interested in ESG risks and opportunities, and a robust approach to risk management can help increase their confidence and ensure a steady flow of investment.
- Reputation and Brand: Organizations that manage sustainability risks effectively can build a solid reputation and gain a competitive advantage. Consumers and customers are increasingly aware of sustainability practices, and a proactive and transparent approach to these risks can strengthen their trust and loyalty.
- Compliance and Regulation: Sustainability risk management contributes to complying with rules and regulations related to ESG aspects, avoiding possible sanctions and penalties. A compliant approach to sustainability requirements can facilitate relations with regulatory authorities and open new business opportunities.
- Stakeholder Relations: Involving stakeholders in the sustainability risk management process strengthens the organization's relationships with local communities, employees, investors and other interested groups. Open and transparent dialogue with stakeholders can help avoid conflicts and build a positive reputation.
- Innovation and Operational Efficiency: Sustainability risk management can stimulate innovation by identifying opportunities for operational efficiency and

the development of sustainable products or services. Reducing the risks associated with natural resources and energy can lead to significant savings.

- Attracting Talent: Organizations that demonstrate a commitment to sustainability more easily attract talent and can keep employees motivated and engaged. Sustainability-oriented organizational culture can be a key factor in workforce recruitment and retention.

Overall, managing sustainability risks effectively in the contemporary corporate environment not only helps prevent potential problems, but also capitalizes on sustainability opportunities, having a positive impact on organizational performance and stakeholder relations. Recognizing and properly managing risks can become a strategy for developing organizational performance (Masuin, Latief, & Zagloel, 2020). It is a strategic approach that reflects the current concerns of society and can help build a sustainable and successful business in the long term.

Conclusions

Sustainability and risk are discussed independently in the supply chain literature but combinatorial discussions are very limited, despite the interdependence of these concepts (Rafi-Ul-Shan, Grant, Perry, & Ahmed, 2018). Sustainability risk management has a significant role in the broader context of risk management at the company level. It intertwines the traditional objective of creating, preserving, and realizing financial value with the imperative of fostering sustainability and responsible business practices (COSO, 2020). This approach is not merely about mitigating potential negative impacts but also about seizing opportunities to align profit objectives with sustainability goals, reinforcing a holistic view of corporate value.

Companies that embrace sustainability risk management delve into the environmental effects generated by their various business processes. These processes are evaluated individually, enabling the identification of sustainability risks and opportunities within each operational facet. The overarching objective is to curtail the environmental footprint of these processes, seeking efficiencies and improvements while maintaining profitability.

Fundamentally, all sustainability risk management frameworks share common principles. They begin by identifying and categorizing sustainability risks and opportunities inherent in a company's operations. Subsequently, they assess the potential impact of these factors on the company's overall performance, acknowledging that sustainability risks can pose threats while sustainability opportunities can drive innovation and competitiveness.

The next step involves the active management of these identified risks and opportunities. This management phase is essential in implementing strategies and practices that mitigate or capitalize on the effects of sustainability factors. It entails the integration of sustainability considerations into the company's strategic decision-making processes, operational activities, and supply chain management, among others.

Finally, transparency and reporting are central to sustainability risk management. Companies are expected to communicate their sustainability performance to stakeholders, encompassing investors, customers, regulatory bodies, and the wider community. This reporting provides a means of accountability and ensures that the company's sustainability efforts are accessible to a broader audience.

In conclusion, sustainability risk management is intrinsically linked to the dual objectives of financial and sustainability value creation. By adopting a structured approach to identifying, assessing, managing, and reporting on sustainability risks and opportunities, companies can navigate the complex landscape of modern business while fulfilling their commitment to environmental and social responsibility. This integration of sustainability into risk management aligns with evolving stakeholder expectations, regulatory requirements, and the imperative of addressing global challenges such as climate change and resource scarcity. As companies evolve in their adoption of sustainability risk management, they are better positioned to build resilient, sustainable, and responsible businesses, contributing positively to both their bottom lines and the well-being of society.

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