
SUSTAINABLE BALANCE: MANAGEMENT STRATEGIES TO REDUCE COSTS AND ENVIRONMENTAL IMPACTS IN COMPANIES

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SUMMARY

This article explores the intersection between business management and sustainability, highlighting the importance of strategies and methods to reduce costs and environmental impacts in corporate operations.

Through a detailed analysis of environmental costs, the study emphasizes the need for management practices that promote balanced development, considering economic, social, and environmental aspects. Addressing legislation and recognizing the environment as a fundamental right, the article highlights companies' legal and ethical responsibilities. It also discusses the concept of Corporate Sustainability, structured by the Triple Bottom Line - Planet, People, and Profit - and how it affects reputation and competitiveness in the market.

The Environmental Management System (EMS) and ISO 14001 standards are presented as essential tools for implementing sustainable and effective practices. The study concludes that management is crucial to the long-term success of companies, encouraging adopting practices that exceed regulatory requirements and contribute to a more sustainable future.

Keywords: Business Management; Environmental costs; Business sustainability; Environmental Management System (EMS); ISO 14001 standards; Triple Bottom Line.

ABSTRACT

This article explores the intersection between business management and sustainability, emphasizing the importance of effective strategies to reduce costs and environmental impacts in corporate operations. Through a detailed analysis of environmental costs, the study highlights the need for management practices that promote balanced development, considering economic, social, and environmental aspects. Addressing legislation and recognizing the environment as a fundamental right, the article underscores businesses' legal and ethical responsibilities. It also discusses the concept of Corporate Sustainability, structured by the Triple Bottom Line - Planet, People, and pro - and how it influences reputation and market competitiveness. The Environmental Management System (EMS) and ISO 14001 standards are presented as essential tools for implementing effective sustainable practices. The study concludes that environmental management is crucial for the long-term success of businesses, encouraging adopting practices that exceed regulatory requirements and contribute to a more sustainable future.

Keywords: Business Management; Environmental costs; Corporate sustainability; Environmental Management System (EMS); ISO 14001 standards; Triple Bottom Line.

INTRODUCTION

The World Health Organization's worrying warning about worldwide exposure to unhealthy air quality underscores the urgency of implementing conscious measures to reduce air pollution. It is crucial to develop specific strategies adapted to each company's characteristics and management practices, considering the variety of sectors and their unique environmental interactions.

In this context, the ABNT NBR ISO 14001 standard is essential. It offers guidelines for Environmental Management Systems (EMS). The aim is to help organizations manage their environmental impacts and promote sustainability. This strategy raises companies' social and economic importance and guarantees compliance with regulatory standards.

Thus, business management goes beyond the simple need for environmental sustainability, standing out for how companies manage their practices. Legislation and standards, such as ISOs, not only guide diagnoses but also act as corrective tools, helping to fulfill legal obligations and increasing international recognition.

In the corporate sphere, adopting sustainable management practices and minimizing environmental impacts have become central themes. This study aims to provide a detailed analysis of ecological costs in companies, corporate sustainability, and the importance of mitigating environmental impacts in management practices. The research addresses various perspectives, from the expenses related to environmental conservation to implementing sustainable practices in company operations.

This work mainly focuses on the interaction between environmental costs, corporate sustainability, and environmental management.

The commitment is to analyze how companies balance economic growth with environmental responsibility, emphasizing the importance of reducing environmental impacts in management practices.

Given the growing relevance of environmental awareness, the question arises of how companies can manage their ecological costs effectively, adopt sustainable practices, and mitigate environmental impacts in their management practices. The hypotheses of this research suggest that the efficacious management of ecological costs favors corporate sustainability, adopting sustainable practices boosts organizational performance, and reducing environmental impacts in management practices is crucial for companies' image and reputation.

The main objective is to examine the relationship between environmental costs, corporate sustainability, and reducing environmental impacts in management practices. Specific goals include investigating the various environmental costs in companies, evaluating corporate sustainability practices, and analyzing the effect of reducing environmental impacts on management practices.

The methodology used in this study is based on a literature review with a critical analysis of the specialized literature. Integrating theoretical and empirical knowledge aims to provide a complete understanding of the subject.

In the first subchapter of the development chapter, we will briefly discuss environmental law, emphasizing current legislation and the importance of environmental preservation as a fundamental right. The second subchapter analyzes Environmental Costs in Companies, exploring everything from environmental preservation costs to integrating sustainable practices into company operations. The third subchapter addresses the complexity of Corporate Sustainability, examining various perspectives and dimensions, from the sustainability tripod to the influence of sustainable actions on corporate reputation.

Finally, the fourth subchapter focuses on the Management System Environmental and Standards, highlighting the role of the EMS and standards such as ISO 14001 in guiding and standardizing sustainable practices in companies.

2 DEVELOPMENT

2.1 Law and the Environment

The categorization of the environment as a fundamental right is a recurring theme in the Constitutions of several countries, consolidating it as vital for human dignity, as Facin (2012) elucidates. Silva (2014) argues that these rights cover all necessary conditions for a complete and satisfactory life.

Facin (2012) details third-generation human rights, associating them with collective rights such as solidarity and protecting historical, cultural, and environmental heritage. As highlighted by Martins (2011), any violation of the right to a healthy and dignified environment constitutes a violation of human rights.

Worldwide environmental interest intensified after World War II, culminating in the First United Nations Conference on the Environment in 1972. At this event, common principles were outlined, stressing the need to preserve natural resources and promote international cooperation (Martins, 2011).

The Brazilian Federal Constitution of 1988 reaffirms this perspective in article 225, guaranteeing everyone the right to an ecologically balanced environment. The environment is seen not only as a resource to be enjoyed collectively but as essential for a superior quality of life.

Considered a third-generation fundamental right, the environment reflects the values of fraternity and solidarity between nations, as recognized by legal doctrine and the Superior Court of Justice Federal.

This transindividual and transgenerational right encompasses several dimensions, including the natural, cultural, artificial, and labor environments (Quonian; Lima; Mose, 2018).

Law 6.938/81 establishes Brazil's National Environmental Policy and reiterates the commitment to conserving and improving environmental quality. The 1988 Constitution treats the environment as a system, assigning shared responsibility for damage and subjecting offenders to criminal, administrative, and civil sanctions.

Administrative liability is aimed at prevention and includes sanctions such as warnings, fines, seizures, and activity bans. On the other hand, civil liability focuses on full reparation for damage to the environment and to third parties, regardless of fault, as defined by Law No. 6.938/81 (Quonian; Lima; Mose, 2018).

In summary, the historical and legal trajectory of recognizing the environment as a fundamental right highlights its crucial importance for quality of life and human dignity, emphasizing the shared responsibility for preserving this common good.

2.2 Environmental Costs in Companies

Environmental costs refer to the total expenses related to the use of resources in actions to control, conserve, and restore the environment (Ribeiro, 1998). According to UNCTAD (1998), these costs include expenses to manage the environmental impacts of business operations and other fees linked to environmental goals and requirements of the operational context (Braga, 2006).

Hansen and Mowen (2001, p. 567) define environmental costs as expenses resulting from poor environmental quality; thus, these costs are linked to the generation, detection, correction, and prevention of environmental degradation.

Understanding these costs is essential to management, especially in an environmental context. This information is crucial not only for the company's environmental and general management but also to demonstrate the organization's level of interaction with the environment, whether in its preservation or the recovery of the degraded (Braga, 2006).

Adequate management of environmental costs is essential because, besides representing a significant portion of financial resources, these costs have gained economic, social, and political relevance (Ribeiro, 2000). This increase is partly due to increasingly stringent environmental regulations and growing public scrutiny (Tinoco and Kraemer, 2004).

Hansen and Mowen (2001, p. 566) reinforce this idea by mentioning that "environmental costs can make up a substantial part of total operating costs and, remarkably, many of these costs can be reduced or eliminated through conscious management." Companies are increasingly concerned about the types of environmental costs, looking for methods that are both affordable and qualitatively effective. These costs can be categorized into four pillars: cost of prevention, cost of assessment, and cost of internal and external failures (Braga, 2006).

These costs are linked to the management of business processes, especially prevention costs, which are interlinked with the impact on environmental licenses and other legal requirements. As Braga (2006) highlighted, management planning must clearly define all these costs to avoid unwanted surprises.

As Barbieri (2011, p.24) points out, "Prevention and evaluation costs are associated with the planning, organization, and control of activities to achieve superior environmental performance, minimizing the costs of internal and external failures."

This need derives directly from the legal norms and environmental policies that govern all stages of the management process, ensuring that operations are sustainable and minimize environmental impacts.

2.3 Corporate Sustainability Tripod

Elkington (1997) presents Corporate Sustainability through the Triple Bottom Line (TBL) concept, based on three fundamental pillars: environmentally sustainable, socially just, and economically viable development, known as the three P's: Planet, People, and Profit. TBL is an approach that seeks to balance the social, economic, and environmental dimensions, promoting harmonious interaction between society, companies, and their mutual interests. According to this vision, a sustainable company seeks profit and is committed to environmental preservation and the well-being of all those involved, exceeding society's commercial, ethical, and legal expectations (Zago et al., 2018).

Mendes (2018) argues that although there is no single method for measuring an organization's sustainability, various tools have been developed to assess sustainable practices' impact on the environment and the local community. The Triple Bottom Line often serves as a reference model for these assessments.

These tools include the FVTool (Financial Valuation Tool for Sustainability Investments), which helps companies to identify the most profitable investments in sustainability, and SEAT (Anglo American Socioeconomic Assessment Toolbox), designed to simplify and improve the management of local social and economic impacts (Tagliari; Souza, 2022).

In Brazil, an important indicator is the ISE (Corporate Sustainability Index), designed to reflect the share price performance of companies committed to sustainability (B3, 2021).

Vassão (2017) points out that the ISE offers investors a portfolio option of companies that value social responsibility and sustainability, attracting investors interested in socially responsible, sustainable, and profitable companies.

2.4 Environmental Management System and Standards

The growing demand for sustainable practices has led large and small companies to seek a new business management model that integrates environmental management and employee participation to reduce ecological impacts significantly.

In this context, Environmental Management Systems (EMS) have been developed, allowing each company to adapt the system to the essential pillars of its operation (Patti, 2016). Environmental management includes a set of policies, practices, and procedures focused on preserving the health and safety of people and protecting the environment, aiming to minimize or eliminate environmental damage resulting from business activities (Patti, 2016).

The standards governing these systems start with implementing an EMS within companies, including audits to ensure quality and identify opportunities for environmental improvement. In addition, the standards address the characterization of products and services, including ecological labeling and assessments during the manufacturing process to ensure that the company is operating within legal standards. ISO standards are crucial in this process and essential for companies to obtain government recognition of their practices (Silva, Castro, Pinheiro, 2019).

Many organizations seek ISO certification, mainly ISO 9000 and 14000, which refer to the quality of products, processes, and services and environmental quality management, respectively (Bruhn et al., 2018). ISO 14000, in particular, establishes uniform procedures that are more effective for ecological management and processes.

It emphasizes the importance of adopting these standards in all EMS and corporate environmental management operations, promoting transparency in the organization and its products or services (Silva; Castro; Pinheiro, 2019).

The ISO 14000 standards provide clear guidelines for Environmental Audits, Environmental Performance Assessments, Environmental Labelling, and Life Cycle Assessments of products, allowing complete transparency of the organization and its products regarding environmental aspects (Valle, 2012, p. 144).

ISO 14000 establishes a method that demonstrates the science of environmental management and the importance of adopting it to make sustainable corporate environmental management possible for different companies and businesses. It highlights the organization's transparency regarding environmental issues and their impacts on the world and society.

To obtain environmental certification, an organization must meet three basic requirements of the ISO 14001 standard: implementation of an environmental management system, compliance with applicable environmental legislation, and commitment to continually improving environmental performance (Valle, 2012, p. 140).

Corporate environmental awareness is crucial; the more companies incorporate management practices that reduce environmental impacts, the more significant the increase in competitiveness. This encourages more companies to adapt to sustainability laws and programs, promoting improvements and greater transparency in the company's environmental image in the eyes of its employees and society, which is increasingly looking for sustainable options in a world impacted by industrial evolution (Araujo, 2006).

CONCLUSION

Throughout this study, the complexity and importance of the topics covered in each chapter became apparent. Centrally, the research investigated company environmental costs, the essence of corporate sustainability, and the relevance of mitigating environmental impacts in management processes.

In the first chapter, exploring Law and the Environment, we highlight legislation and the Federal Constitution, which emphasize the environment as a fundamental right and the crucial importance of its preservation.

The second chapter focused on Environmental Costs in Companies, unveiling the extent of these costs, which transcend the financial and touch on economic, social, and political aspects. The need to manage these costs in a specific way was highlighted, given their a significant share of organizations' financial resources.

In the third chapter, we unfold the complexity of the concept of Corporate Sustainability, treating it as a dynamic and multidisciplinary paradigm. The discussion on the sustainability tripod illustrated the search for a balance between environmentally sustainable development, social responsibility, and economic viability. We also highlighted how sustainable practices positively affect companies' reputations, directly influencing consumer decisions.

When addressing Environmental Management Systems and Standards, we emphasize the importance of Environmental Management Systems (EMS) and standards such as ISO 14001 in driving sustainable practices in companies. Implementing these systems ensures compliance with regulatory standards and promotes effective management of environmental impacts.

Throughout the chapters, we have concluded that business management is more than necessary for sustainability; it represents a conscious strategic choice for each organization. Legislation, regulations, and certifications, such as ISO standards, not only regulate but also add recognition and social and economic value.

In answering the central question of this research, it is clear that management's awareness of environmental costs enhances corporate sustainability. Adopting sustainable practices increases organizational performance and positively shapes the company's image and reputation. Reducing ecological impacts in management processes is intrinsically linked to projecting a more sustainable business future.

Companies must balance economic growth with environmental responsibility in an era when environmental awareness is imperative. We conclude that managing these dimensions effectively is vital for sustainable organizational success. This study highlights the need to adopt practices that comply with regulations and foster environmental and social integrity, providing a more ethical and sustainable business environment.

REFERENCES

ARAÚJO, Geraldino Carneiro et al. Corporate sustainability: concept and indicators. Anais, v. 3, p. 70-82, 2006.

ALENCASTRO, M. S. C. Ethics and the Environment: Building the foundations for a sustainable future. Curitiba: Intersaberes, 2015.

BRAGA, J. P., and MACIEL, P. Identification of Environmental Costs: An Empirical Study in a Passenger Road Transport Company. Available at: [link]. Accessed on November 26, 2023.

BRUNDTLAND, G. H. Nosso Futuro Comum. 2. ed. Rio de Janeiro: Fundação Getúlio Vargas, 1992.

BARBIERI, José Carlos. Corporate environmental management. 3rd edition. São Paulo: Saraiva, 2011.

CORAL, Elisa. Strategic planning model for corporate sustainability. Thesis (Doctorate in Production Engineering). Federal University of Santa Catarina, Florianópolis - SC, 2002.

ELKINGTON, J. Cannibals with forks: The triple bottom line. Oxford: Capstone Publishing Limited, 1997.

FACIN, Andréia Minussi. Environment and human rights. 2012. Available at: [link]. Accessed on: Nov. 25, 2023.

HANSEN, Dan R.; MOWEN, Maryanne M. Cost Management: Accounting and Control. São Paulo: Pioneira Thomson Learning, 2001.

MARTINS, Liliane Aparecida dos Santos; GITAHY, Raquel Rosan Christino. Corporate Sustainability: the environment as a fundamental right. Anais Do Sciencult, v. 4, n. 1, p. 98-105, 2016.

PATTI, Fabiana; SILVA, Daniela; ESTENDER, Antonio Carlos. The importance of sustainability for business survival. *Revista Terceiro Setor & Gestão*, v. 9, n. 1, p. 18-34, 2016.

RIBEIRO, M.S. Costing Environmental Activities. Thesis (Doctorate in Controllershship and Accounting). FEA/USP, São Paulo, 1998.

SILVA, Alessandre; DE CASTRO, Cristina Veloso; AMÉRICO-PINHEIRO, Juliana Heloísa Pinê. The influence of people management in organizations in the face of environmental impacts and sustainability. *Multitemas*, p. 5-23, 2019.

TINOCO, João Eduardo P.; KRAEMER, Maria Elisabeth P. *Contabilidade e Gestão Ambiental*. São Paulo: Atlas, 2004.

VALLE, Cyro Eyer. *Environmental quality: iso 14000*. 12th edition. São Paulo: Senac, 2012.

VASSÃO, C. M. et al. Corporate Sustainability: the importance of sustainability in organizations. *Revista Eletrônica de Divulgação Científica da Faculdade Don Domênico*, 10th Edition, Guarujá, 2017.

ZAGO, Ana Paula Pinheiro; JABBOUR, Charbell José Chiappetta; BRUHN, Nádia Campos Pereira. Corporate sustainability and value creation: the "Dow Jones Sustainability Index" case. *Gestão & Produção*, v. 25, p. 531- 544, 2018

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