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17 years of research on environmental management control

17 ans de recherche en contrôle de gestion environnemental

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17 years of research on environmental management control

Abstract:

Since the 2000s, environmental management control has become a specific area of research within the discipline of management control. Its aim is to incorporate environmental concerns into management practices. This paper aims to explore the evolution of research on environmental management control. To do so, an analysis grid was established by analyzing 46 peer-reviewed articles published between 2008 and 2025. This grid allows for the development of an overview of the themes covered, the theoretical foundations mobilized, and the methodological approaches used.

Two major themes were identified: antecedents, which refer to reasons and factors of adoption and the integration process; and consequences referring to the impact of this adoption on organizational performance.

The results also show that environmental management control is an autonomous field of research with specific theoretical foundations, methodologies adopted and research themes that differentiate it from traditional management control. It has gradually developed its own empirical frameworks and insights.

Keywords: environmental management control, eco-control, environment, analysis grid, review of literature.
Classification JEL: L25, M41, Q56
Paper type: Theoretical Research

Résumé :

Depuis les années 2000, le contrôle de gestion environnemental s'est affirmé comme un champ de recherche spécifique au sein de la discipline du contrôle de gestion. Son objectif est d'intégrer les préoccupations environnementales dans les pratiques du management. Cet article a pour objectif d'analyser le développement et le progrès de la recherche en contrôle de gestion environnemental. Pour ce faire, une grille d'analyse a été élaborée suite à une analyse de 46 articles évalués par les pairs et publiés entre 2008 et 2025. Cette grille permet de donner une vue d'ensemble des problématiques traitées, des fondements théoriques mobilisés et des approches méthodologiques utilisées.

Deux thèmes majeurs ont été identifiés : les antécédents, qui font référence aux facteurs et aux raisons d'adoption ainsi qu'au processus d'intégration ; et les conséquences, qui font référence à l'impact de cette adoption sur la performance organisationnelle.

Les résultats montrent également que le contrôle de gestion environnemental constitue un domaine de recherche autonome, doté de fondements théoriques spécifiques, de méthodologies propres et de thématiques d'étude qui le distinguent du contrôle de gestion traditionnel. Il a progressivement développé ses propres cadres empiriques et ses contributions scientifiques.

Mots clés : contrôle de gestion environnemental, éco-contrôle, environnement, grille d'analyse, revue de la littérature.
JEL Classification : L25, M41, Q56
Type du papier : Recherche théorique

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1. Introduction

Environmental management control is a specific area of research within the discipline of management control. Its aim is to integrate environmental issues into the management and performance measurement systems of organizations. According to Bouquin & Kuszla (2010), environmental management control is an application of management control to new fields, including the environment. Indeed, management control represents an expansion of scope, which traditionally focused on economic and financial dimensions while ignoring the importance of human and environmental dimensions. This expansion reflects the fact that organizational performance cannot be adequately measured without considering environmental and sustainability dimensions.

The emergence of environmental management control is explained by the growing awareness of environmental issues, as well as by the increasing pressure on organizations to improve their environmental responsibility. Since the 1990s, expectations from regulators and investors, demands from customers and society have grown stronger, pushing organizations to move beyond mere compliance toward proactive environmental strategies.

From a scientific point of view, it is now tending to be structured as an autonomous field of research, developing research questions specific to societal issues and adapted methodologies that have not been adopted in 'traditional' management control, and which are often at the intersection of several disciplines such as accounting, management, strategy, or sustainable development. This growing body of literature has contributed to clarifying key concepts and outlining the mechanisms through which environmental concerns are integrated into managerial practices.

A number of scientific papers and academic works are specifically devoted to this field. Actually, environmental management control is recognized as a legitimate scientific field that is being structured within the discipline of management control (Marquet-Pondeville, 2008; Henri & Journeault, 2010; Renaud, 2013, 2014; Antheaume, 2013). This legitimization process has been accompanied by the establishment of dedicated academic forums, special journal issues, and professional networks focused on environmental and sustainability accounting and control systems.

Research into environmental management control has been growing for around 20 to 25 years, with an acceleration from the 2000s onwards. Also, the researchers all stress that environmental management control has become a legitimate and growing field of management control research. This legitimacy has illustrated a diversification of research perspectives, with researchers examining not only the determinants of environmental management control but also their strategic, organizational, and performance implications.

Some studies explain the reasons and the factors why companies integrate environmental dimensions into their management practices (Hennig et al., 2023; Pondeville et al., 2013; Einhorn et al., 2024). Others are interested in the integration process (Cantele et al., 2024; Gunarathne & Lee, 2020; Journeault et al., 2016, Renaud, 2013; Antheaume, 2013), and still others examine the consequences of this adoption and its effects on performance (Appiah et al., 2020; Abdel-Maksoud et al., 2021; Dharsana et al., 2024; Henri & Journeault, 2018; Henri & Journeault, 2010; Laguir et al., 2021; 2024; Petera et al., 2021).

Paradoxically, no study to date has taken stock of research into environmental management control. Yet this type of research is essential for a critical examination of current knowledge and for guiding future work.

This research therefore aims to answer the following question: *How has research on environmental management control evolved over time, and in what ways do the theoretical mobilized, the methodological approaches adopted, and the analytical frameworks studied in the literature contribute to understanding this evolution?*

To do so, this work aims to establish an analysis grid that allows for the drawing up of an overview of the themes covered, the theoretical foundations, and the methodological approaches used. Consistent with an inductive research approach, this paper adopts a conventional and coherent structure in which the objective is to understand, through the analysis of existing studies, the emergence of conceptual and methodological frameworks related to environmental management control.
This paper is structured as follows: the first section provides an introduction to this research, the second section outlines the research methodology adopted, the third section presents the research results, the fourth section provides the discussion, and the final section synthesizes the most important conclusions of this work and also discusses its limitations and avenues for future research.

2. Methodology for analyzing scientific publications

2.1. Specification of the theoretical framework and study scope

The discipline of management control has generally evolved since its emergence in the 1920s at General Motors. Management control was primarily focused on financial and operational performance, however, it has progressively integrated new dimensions (human, social, environmental…) in order to respond to institutional and societal pressures. From the 1990s onward, environmental issues led to the emergence of environmental management control as an extension of traditional management control (Renaud, 2014, 2015).
The aim of this study is to explore how environmental management control develops over time. In this regard, it was pertinent to take a period long enough to provide a comprehensive view of the field's academic production. The period 2008 to 2025 has been selected for this study for two main reasons. According to Renaud (2015), environmental management control has emerged as an autonomous and structured area of research in the early 2000s. Since 2012, the journal *Comptabilité-Contrôle-Audit* (CCA) had officially integrated this area within its editorial scope (ibid., 2015). Furthermore, the emergence of the ISO 14001:2004 standard represented an important step in the evolution of environmental management control research. Consequently, 2008 was chosen as a starting point because it reflects the transition from an exploratory stage to one characterized by stronger theoretical and empirical findings. The year 2025, on the other hand, marks the endpoint of the analysis, allowing the inclusion of the most recent contributions to the field.

2.2. Search Strategy and Inclusion Criteria.

To ensure an overview of the relevant literature, the authors conducted the search across multiple academic databases. The search strategy combined the following keywords using Boolean operators: *("environmental management control" OR "eco-control" OR "sustainability management control" OR "green controlling")*. The chosen keywords were searched in the title, in the abstract and in the keyword fields of the articles. Regarding the language of the selected articles, the search was restricted to English language publications because of its predominance in management control research. Articles were included in the corpus chosen for this study if they met the following criteria: (1) addressed environmental management control, eco-control, or related concepts (2) contributed theoretically or empirically to management control research; (3) published in peer-reviewed academic journal indexed in at least one of the selected databases; and finally (4) available in full text. Some other publications were excluded because they: (1) were doctoral dissertations, conference papers or books; (2) focused exclusively on environmental management or environmental reporting without explicitly addressing environmental management control; and finally (3) were duplicated across databases.

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Rather than focusing on specific journals, the corpus was assembled using well-known international academic databases such as Scopus and Web of Science, which index only peer-reviewed journals (see Appendix 1).

2.3. Methodological Limitations and Potential Biases

Several methodological limitations must be acknowledged. First, excluding doctoral dissertations, conference papers, books and gray literature may lead to the loss of valuable insights. However, this exclusion decision prioritizes the quality and rigor of the review but it may overlook interesting and emerging research. Second, focusing only on articles indexed in the selected databases and on English language publications may lead to geographic and linguistic bias, with a potential under-representation of research published in other languages or published in other journals. Finally, the search strategy used and the keywords chosen for the search may have missed relevant scientific articles that use different conceptual framework to address similar topic. Despite these limitations, the corpus selected provides a solid basis allowing researchers to explore and understand the evolution of research on environmental management control over the past 17 years.

2.4. Analysis Grid

After a thorough cleaning process, the number of references was reduced from 65 to 46 (see Appendix 2 and Appendix 3). These references were then imported into Zotero and subsequently analyzed using NVivo 10. Each article was independently coded using NVivo 10 qualitative data analysis software. The first step in the coding process was to read the full text of each article and then extract information according to the analysis grid. The coding process was conducted by a single author; however, a verification process was implemented throughout the analysis to limit methodological biases related to this choice.
The corpus was structured using an analysis grid to provide an overview of theories mobilized, as well as a thematic and methodological perspective of the collected research. In the first instance, the publications were classified by database in order to highlight the main academic sources encompassing research on environmental management control. They were then organized by year of publication to analyze the evolution of research between 2008 to 2025, and by authors to identify the most frequent contributors. Furthermore, the publications were classified according to research methodologies and theoretical frameworks to explore the methodological approaches used and theories mobilized in environmental management control research. Lastly, the material was thematically categorized to reflect the central topics addressed ranging from the antecedents to the consequences of environmental management control. This structure allows for understanding how research in this area has evolved and diversified over time.

3. Presentation of results: 17 years of research on environmental management control

Note: Throughout this section, the numerical references in brackets [1], [2], etc., correspond to the article codes listed in Appendix 2 and Appendix 3, which provide the full bibliographic details of each article in the corpus.

3.1. Distribution of published articles by database and by year.

The table below (see Table 1) indicates that the corpus studied was primarily collected from four databases: Web of Science (12 references), ScienceDirect (8 references), ResearchGate (8 references), and Scopus (7 references). These references include 43 articles and 3 book chapters.

Table 1: Published articles per database

Source/Database	Number	%
Web of Science	**12**	**26,09**
ScienceDirect	**8**	**17,39**
ResearchGate	**8**	**17,39**
Scopus	**7**	**15,22**
Google Scholar	6	13,04
Cairn	3	6,52
Springer Link	2	4,35
Total	46	100

Source : authors

The chart below (see Figure 1), based on our corpus, shows the number of articles published per year between 2008 and 2025. It can be observed that between 2013 and 2019, the number of publications per year increased, reflecting growing research activity in this field. The peak productivity year was 2020, with 6 published articles. Following this peak, especially in 2021, 2023 and 2024, strong research activity continued, with 5 publications in 2021 and 2023, and 7 publications in 2024.

Figure 1: Published articles per year

Source : authors

3.2. Most recurrent words in the abstracts

The visuals below (see Figure 2 & Table 2) illustrate the most recurrent words in the abstracts of all references. The most important words in the corpus are, respectively, “environmental”, “control”, “management”, “performance”, “eco”, “systems”, “sustainability”, “economic” and “EMCS[1]”.

Table 2: Word Frequency Query

Word	Count	Weighted Percentage (%)
Environmental	205	4,46
Control	130	2,83
Management	95	2,07
Performance	82	1,78
Eco	79	1,72
Systems	56	1,22
Sustainability	54	1,17
Economic	36	0,78
EMCS	34	0,74

Source: Nvivo

[1] *EMCS : Environmental Management Control Systems*

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Figure 2: Word Cloud of Reference Abstracts

Source: Nvivo

3.3. Main contributing authors in the corpus

The table below (see Table 3) shows the most important authors in the corpus who produce at least two articles in this field. Based on our corpus, Jean-François Henri and Marc Journeault are the authors who have contributed the most to this field.

Table 3: List of the most recurrent authors in the corpus

Authors	Number
Henri, Jean-François	4
Journeault, Marc	4
De Rongé, Yves	3
Abdel-Maksoud, Ahmed	2
Gomez-Conde, Jacobo	2
Rehman, Shafique Ur	2
Try Dharsana, Muhammad	2
Guenther, Edeltraud	2
Lunkes, Rogerio Joao	2
Rosa, Fabricia Silva	2
Laguir, Issam	2
Stekelorum, Rebecca	2
Marquet-Pondeville, Sophie	2
Swaen, Valérie	2
Renaud, Angèle	2

Source: authors based on NVivo outcomes

3.4. Distribution of published articles by authors

When examining the methodologies adopted (see Table 4), we observe that the empirical method dominates quantitatively (≈ 69,56%). Most researchers are based on quantitative surveys, using questionnaires and statistical tools to test and evaluate the contribution of environmental management control across a large sample of businesses. Only a few studies are based on a qualitative approach (≈ 19,57%), mainly through case studies, which allow for a deeper analysis and understanding of the phenomenon of environmental management control. Another type of methodology adopted in some research is the theoretical approach, represented by literature reviews and state-of-the-art studies. Finally, only ≈ 2.17% of the studies in our sample involve direct contact with managers through action research.

Table 4: Published articles per methodology

Methodology	Articles	Number	%
Quantitative Survey	[1] [2] [3] [5] [6] [8] [11] [12] [15] [16] [17] [19] [20] [21] [22] [23] [26] [27] [28] [29] [30] [31] [32] [33] [36] [37] [38] [42] [43] [44] [45] [46]	32	≈ 69,56
Case studies	[7] [9] [10] [13] [18] [25] [34] [39] [40]	9	≈ 19,57
Theoretical Research	[4] [14] [35] [41]	4	≈ 8,7
Action Research	[24]	1	≈ 2,17
Total	-	46	100

Source: authors based on NVivo outcomes

3.5. Theoretical foundations in the corpus

As environmental management control is a discipline of management science, most research is based on theories derived from management science, such as contingency theory, stakeholder theory, and organizational learning theory. Other studies mobilize theories from social sciences, such as institutional theory and structuration theory (see Table 5).

The integration of these diverse theoretical perspectives shows that research on environmental management control can be conducted from the standpoint of social sciences, economics, or management science. This interdisciplinarity enables researchers and practitioners to build and to develop a more comprehensive understanding and design more effective environmental management systems that address both organizational performance objectives and broader sustainability goals.

Table 5: Theories mobilized in research

Theories	Number
Contingency theory	10
Stakeholder theory	11
Natural resource-based view theory	5
Institutional theory	2
Dual core theory	2
Stakeholder salience theory	1
Legitimacy theory	1
Eco-efficiency theory	1
Theory of planned behaviour	1
Social exchange theory	1
Social identity theory	1
Structuration theory	1
Role theory	1
Theory of innovation ecosystems	1
Organizational Learning Theory	1
Theories not mentioned	19

Source: authors based on NVivo outcomes

The research was not based exclusiveley on theories, but also refers to some of the most influential models of management control: the Levers of Control by Simons and the Management Control as a Package by Malmi and Brown. Simons' model is often used because of its relevance in explaining the relationship between control and strategy (Renaud, 2009). Moreover, the Levers of Control framework provides a valuable lens for analyzing the different control systems that make up the environmental management system (ibid., 2009).

3.6. Main Themes Covered in the Corpus

In our sample, the environmental management control (or eco-control) is studied on different areas, we identified two major main themes: Antecedents and Consequences (see Table 6).

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In the Antecedents category, we identified two sub-themes : on the one hand, we focused on articles that examine the reasons and factors for adoption of environmental management control, investigating what drives organizations to implement green control mechanisms. On the other hand, the integration encompasses studies that analyze the implementation process, exploring the emergence of environmental management control in companies and the challenges they encounter during implementation.
For the Consequences category, we identified two sub-themes: articles dealing with environmental innovation outcomes that focus on how environmental management control foster innovative environmental practices and solutions, and studies examining performance outcomes in all their forms (global, environmental, economic, hydric, etc.).
During this structuring work, we found that some articles cover more than one theme (for example, linking reasons and performance), while a few others do not fit these themes because they discuss environmental management control in a different contextual frameworks that do not align with our purpose.

Table 6: The themes coverd

Themes		Articles	%
Antecedents	Reasons and Factors for adoption	[1] [2] [15] [20] [37] [45]	≈ 13,04
	Integration & implementation	[4] [7] [9] [10] [13] [16] [18] [24] [26] [34] [35] [39]	≈ 26,09
Consequences	Environmental innovation Outcomes	[5] [17] [31]	≈ 6,25
	Performance Outcomes	[11] [12] [19] [21] [27] [28] [32] [36] [38] [41] [42] [43]	≈ 26,09
Multi-themes		[3] [6] [8] [22] [23] [25] [29] [33]	≈ 17.39
Others		[14] [30] [40] [44] [46]	≈ 10.87

Source: authors based on NVivo outcomes

4. Analysis of scientific production

4.1. Analysis of the main research results

Strong and instructive patterns appear when the three analytical elements of our study, research methodologies, theoretical underpinnings, and theme orientation are analyzed collectively.
The predominant methodological tradition is still by far quantitative surveys. They are most frequently associated with research on performance outcomes and the motivations behind the adoption of environmental management control, or eco-control. The two most prominent theoretical frameworks used to address these issues are stakeholder theory and contingency theory. When combined, these theories logically explain the performance impacts and adoption factors. While contingency theory describes how organizational size, structure, or sectoral conditions impact that adoption, stakeholder theory emphasizes the external pressures (regulators, customers, etc.) that drive enterprises to implement environmental management control. Because survey methods enable researchers to gather large samples, assess associations, and test hypotheses, all of which facilitate statistical generalization, they are a good fit for these concerns. This convergence of theory and methodology has improved the field's capacity to show the causal relationships between quantifiable environmental or economic performance, internal circumstances, and external influences. However, because cross-sectional surveys frequently capture organizational reality at a particular moment in time, the advantages of this paradigm may also restrict context awareness and dynamic knowledge.

Case studies are essential and supplementary. Most papers that use this method specifically address the integration and implementation phase. The following topics can be addressed by this methodology: how eco-controls are developed, negotiated, and gradually incorporated into management practices; how cultural change takes place; and how internal and external obstacles are surmounted. The theories mobilized, however, are lacking. The fundamental theoretical underpinnings of many integration-focused investigations are not explicitly stated. However, it is frequently possible to identify implicit theoretical references, such as organizational learning theory, stakeholder theory, or management control models like Simons' levers of control or Malmi and Brown's management control as a package. In this situation, applying these theories enables us to comprehend how businesses reorganize control systems and develop new skills to achieve environmental goals.

The combination of qualitative methods with the aforementioned theoretical frameworks provides deep and practical insights into how environmental management control operates insights that cannot be captured through survey-based research alone.

Overall, the results indicate that the nature of the research question significantly shapes the methodological and theoretical choices made in environmental management control studies. When researchers focus on adoption factors or measurable outcomes, they tend to rely on quantitative survey methods grounded in stakeholder or contingency theories. In contrast, studies examining implementation processes generally employ qualitative case studies informed by organizational learning perspectives. This methodological divide helps explain why there is still limited understanding of how environmental management control evolves over time or fosters eco-innovation topics that require integrating multiple approaches and theoretical lenses, something rarely undertaken in existing research on environmental management control.

Historically, management control was emerged at the end of 19th Century in the classical management school, particularly in Taylor's theory of scientific management, which viewed organizations as mechanical systems structured by hierarchy, rationality, and standardization. Within this paradigm, control primarily served to ensure efficiency, achieve predefined financial targets, and secure profitability.

Over time, management control has adopted a broader and more strategic orientation. It is no longer limited to ensuring compliance, but now plays an active role in strengthening collective learning and creating sustainable value. This evolution has encouraged the use of theories such as stakeholder theory to explain institutional and external pressures that drive the adoption of environmental management control (antecedents), contingency theory, which highlights how organizations adapt their control tools to specific organizational contexts (integration), and finally organizational learning and the resource-based view theory allow for understanding how environmental management control improves performance and strengthen sustainable competitive advantage (consequences).

Most frameworks inadequately address the role of technologies in environmental monitoring and how environmental management control foster radical innovation rather than incremental improvement. Furthermore, while institutional and stakeholder theories explain the factors of adoption, they offer limited insight into implementation processes, a gap partially filled by organizational learning theory but rarely studied longitudinally.

Future research should explicitly theorize the relationships between adoption motivations (institutional/stakeholder pressures), contextual factors (contingency factors), implementation processes (organizational learning), and performance outcomes, moving beyond a single-theory applications to adopt integrated theoretical frameworks.

The positivist approach, based on a more objective, quantitative, and measurement-oriented viewpoint, served as the main methodological foundation for management control research. Due to critical perspectives, the interpretivist approach, and even the use of contemporary

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techniques such as mixed and multidisciplinary approaches, this field has grown significantly in the modern era. As a result, the field has become increasingly diverse, open, and rich in methodology. This development is a reflection of how complicated organizations are becoming and how various methods must be used to comprehend managerial issues.
Taken together, these theoretical and methodological orientations demonstrate how management control has evolved into a truly strategic and sustainability-oriented mechanism for guiding organizational performance.

4.2. Analysis Grid: phases of research in Environmental management control

This analysis grid (See Table 7) is proposed to structure and interpret the existing literature by identifying the main phases through which research on environmental management control has evolved.

Table 7: Analysis grid of literature review

Adoption factors	This phase focuses on understanding environmental challenges and on the conditions under which environmental management control practices emerge and are adopted (or rejected) within organizations. In this phase, the literature primarily seeks to identify environmental, organizational and institutional issues, as well as the diagnostic process that motivate firms to incorporate environmental concerns into their management.	• Environmental and regulatory pressures • Managerial commitment and organizational awareness • Change resistance
Integration and strategic alignment	This phase covers research examining how environmental management control is embedded within the strategy. It focuses on aligning environmental objectives with strategic orientations of the firms and also ensuring coherence between environmental management practices and organizational orientations.	• Environmental strategy • Environmental objectives
Implementation of control tools	This phase deals with developing the environmental management control tools and instruments used to translate environmental strategic intentions into managerial practices.	• Environmental management control tools • Measurement systems • Dashboards and monitoring systems
Performance management	This phase adopts a broader perspective that moves beyond a purely control logic towards a global steering approach. It also explores connections with broader frameworks like sustainability management control, integrated reporting, and performance measurement for sustainability, highlighting where environmental management control have their own specific features and where they overlap with these approaches, particularly regarding competitiveness and overall organizational performance.	• Environmental performance steering • Sustainability management control systems • Competitiveness and overall performance

Source: authors

5. Conclusion

This study employs an analysis grid designed to shed light on the evolution of academic research concerning environmental management control. The selected articles were organized into two dimensions: antecedents, referring to the factors and motivations that drive organizations to adopt environmental management control; including also integration process, which examines how environmental considerations are incorporated into management practices; and consequences, which assess the impact of such adoption on organizational performance. Despite its contributions, this research presents certain limitations. It is based on

46 studies that explicitly focus on environmental management control within the field of management sciences and covers the period from 2008 to 2025. Consequently, it excludes other databases and non-academic sources. Several gaps were also identified in the existing literature. First, there remains no unified theoretical framework specifically dedicated to environmental management control. Most studies draw upon theories such as organizational learning, contingency, and stakeholder theory, yet these perspectives have not converged into a single, cohesive model.

Methodologically, the field displays a clear imbalance: nearly three-quarters of the studies rely on quantitative survey designs. While such methods are useful for measuring relationships between variables, they tend to offer a static picture and fail to capture how environmental management control evolves over time. Longitudinal, mixed-method, and action-research approaches are still rare. Additionally, much of the existing research concentrates on adoption motives, integration processes, and performance outcomes, while less attention is given to innovation-related effects, such as how environmental management control encourages green practices or interacts with digital transformation.

The predominant research themes continue to revolve around antecedents and consequences, yet the steering or piloting function of environmental management control remains largely underexplored. External validity is also limited, as most empirical studies focus on manufacturing sectors in Europe, Asia, and North America, leaving Africa, Latin America, and the public sector largely overlooked.

Looking ahead, future research should work toward developing a more unified theoretical framework for environmental management control, employ diverse and longitudinal methodologies, and place greater emphasis on early adoption drivers, innovation outcomes, and the piloting role of environmental management control. Expanding the scope of inquiry to include new regions and sectors would also enrich understanding. Addressing these issues could help move the field beyond fragmented findings toward a more integrated and comprehensive perspective on how environmental management control emerges, evolves, and generates long-term value.

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Appendices:

Appendix 1 – List of Academic Journals

Journals	References
Accounting and Finance	[31]
Accounting Auditing Control	[4] [39] [40]
Accounting Forum	[1]
Accounting Organizations and Society	[21]
Accounting Perspectives	[22]
Accounting, Auditing & Accountability Journal	[17] [34]
Advances in Environmental Accounting & Management	[14]
Business Strategy and the Environment	[42]
Corporate Governance-The International Journal of Business in Society	[44]
Corporate Social Responsibility and Environmental Management	[28] [46]
Energies	[36]
Environmental Economics	[45]
Hasanuddin Economics and Business Review	[12]
International Journal of Energy Economics and Policy	[6]
International Journal of Hospitality Management	[2]
International Journal of Production Economics	[28]
International Journal of Productivity and Performance Management	[33]
International Journal of Professional Business Review	[11]
International Journal of Sustainability in Higher Education	[41]
Journal of Accounting and Organizational Change	[23] [43]
Journal of Business Research	[20]
Journal of Cleaner Production	[27]
Journal of Environmental Management	[30]
Journal of Infrastructure, Policy and Development	[16]
Journal of Management and Research	[3]
Management Accounting Research	[5] [19] [37]
Management Control	[9]
Management Decision	[38]
Proceedings of the International Conference on Business Excellence	[35]
PSU Research Review	[13]
Review of International Business and Strategy	[8]
Review of Managerial Science	[15]
Studies in Managerial and Financial Accounting	[24]
Sustainability	[10]
Sustainability Accounting Management and Policy Journal	[25]
Sustainable Futures	[32]
The British Accounting Review	[26]
Journal not mentioned	[7][2] [29][3]

Appendix 2 – List of Articles Included in the Literature Review (2008–2025)

N°	Title	Authors	Year	Journal
1	Stakeholder pressure, eco-control systems, and firms' performance: empirical evidence from UK manufacturers	A. Abdel-Maksoud, M. Jabbour M. Abdel-Kader	2021	Accounting Forum
2	Investigating relationships between stakeholders' pressure, eco-control systems and hotel performance	A. Abdel-Maksoud H. Kamel S. Elbanna	2016	International Journal of Hospitality Management

[2] *Appendix 3*

[3] https://www.researchgate.net/publication/238674712_The_impact_of_external_environment_stakeholders'_pressures_and_environmental_strategy_on_environmental_management_control_systems

3	Mediating Role of Environmental Management Accounting and Control System between Top Management Commitment and Environmental Performance: A Legitimacy Theory	M. Amir S. Abdur Rehman M. Irfan Khan	2020	Journal of Management and Research
4	Environmental Management Control Current Situation and State of the Art	N. Antheaume	2013	Accounting Auditing Control
5	Environmental management control systems and environmental innovation: Unintended consequences of the EU non-financial reporting directive	C. Antonini J. Gomez-Conde	2024	Management Accounting Research
6	Effects of Environmental Strategy, Uncertainty and Top Management Commitment on the Environmental Performance: Role of Environmental Management Accounting and Environmental Management Control System	B. K. Appiah Z. Donghui S. C. Majumder M.P. Monaheng	2020	International Journal of Energy Economics and Policy
8	Environmental MCS package, perceived environmental uncertainty and green performance: in green dynamic capabilities and investment in environmental management perspectives	S. Bresciani S. Ur Rehman G.M Alam K. Ashfaq M.U. Hailey	2022	Review of International Business and Strategy
9	The Interaction of Sustainability Governance Structure and Sustainability Management Control Systems: An Italian Case Study	S. Cantele S. Valcozzena B. Campedelli C. D. Stefani M. De Luca	2024	MANAGEMENT CONTROL
10	Sustainability Strategy and Management Control Systems in Family Firms. Evidence from a Case Study	F. Caputo S. Veltri A. Venturelli	2017	Sustainability
11	Environmental Management Control Systems and Environmental Performance: Direct and Indirect Effect	F.E. Daromes S. Ng	2023	International Journal of Professional Business Review
12	Eco-Control and Its Dual Impact on Environmental and Economic Performance	M.T. Dharsana A. I. P. Natsir N. M. Aksah I. Ulumuddin	2024	Hasanuddin Economics and Business Review
13	Environmental management control systems for carbon emissions	N. Di Giacomo J. Guthrie F.Farneti	2017	PSU Research Review
15	The relationship of organizational culture with management control systems and environmental management control systems	S. Einhorn B. Fietz T. W. Guenther E. Guenther	2024	Review of Managerial Science
16	Levels of corporate environmental strategies in Hungary and the associated environmental management control tools	H. Fekete-Berzsenyi K.M Barna D.E. Kozma	2025	Journal of Infrastructure, Policy and Development
17	Environmental innovation practices and operational performance The joint effects of management accounting and control systems and environmental training	J. Gomez-Conde R.J. Lunkes F. S. Rosa	2019	Accounting, Auditing & Accountability Journal

18	Eco-control for corporate sustainable management: A sustainability development stage perspective	A. D. N. Gunarathne K-H. Lee	2020	Corporate Social Responsibility and Environmental Management
19	The effects of an enabling approach to eco-control on firms' environmental performance: A research note	C. Heggen V.G. Sridharan	2021	Management Accounting Research
20	Environmental management control systems: Exploring the economic motivation behind their implementation	J. C. Hennig S. Firk M. Wolff H. Coskun	2023	Journal of Business Research
21	Eco-control: The influence of management control systems on environmental and economic performance	J.F. Henri M. Journeault	2010	Accounting Organizations and Society
22	Antecedents and Consequences of Eco-Control Deployment: Evidence from Canadian Manufacturing Firms	J.F. Henri M. Journeault	2018	Accounting Perspectives
23	Eco-Control Change and Environmental Performance : A Longitudinal Perspective	J.F. Henri M. Journeault C. Brousseau	2017	Journal of Accounting and Organizational Change
25	The means to substantive performance improvements environmental management control systems in ISO 14001– certified SMEs	L. Johnstone	2022	Sustainability Accounting Management and Policy Journal
26	Levers of eco-control and competitive environmental strategy	M. Journeault Y. De Rongé J.F. Henri	2016	The British Accounting Review
27	Eco-control systems and firm performance: Understanding the mediating role of circular economy practices and the moderating role of environmental uncertainty	I. Laguir R. Stekelorum A. Beysül O. Mouadili E. A. Segbotangni	2024	Journal of Cleaner Production
28	Proactive environmental strategy and performances of third-party logistics providers (TPLs): Investigating the role of eco-control systems	I. Laguir R. Stekelorum J. El Baz	2021	International Journal of Production Economics
29	The impact of external environment, stakeholders' pressures and environmental strategy on environmental management control systems	S. Marquet-Pondeville V. Swaen Y. De Rongé	2008	-
30	Are corporate environmental activities to meet sustainable development goals (SDGs) simply greenwashing? An empirical study of environmental management control systems in Vietnamese companies from the stakeholder management perspective	K. Nishitani T.B. Hue Nguyen T.Q. Trinh Q. Wu K. Kokubu	2021	Journal of Environmental Management
31	The impact of interactive and diagnostic levers of eco-control on eco-innovation: The mediating role of employee environmental citizenship behaviour	N. Abubakar Nuhu K. Baird S. Su	2023	Accounting and Finance
32	Environmental management control system, blockchain adoption, cleaner production, and product efficiency on environmental reputation and	U.W. Nuryanto Basrowi I. Quraysin I. Pratiwi	2024	Sustainable Futures

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	performance: Empirical evidence from Indonesia			
33	Organisational culture, environmental management control systems, environmental performance of Pakistani manufacturing industry	T.S. Ong H. B. Magsi T.F. Burgess	2019	International Journal of Productivity and Performance Management
34	Structuring social and environmental management control and accountability: behind the hotel doors	L.D. Parker L. H. Chung	2018	Accounting, Auditing & Accountability Journal
35	Green controlling – concept and practice	M. Păunică M. Mocanu	2017	Proceedings of the International Conference on Business Excellence
36	The Influence of Environmental Strategy, Environmental Reporting and Environmental Management Control System on Environmental and Economic Performance	P. Petera J. Wagner R. Pakšiová	2021	Energies
37	Environmental management control systems: The role of contextual and strategic factors	S. Pondeville V. Swaen Y. De Rongé	2013	Management Accounting Research
38	The role of environmental management control systems for ecological sustainability and sustainable performance	S. Ur Rehman A. Bhatti S. Kraus J. J. M. Ferreira	2020	Management Decision
39	Configurations of the Interactive Use of Environmental Management Control	A. Renaud	2013	Accounting Auditing Control
40	The controller's role in environmental management control	A. Renaud	2014	Accounting Auditing Control
41	Sustainability management control systems in higher education institutions from measurement to management	N. Roos E. Guenther	2020	International Journal of Sustainability in Higher Education
42	Green innovation ecosystem and water performance in the food service industry: The effects of environmental management controls and digitalization	F.S. Rosa L. Compagnucci R. J. Lunkes J. J. Monteiro	2023	Business Strategy and the Environment
43	Integrating environmental management control systems to translate environmental strategy into managerial performance	P. G. Rötzel A. Stehle B. Pedell K. Hummel	2019	Journal of Accounting and Organizational Change
44	The impact of leanness on supply chain sustainability: examining the role of sustainability control systems	H. D. Rupasinghe C. Wijethilake	2020	Corporate Governance-The International Journal of Business in Society
45	Implementation of eco-control system by Indonesian manufacturing firms: Understanding the mediating role of organizational culture	M.T. Dharsana A.I. P. Natsir F. I. Hermansyah K. N. F. Syahnur	2024	Environmental Economics
46	How eco-control systems enhance carbon performance via low-carbon supply chain collaboration? The moderating role of organizational unlearning	S. Wei L. Wang W. Jiang L. Feng T. Feng	2023	Corporate Social Responsibility and Environmental Management

Appendix 3 – List of Book Chapters Included in the Literature Review

N°	Title	Authors	Year	Journal	Book	Publisher
7	An Integrated Package of Environmental Management Control Systems	M. L. Baker D. A. Brown T. Malmi	2012	-	Best Practices in Management Accounting	Palgrave Macmillan
14	Towards a more comprehensive framework for sustainability control systems research	A. Ditillo I. E. Lisi	2014	Advances in Environmental Accounting & Management	Accounting for the Environment: More Talk and Little Progress	Emerald Group Publishing Limited
24	Environmental management control systems in SMEs - An implementation schedule	P. Horváth S. Berlin J. M. Pütter	2014	Studies in Managerial and Financial Accounting	Performance Measurement and Management Control: Behavioral Implications and Human Actions	Emerald Group Publishing Limited