

AUDITING GREENWASHING: THE ROLE OF AUDITORS IN DETECTING MISLEADING SUSTAINABILITY CLAIMS

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Abstract: *Greenwashing presents substantial challenges to the credibility of sustainability reporting, as it undermines stakeholder trust and hinders genuine environmental accountability. This study aims to explore the critical role of auditors in identifying and mitigating greenwashing practices across various industries. Employing a mixed-methods research design, data were collected through surveys and interviews with auditing professionals and sustainability experts from six countries. The findings reveal several persistent challenges, including the absence of standardized frameworks, limited transparency, and the complex nature of ESG data. The research emphasizes the potential of advanced technologies such as AI and blockchain to enhance the accuracy and reliability of audits. It further provides actionable recommendations for auditors, policymakers, and organizations to foster greater transparency and accountability in sustainability reporting. The study contributes to the ongoing discourse on promoting ethical corporate behaviour by proposing innovative strategies to combat greenwashing and improve the integrity of ESG disclosures. In conclusion, the role of auditors is underscored as pivotal in ensuring the authenticity of sustainability claims, thereby reinforcing stakeholder trust and fostering a culture of accountability.*

Keywords: *Greenwashing, Sustainability Reporting, Auditing, Transparency, Accountability.*

JEL Classification: *M42, Q56, G38, O16*

INTRODUCTION

The growing emphasis on sustainability in corporate practices has positioned sustainability reporting as an essential tool for communicating Environmental, Social, and Governance (ESG) initiatives. However, the prevalence of greenwashing—prac-

tices where companies misrepresent their environmental efforts to appear more sustainable—has raised significant concerns. This phenomenon undermines stakeholder trust, distorts market dynamics, and compromises the credibility of genuine sustainability initiatives (de Freitas Netto, Sobral, Ribeiro, & Soares, 2020). Despite the increasing demand for transparency and corporate accountability, exaggerated or false claims remain a persistent issue in sustainability reporting, highlighting the need for effective mechanisms to detect and address greenwashing (Seele & Gatti, 2015).

This research explores the role of auditors in identifying and mitigating greenwashing, focusing on their capacity to verify sustainability claims and ensure compliance with ethical reporting standards. The motivation for this study stems from the growing global demand for credible sustainability disclosures, the potential reputational risks posed by greenwashing, and the critical need for enhanced accountability in corporate reporting practices.

Three hypotheses guide this research:

- H0: The absence of standardized ESG reporting frameworks does not significantly impact auditors' ability to detect greenwashing.
- H1: Advanced technologies, such as artificial intelligence and blockchain, enhance audit accuracy and reliability.
- H2: Effective audit practices contribute to reducing greenwashing and promoting corporate accountability.

The paper provides a detailed analysis of these aspects. It begins by examining the conceptual and empirical background of greenwashing and its implications for stakeholders and auditors. This is followed by a description of the research methodology, encompassing both qualitative and quantitative approaches. The findings highlight key challenges and opportunities for auditors, while the conclusion offers actionable recommendations for fostering greater transparency and integrity in sustainability reporting.

LITERATURE REVIEW

This section explores the theoretical and empirical foundations of greenwashing, emphasizing its impact on stakeholder trust and the credibility of sustainability reporting. The review delves into key concepts such as transparency, accountability, and legitimacy, while also examining the theoretical frameworks that underpin the study of greenwashing. Empirical studies provide insights into the prevalence of greenwashing across industries and the role of auditors in mitigating misleading claims. Additionally, the review highlights persistent challenges in sustainability reporting and identifies critical gaps in current research, such as the limited application of advanced technologies like blockchain and AI. These gaps underscore the need for innovative strategies to enhance transparency and accountability in ESG disclosures.

Conceptual Foundations

Greenwashing, defined as the practice of misrepresenting sustainability efforts to appear more environmentally responsible, undermines genuine sustainability initiatives and erodes stakeholder trust (Testa, Miroshnychenko, Barontini, & Frey, 2018). Central to addressing greenwashing are the principles of **transparency** and **accountability**, which serve as the foundation of sustainability reporting. Transparency in-

volves the openness and clarity of disclosed information, while accountability requires organizations to justify their actions and claims to stakeholders ((GRI), 2022). However, greenwashing distorts these principles by creating an illusion of commitment to environmental and social responsibility.

Theoretical frameworks provide insights into greenwashing and its broader implications. **Signalling theory** posits that organizations use sustainability claims to reduce information asymmetry and influence stakeholder perceptions, but greenwashing distorts these signals, leading to diminished organizational credibility (Connelly, Certo, Ireland, & Reutzel, 2011). **Stakeholder theory** emphasizes the importance of addressing diverse stakeholder interests through sustainability reporting, yet greenwashing undermines this process by misrepresenting organizational performance (Freemman, 1984). Similarly, **legitimacy theory** highlights the role of aligning corporate actions with societal norms to maintain legitimacy; however, companies engaging in greenwashing exploit this alignment, prioritizing appearance over substantive action (Deegan, 2019).

Empirical Studies

Empirical research demonstrates the widespread prevalence of greenwashing across industries and its negative impact on stakeholders. For instance, Testa et al. (2018) found that greenwashing erodes stakeholder trust and adversely affects firm performance. In the fashion industry, Jestratićević, Uanhoro, & Creighton (2021) revealed that many brands avoid full disclosure of their sustainability practices, perpetuating misleading claims. Nygaard & Silkoset (2022) explored the role of blockchain technology in combating greenwashing, emphasizing its potential to improve transparency and empower stakeholders to verify sustainability claims.

The role of auditors in mitigating greenwashing has also been extensively studied. Parguel, Benoît-Moreau, & Larceneux (2011) argued that sustainability ratings serve as deterrents by holding companies accountable for their claims. Weber (2018) demonstrated that external assurance of corporate social responsibility (CSR) disclosures enhances stakeholder trust while reducing equity capital costs for firms. Recent research by Meutia (2023) highlighted the importance of governance structures, such as independent and expert audit committees, in improving the quality of sustainability reporting and mitigating greenwashing.

Challenges in Current Practices

Despite advancements, significant challenges remain in combating greenwashing through sustainability reporting and auditing practices. One key issue is the lack of standardized frameworks for ESG reporting, which leads to inconsistencies in assessing sustainability claims (GRI (2022); Roussy & Brivot (2016). Traditional audit methodologies often struggle to handle the qualitative and complex nature of ESG data, limiting their ability to detect misleading claims (McGowan, Chan, Yurova, Liu, & Wong, 2018).

Corporate culture and internal pressures further exacerbate these challenges. Sonjaya (2024) observed that organizational pressures often compromise auditors' ethical decision-making, allowing greenwashing to persist unchecked. Additionally, the reliance on self-reported data and vague ESG metrics contributes to the opacity of sustainability claims, making it difficult for auditors to provide effective assurance.

Addressing Gaps in Knowledge

While the existing literature provides valuable insights into the challenges and potential solutions for mitigating greenwashing, critical gaps remain. For example, there is limited research on the application of advanced technologies such as AI and blockchain in auditing sustainability claims. Moreover, cross-industry comparisons of greenwashing practices are scarce, leaving a knowledge gap regarding sector-specific challenges and best practices. This study aims to address these gaps by critically analyzing auditors' roles, examining innovative methodologies, and proposing actionable strategies to enhance transparency and accountability in sustainability reporting. Additionally, the inclusion of recent studies from 2023-2024 ensures the relevance of this review and aligns the research with current advancements in the field.

METHODOLOGY

This section outlines the research design, data collection methods, and analytical techniques used to explore the role of auditors in detecting greenwashing. Employing a mixed-methods approach, the study combines qualitative insights from interviews and case studies with quantitative analysis of survey data to ensure both depth and generalizability. The methodology is designed to capture diverse perspectives from professionals across multiple industries and countries, providing a comprehensive understanding of the challenges and opportunities in mitigating greenwashing. Ethical considerations were integral to the research process, ensuring participant confidentiality and adherence to institutional guidelines.

Research Design and Data Collection

This study utilizes a mixed-methods approach, combining both qualitative and quantitative techniques to explore the issue of greenwashing and the role of auditors in verifying sustainability claims. The qualitative aspect involves interviews and case studies to gather in-depth insights from professionals, while the quantitative component utilizes survey data to assess broader perceptions of greenwashing, audit effectiveness, and stakeholder trust. The mixed-methods design facilitates both depth and generalizability, addressing the research objectives comprehensively (Xu, L & Xu (2023); Petrov (2023)).

Data were collected over the last quarter of 2024, from October to December, ensuring timely insights relevant to current practices. Participants from six countries—Serbia, Montenegro, Germany, Spain, Bulgaria, and Slovenia—were involved, providing diverse perspectives on greenwashing and auditing practices.

- **Qualitative Data:**

- **Interviews:** Semi-structured interviews were conducted with 10 professionals, including auditors, ESG analysts, and sustainability officers. The interviews were designed to provide flexibility while ensuring consistency across participants. Participants were selected based on their professional experience and involvement in greenwashing-related practices. These professionals were drawn from industries such as fashion, energy, and manufacturing, ensuring a diverse set of experiences.
- **Case Studies:** Five case studies of organizations accused of greenwashing were analyzed. These case studies were selected from publicly

available sustainability reports and regulatory documents. Industries such as fashion, energy, and manufacturing were included, offering insights into real-world applications of sustainability reporting and greenwashing practices.

- **Quantitative Data:**

- A structured survey was distributed to 500 professionals across the six countries. The survey was disseminated via email and professional networks, ensuring broad participation from a diverse set of respondents. Out of the 500 surveys distributed, 350 responses were received, yielding a 70% response rate. A final count of 320 valid responses were analysed.

Interview and Survey Structure

The semi-structured interviews allowed participants to elaborate on their experiences, with each interview lasting 45–60 minutes. The interview structure included:

Table 1. Structure and Focus of Semi-Structured Interviews

Section	Focus	Example Questions
Introduction	Explanation of study purpose and participant's background	"Can you tell me about your role in the organization?"
Greenwashing Perceptions	Participant views on greenwashing in their industry	"How would you define greenwashing in your industry?"
Audit Practices	Effectiveness and challenges of audit interventions	"In your opinion, how effective are audits in detecting greenwashing?"
Case-Specific Insights	Contextual understanding of real-world practices	"Can you share an example of an audit that addressed sustainability claims?"
Recommendations	Suggestions for improving audit practices	"What measures do you think could enhance the effectiveness of audits in ensuring transparency?"
Conclusion	Wrap-up and final comments	"Is there anything else you would like to add regarding this topic?"

Source: Authors

The interviews were conducted via video conferencing to accommodate participants from different countries, specifically **Bulgaria, Serbia, and Spain**. These interviews were carried out in a **Metaverse environment**, as part of the project "**Metaversing – Civil Society in the Field of Youth**," co-funded by the European Union under the **Citizens, Equality, Rights, and Values (CERV)** program. The project focuses on utilizing digital and virtual technologies to foster collaboration and innovation in addressing societal challenges, including sustainability and transparency. By leveraging the Metaverse, participants engaged in immersive and interactive discussions, transcending traditional geographical barriers. For more details about the project, visit: <https://eu4all.rs/metaversing-civil-society-in-the-field-of-youth-sga-2023/>.

All interviews were recorded with participants' consent.

Table 2. Structure and Content of Survey Questionnaire

Section	Focus	Example Question	Type of Question
Demographics	Participant background and professional experience	"How many years have you worked in your current field?"	Multiple-choice
Perceptions of Greenwashing	Stakeholder views on prevalence and impact of greenwashing	"To what extent do you believe greenwashing is prevalent in your industry?"	5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree)
Audit Practices	Effectiveness of auditing in addressing greenwashing	"Audits significantly improve the credibility of sustainability claims."	5-point Likert scale
Recommendations	Suggestions for improving audit practices	"What measures do you think could enhance the effectiveness of auditing practices?"	Open-ended

Source: Authors

The survey was pretested with 10 participants from different countries to ensure clarity, reliability, and cultural relevance before full-scale dissemination.

Sampling Strategy

A purposive sampling strategy was employed to ensure that the participants were relevant and diverse. This strategy enabled the selection of individuals with direct experience and expertise in the field of sustainability reporting, auditing, and greenwashing detection.

- **Interviews and Case Studies:**

- Interview participants were selected based on their professional roles in auditing, sustainability reporting, or corporate governance, with a minimum of three years of relevant experience.
- Case studies were chosen from a variety of industries to ensure a comprehensive understanding of sustainability reporting practices and greenwashing across different sectors.

- **Survey Participants:**

- Survey respondents were auditors, ESG analysts, and corporate sustainability officers from the six countries. The diverse geographic and professional backgrounds of participants allowed the study to capture varied perspectives on greenwashing and auditing practices (Rahi, Johansson, & Blomkvist (2022); Wang et al. (2022)).

Data Analysis Techniques

Data analysis was conducted in two phases:

- **Qualitative Analysis:**

- Thematic analysis was applied to interview transcripts and case study data to identify recurring themes related to greenwashing and audit practices. This approach helped to uncover key challenges and insights from the qualitative data.

- **Quantitative Analysis:**

- Survey data were analyzed using statistical methods, including:

- ◆ **Descriptive statistics** to summarize the survey responses.
- ◆ **Correlation analysis** to explore relationships between variables, such as the effectiveness of audit practices and the prevalence of greenwashing.
- ◆ **Regression analysis** to assess the impact of auditing practices on stakeholder trust and the effectiveness of sustainability reporting (Seele & Gatti (2015); Graafland & Smid (2016)).

Ethical Considerations

Ethical compliance was a critical aspect of this research, ensuring the protection of participants and data integrity:

- **Informed Consent:** Participants were fully informed about the study's objectives, the voluntary nature of their participation, and their right to withdraw at any point. Written consent was obtained for both interviews and survey participation.
- **Confidentiality:** Data were anonymized to protect participant identities, and all research materials were securely stored.
- **Case Study Data:** Only publicly available data were used for case studies, ensuring transparency and avoiding any ethical conflicts.
- **Institutional Oversight:** The study adhered to ethical guidelines established by institutional review boards, maintaining integrity throughout the research process (Leonidou, Leonidou, Palihawadana, & Hultman, 2011).

EMPIRICAL DATA

This section presents the key findings, patterns, and statistical insights derived from the study, which highlight the challenges and trends in detecting and addressing greenwashing in sustainability reporting. By analysing survey data, interviews, and case studies, the research identifies critical issues such as the lack of standardized frameworks, the complexity of ESG data, limited transparency, and organizational resistance. Furthermore, specific examples illustrate the real-world implications of these challenges, providing a comprehensive understanding of greenwashing practices across industries. The findings aim to inform actionable strategies for improving audit practices and fostering transparency in ESG reporting.

Key Findings

The study identified several significant challenges and trends in detecting and addressing greenwashing. Each finding is supported by quantitative analysis, qualitative insights, and statistical tests to ensure robust conclusions.

a. Lack of Standardized Frameworks

- **Finding:** 67% of respondents identified the absence of universal sustainability reporting standards as a major challenge. This issue was consistent across industries, with no statistically significant differences ($\chi^2 = 3.12$, $p = 0.21$).
- **Analysis:** The lack of universal standards leads to inconsistent reporting practices. Frameworks like the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB) are widely used but re-

main voluntary, creating challenges for auditors in evaluating sustainability claims uniformly.

b. Complexity of ESG Data

- **Finding:** 62% of participants reported difficulties in assessing subjective and non-quantifiable ESG metrics, particularly in the fashion and energy sectors ($M = 4.2$, $SD = 0.6$) compared to manufacturing ($M = 3.8$, $SD = 0.7$). This difference was statistically significant ($t(318) = 2.89$, $p < 0.01$).
- **Analysis:** Qualitative metrics like community engagement and carbon offset programs often lack concrete benchmarks, especially in sectors with fragmented supply chains.

c. Limited Transparency

- **Finding:** 74% of respondents agreed or strongly agreed that companies engage in selective disclosure. A χ^2 -test revealed significant differences by industry ($\chi^2 = 12.47$, $p < 0.05$), with energy (82%) and fashion (77%) industries reporting the highest levels of selective disclosure.
- **Analysis:** Selective disclosure complicates the audit process, particularly in sectors like energy and fashion, where companies often emphasize positive environmental practices while omitting negative impacts.

d. Organizational Resistance

- **Finding:** 58% of respondents reported encountering resistance from management when findings could negatively affect the company's reputation. Larger corporations reported this more frequently ($M = 4.1$, $SD = 0.5$) than smaller firms ($M = 3.6$, $SD = 0.6$), as confirmed by a t-test ($t(318) = 2.45$, $p < 0.05$).
- **Analysis:** Organizational resistance includes withholding critical data or downplaying audit recommendations, particularly in multinational corporations concerned about their public image.

Patterns and Insights

a. Common Practices in Greenwashing

- **Finding:** 80% of respondents in the fashion and energy sectors reported selective disclosures, particularly in renewable energy claims or sustainable material usage.
- **Analysis:** Companies overemphasize positive initiatives while downplaying less favourable aspects, creating a favourable public image while avoiding scrutiny on key issues.

b. Red Flags in Reporting

- **Finding:** 68% of respondents identified vague language, such as "committed to greener practices," as a key indicator of greenwashing. Additionally, 64% highlighted the lack of third-party verification as a concern.
- **Analysis:** Vague language and lack of third-party verification weaken sustainability claims, making it difficult for stakeholders to assess legitimacy.

c. Gaps in Current Practices

- **Finding:** 59% of respondents noted the underutilization of advanced tools like blockchain and data analytics in sustainability audits.
- **Analysis:** Barriers such as cost and technical expertise limit the adoption of tools like blockchain, which could significantly improve the transparency of sustainability audits.

Statistical Insights

The survey data provided key statistical insights into the challenges and patterns associated with detecting greenwashing in sustainability reporting. The findings highlight significant issues such as the lack of standardized frameworks, transparency challenges across industries, and organizational resistance to audit findings. Additionally, the prevalence of vague language in ESG reports further complicates the ability of stakeholders to assess the legitimacy of sustainability claims. The following table summarizes the key metrics and their associated statistical measures:

Table 3. Statistical Insights from Survey Data

Key Metric	Value	Statistical Measure
Total survey responses	320	Descriptive statistics
Lack of standardized frameworks	67% agreement	$\chi^2 = 3.12, p = 0.21$
Transparency issues by industry	Energy (82%), Fashion (77%)	$\chi^2 = 12.47, p < 0.05$
Organizational resistance	58% agreement	$t(318) = 2.45, p < 0.05$
Vague language in reporting	68% agreement	Mean = 4.1, SD = 0.5

Source: Author's research based on survey data

Case Examples

The following case examples illustrate real-world instances of both successful and unsuccessful efforts in addressing greenwashing. These examples highlight the diverse challenges faced by auditors and organizations in verifying sustainability claims. They also demonstrate the importance of thorough audits, holistic assessments, and independent verification in mitigating greenwashing practices across industries.

a. Successful Audit of Greenwashing Claims

An energy company's claim of 100% renewable energy was audited, revealing discrepancies in procurement records. Only 60% of energy came from renewable sources, leading to a revised sustainability report.

b. Greenwashing in the Fashion Industry

A fashion brand promoted sustainable manufacturing but excluded emissions from transportation. Auditors recommended supply chain-wide assessments for accurate reporting.

c. Failure to Detect Greenwashing

A multinational corporation's self-reported reductions in water usage were based on facility reclassification rather than actual improvements. The case highlighted the risks of relying on self-reported data without independent verification.

RESULTS AND DISCUSSION

The results of this study reveal critical insights into the systemic challenges and opportunities for addressing greenwashing in sustainability reporting. By synthesizing findings from survey data, interviews, and case studies, the research underscores the multifaceted nature of greenwashing and its implications for stakeholders. This section integrates key findings with broader implications, highlighting the interconnectedness of challenges such as the lack of standardized frameworks, the complexity of ESG data, and organizational resistance. The discussion further explores actionable recommendations to mitigate these issues, emphasizing the collaborative role of auditors, corporations, and policymakers in fostering transparency and accountability.

Synthesis of Findings

The findings emphasize systemic challenges in detecting greenwashing, which include the lack of standardized frameworks, complexity in evaluating ESG data, limited transparency, and organizational resistance. These challenges do not exist in isolation but are interconnected. For instance, the absence of universal frameworks contributes to inconsistencies in reporting, making it easier for organizations to exploit gaps in transparency. The complexity of ESG data further complicates efforts to audit sustainability claims effectively, particularly in industries like energy and fashion where selective disclosures are common.

Broader Implications

The findings of this study reveal critical areas that need to be addressed to improve the transparency and credibility of sustainability reporting. The broader implications extend beyond the challenges of greenwashing detection and emphasize systemic changes required at multiple levels—policy, organizational practices, and technological innovation. By addressing these areas, stakeholders can work towards fostering a more reliable and accountable ESG reporting environment. Below are three key focus areas that demonstrate the potential for significant impact:

a. The Role of Standardization

Standardized frameworks, such as GRI and SASB, are critical for enhancing the reliability and comparability of ESG data across industries. Their voluntary nature, however, limits widespread adoption, resulting in discrepancies in sustainability claims. Policymakers and industry leaders need to push for mandatory frameworks to ensure consistency. Industries that have embraced these standards, such as finance, provide a successful model for how universal adoption can improve the credibility of sustainability reporting.

b. Importance of Independent Verification

Third-party audits play an essential role in ensuring the integrity of ESG claims.

Many companies rely on self-reported data, which is often incomplete or misleading. Independent verification can address these gaps by cross-checking data against objective standards. This is particularly important in sectors with complex supply chains, such as fashion and energy, where selective disclosure of positive practices is prevalent. Independent certification mechanisms, such as renewable energy credits, serve as examples of effective verification processes.

c. Technology as a Solution

Emerging technologies like blockchain and AI provide transformative opportunities to address gaps in ESG reporting. Blockchain can ensure traceability and transparency by creating immutable records of sustainability claims. AI, on the other hand, can analyse large datasets for inconsistencies, helping auditors identify patterns of greenwashing. While these tools are underutilized due to cost and technical barriers, their potential to improve audit efficiency and accuracy is immense. Scaling the adoption of these technologies requires investment and collaboration among stakeholders.

Recommendations

To address the challenges of greenwashing and improve the credibility of sustainability reporting, tailored recommendations are provided for auditors, corporations, and policymakers. Each stakeholder plays a crucial role in fostering transparency, accountability, and the adoption of best practices. Below is a detailed outline of actionable strategies:

a. For Auditors:

- **Advocate for standardized frameworks:** Work closely with policymakers and organizations to implement globally recognized frameworks, such as GRI and SASB, to ensure consistency in reporting.
- **Utilize independent verification:** Conduct rigorous third-party audits to validate self-reported ESG data, reducing the risks of greenwashing and enhancing credibility.
- **Adopt advanced technologies:** Leverage tools like blockchain to improve traceability and AI-powered analytics to detect discrepancies in reported data efficiently.

b. For Corporations:

- **Adopt comprehensive reporting practices:** Provide detailed and holistic sustainability reports that include both achievements and shortcomings to build trust with stakeholders.
- **Strengthen internal controls:** Develop systems and processes for verifying sustainability data internally, including regular audits and cross-functional collaboration.
- **Avoid vague and misleading language:** Communicate sustainability goals and achievements clearly and back them with measurable, verifiable data.

c. For Policymakers:

- **Mandate standardized reporting:** Introduce legal requirements for companies to adopt frameworks like GRI or SASB to ensure transparent and comparable ESG reporting.
- **Introduce penalties for greenwashing:** Implement fines and other consequences for companies found guilty of misleading sustainability claims.
- **Promote independent audits:** Offer incentives for companies to engage third-party auditors, such as tax benefits or recognition programs, to encourage accurate reporting.

CONCLUSION

This study examines the role of auditors in identifying and mitigating greenwashing, providing valuable insights into the persistent challenges and opportunities within sustainability reporting. The research confirms the critical importance of auditors in enhancing the credibility and transparency of Environmental, Social, and Governance (ESG) claims. Findings validate the hypothesis that the lack of standardized frameworks, complexity in ESG data, and organizational resistance significantly impede efforts to combat greenwashing, emphasizing the need for global harmonization in reporting standards.

The study's results underscore the transformative potential of advanced technologies such as blockchain and AI in addressing these challenges, offering innovative solutions for ensuring data integrity and traceability. By leveraging these tools, auditors can enhance their ability to detect discrepancies and foster greater accountability in sustainability practices. Furthermore, recommendations for auditors, corporations, and policymakers emphasize the need for holistic reporting, independent verification, and stricter regulations to mitigate greenwashing and strengthen stakeholder trust.

Despite these contributions, the research acknowledges several limitations, including its reliance on self-reported data and the geographical scope of participants, which may not fully capture sector-specific nuances globally. Additionally, the underutilization of advanced auditing tools remains an area for further exploration.

Future research should focus on cross-industry and cross-regional comparisons of greenwashing practices, while exploring the integration of cutting-edge technologies in auditing. Policymakers must prioritize the development of universally accepted ESG reporting standards to reduce inconsistencies, while organizations should foster a culture of transparency and accountability by embracing comprehensive reporting mechanisms.

By addressing these challenges collaboratively, stakeholders can work toward building a robust and ethical framework for sustainability reporting. This will not only mitigate the risks associated with greenwashing but also contribute to genuine environmental and social progress, ensuring that corporate sustainability claims are both credible and impactful.

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