

Carbon Footprint Reduction Strategy at Kompas Gramedia

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ABSTRACT

Keywords:

carbon reduction strategy;
environmental management;
carbon footprint;
media industry;
strategic management

Studies related to carbon emission reduction in business entities have been mostly conducted in the manufacturing, transportation, and energy sectors. Internal strategies for reducing carbon footprints in the media industry are still relatively limited, particularly in developing countries, including Indonesia. This research aims to analyze the carbon footprint reduction strategies formulated and implemented by Kompas Gramedia (KG) Media, an integrated media company, which positions media as a business focus that simultaneously acts as an emissions producer and an agent for shaping public awareness. The research employed a qualitative approach with a case study design. Data were obtained through in-depth interviews with strategic company actors, followed by analysis of policy documents and observations of operational practices. The analysis was conducted thematically, referring to Fred R. David's strategic management framework (strategy formulation, implementation, and evaluation) and linked to the concept of corporate sustainability and carbon footprint management based on the Greenhouse Gas Protocol. The results of this study indicate that the carbon footprint reduction strategy implemented at KG Media is not only oriented towards operational technical efficiency, but is integrated with the transformation of the media business model through digitalization, sustainability governance, and the formation of a low-carbon organizational culture. The novelty of this study lies in mapping carbon reduction strategies in the media industry as a non-manufacturing sector, as well as in the finding that the integration of internal strategies and media educational functions strengthens the effectiveness of corporate sustainability.

INTRODUCTION

Climate change is a global challenge that demands the active involvement of various industrial sectors in reducing carbon emissions. Academic discourse and public policy have historically focused on the energy, manufacturing, and transportation sectors as the primary contributors to carbon emissions. However, with the development of the digital economy, the media industry is beginning to be recognized as having a significant carbon footprint through energy consumption, content production, distribution, and digital infrastructure.

Globally, a number of media companies have adopted carbon reduction strategies as part of their corporate sustainability commitments. This practice demonstrates the media's shift from being merely an environmental communications actor to a business entity responsible for the ecological impact of its operations. In the Indonesian context, Kompas Gramedia (KG) Media is the largest media group with an integrated business model spanning print, digital, and

broadcast media. This complexity makes KG Media a relevant case study for analyzing how carbon reduction strategies are implemented in the media sector.

Previous studies on carbon emission reduction have predominantly focused on manufacturing, energy, and transportation sectors, which are traditionally categorized as high-emission industries (Porter & Kramer, 2011). Research on environmental management in the media industry has largely examined the media's role as an agent of environmental advocacy and climate change communication, rather than as an object of emissions management. Fouladvand (2023) identified challenges and opportunities for media organizations in managing carbon footprints in the digital era, but the study was conducted in the European context and did not specifically address the unique characteristics of media industries in developing countries. Linnenluecke and Griffiths (2010) emphasized the importance of organizational culture in corporate sustainability, yet their research focused on general business sectors rather than the specific dynamics of media companies. In Indonesia, studies on carbon management remain concentrated on the palm oil, mining, and manufacturing sectors, while empirical studies on carbon management in the Indonesian media industry are still very limited (Goh et al., 2016; Nasih et al., 2019; Pirard et al., 2017).

However, empirical studies on carbon management in the Indonesian media industry are still very limited (Gonzalez-Redin et al., 2020; Wardhani & Rahadian, 2021). Previous research has focused more on the media's role as an agent of environmental advocacy, rather than as an object of emissions management. This gap highlights the need for research that examines carbon footprint reduction strategies in the media industry from a strategic management perspective. This gap highlights the need for research that examines carbon footprint reduction strategies in the media industry from a strategic management perspective, particularly in the context of developing countries where regulatory pressures may differ from those in developed nations. The novelty of this study lies in three main aspects. First, this research maps carbon reduction strategies in the media industry as a non-manufacturing sector, an area that has received limited attention in the existing literature. Second, this study identifies how the integration of internal carbon reduction strategies with the media's educational function as a public awareness generator strengthens the effectiveness of corporate sustainability, a finding that has not been extensively explored in previous research. Third, this research provides empirical evidence from an Indonesian media company, contributing to the diversification of geographical contexts in carbon management studies beyond Western and industrialized country settings.

Based on the identified gaps, the objectives of this research are as follows. First, this study aims to analyze the carbon footprint reduction strategies formulated and implemented by Kompas Gramedia (KG) Media, an integrated media company in Indonesia. Second, this research seeks to examine how carbon reduction strategies are integrated with the transformation of the media business model through digitalization, sustainability governance, and the formation of a low-carbon organizational culture. Third, this study aims to evaluate the effectiveness of carbon reduction strategies in contributing to the three dimensions of corporate sustainability: environmental, economic, and social performance.

The benefits of this research are both theoretical and practical. Theoretically, this study extends Fred R. David's strategic management framework to carbon management in the media industry, enriching understanding of proactive environmental strategies in non-emission-

intensive sectors. It also advances stakeholder and legitimacy theories in the context of media companies facing reputational pressures to align environmental narratives with internal practices. Practically, this research provides a reference framework for media companies and sustainability practitioners in developing countries to integrate carbon reduction strategies with business transformation through digitalization, governance, and organizational culture. For policymakers, it highlights the need to support carbon management in the service and media sectors. For academics, it offers a methodological framework for studying carbon management in non-manufacturing sectors and opens avenues for comparative research.

METHOD

This research used a qualitative approach with a case study design. This approach was chosen to gain an in-depth understanding of the strategic processes, organizational dynamics, and context behind the carbon footprint reduction strategies of media companies. Case studies allow researchers to holistically explore phenomena within a real-life context, particularly when the boundaries between phenomenon and context cannot be clearly separated. The object of the research is Kompas Gramedia (KG) Media as an integrated media company in Indonesia, with the study period covering the initial period of the carbon management initiative to the implementation of the strategy (2023–2025).

Unit of Analysis and Research Focus

The unit of analysis for this study is the media business units under KG Media, including print, digital, and broadcast media. The analysis focuses on carbon footprint reduction strategies as part of the company's strategic management, which are examined through three main stages: strategy formulation, strategy implementation, and strategy evaluation. This study does not aim to measure carbon emissions quantitatively, but rather analyzes the organization's strategies, policies, and practices related to carbon footprint management and reduction.

Data collection technique

In- depth interviews interviews

Semi-structured interviews were conducted with key informants directly involved in the formulation and implementation of sustainability strategies, including senior management, the sustainability/ESG division, and related operational units.

Document analysis

The documents analyzed included internal company policies, sustainability reports, environmental program documents, and official company publications relevant to carbon emission management.

Limited observation

Observations were conducted to gain a contextual understanding of the implementation of carbon reduction practices in the company's operational activities.

Data Analysis Techniques

Data analysis was conducted thematically using an inductive approach. The analysis process included initial coding, grouping themes, and interpreting findings. The analytical framework refers to Fred R. David's strategic management theory, which encompasses strategy formulation, implementation, and evaluation, and is linked to the concept of corporate

sustainability (triple bottom line) and carbon footprint management based on the Greenhouse Gas Protocol.

Data validity is maintained through triangulation of sources and methods, as well as verification of findings with key informants (members) check.

RESULT AND DISCUSSION

Formulating a Carbon Footprint Reduction Strategy Internally at KG Media

Research findings indicate that the formulation of a carbon footprint reduction strategy at Kompas Gramedia (KG) Media is not based on coercive regulatory obligations, but rather the result of a combination of strategic internal and external factors. Internally, top management commitment is a key determinant in initiating the carbon management agenda. This commitment is reflected in the integration of sustainability issues into corporate policies and the establishment of an organizational structure responsible for implementing environmental programs.

Externally, reputational pressures and public expectations of the media play a significant role. As an institution that routinely produces and disseminates information on climate change and sustainability, KG Media faces moral and institutional demands to ensure consistency between its editorial narrative and internal operational practices. This pressure is amplified by the global dynamics of Environmental, Social, and Governance (ESG), which increasingly influences stakeholder perceptions of corporate legitimacy and credibility.

This finding aligns with the literature suggesting that companies in non-emission-intensive sectors tend to adopt proactive environmental strategies in response to normative and reputational pressures, rather than solely regulatory pressures. In this context, KG Media's carbon reduction strategy can be categorized as proactive. environmental strategy, where sustainability is positioned as part of long-term strategic advantage.

Table 1. Findings Referring to Strategic Theory

Strategy Stage	Analysis Aspects	Key Findings
Formulation	Strategy drivers	Carbon footprint reduction strategies are driven by management commitment and reputational pressures, not regulatory obligations.
	Priority setting	The initial focus is on managing scope 1 and 2 emissions because they are more measurable and within the company's control.
Implementation	Energy efficiency	Optimization of energy consumption of buildings and operational facilities
	Digitalization	Digitalization of work processes reduces paper consumption and physical distribution.
	Governance	The establishment of sustainability functions and cross-unit coordination strengthens implementation.
Evaluation	Evaluation mechanism	Evaluation is conducted through sustainability reporting and carbon standard-based measurements.

	Challenge	Scope 3 emissions management is still limited due to data and coordination constraints.
Impact	Environment	Reduction in emission intensity and energy consumption
	Economy	Cost efficiency and support for business model transformation
	Social	Increasing awareness and low carbon organizational culture internally

Source: Author's analysis based on interview findings and Fred R. David's strategic management framework (2017)

Emission Source Mapping and Strategic Priority Setting

The strategy formulation stage is characterized by the company's efforts to map the sources of the organization's carbon emissions. Research findings indicate that KG Media prioritizes managing direct emissions (scope 1) and indirect emissions from energy consumption (scope 2) as the initial focus of its strategy. This approach was chosen due to the company's measurability and relatively high level of control over both types of emissions.

In this process, digitalization of work processes emerged as a key structural strategy. The transition from paper-based processes to digital systems was seen not only as a measure for operational efficiency but also as a long-term strategy to reduce carbon emissions. Digitalization was positioned as a co-beneficial solution, providing environmental benefits while supporting the transformation of media business models.

These findings demonstrate that KG Media's carbon reduction strategy was formulated in a phased and pragmatic manner, taking into account organizational capacity and internal system readiness. This approach is consistent with the strategic management perspective that emphasizes the importance of incremental strategies in dealing with complex and cross-functional issues such as environmental sustainability.

Implementation of Carbon Footprint Reduction Strategy

During the implementation phase, carbon footprint reduction strategies are translated into various operational initiatives, particularly those related to energy efficiency and digital transformation. Research findings indicate that companies are optimizing energy use in work facilities by managing electricity consumption, utilizing energy-efficient technologies, and adopting more flexible and adaptive work patterns (Lobus et al., 2023; Padilla-Rivera et al., 2018; Schanes et al., 2016).

Digitizing content production and distribution processes is a key pillar of strategy implementation. Gradually reducing reliance on print media has resulted in lower paper consumption, energy consumption, and distribution logistics. This transformation not only contributes to lower carbon emissions but also improves cost efficiency and speeds up information distribution.

From a strategic management perspective, these findings demonstrate that environmental strategies can align with a company's core business strategy. The implementation of a carbon reduction strategy at KG Media is not positioned as an additional cost burden, but rather as part of an effort to improve the organization's efficiency and competitiveness.

Developing Sustainability Governance and Low Carbon Organizational Culture

Beyond technical aspects, this study found that organizational governance and work culture play a crucial role in the successful implementation of carbon reduction strategies (Obiasor et al., 2025; Roos et al., 2023). Establishing a sustainability team or function allows for cross-business unit coordination and ensures that environmental initiatives are not fragmented (Arokiasamy et al., 2024; Fang et al., 2022).

Changing employee behavior is a crucial aspect of strategy implementation. Internal education programs and environmental awareness campaigns encourage employees to actively participate in low-carbon practices, such as energy conservation and waste reduction. These findings confirm that the success of environmental strategies depends heavily on the acceptance and engagement of internal actors (Abdelwahed & Soomro, 2024).

Sustainability literature emphasizes the importance of organizational Culture as a supporting factor for environmental strategy. In the context of KG Media, a low-carbon organizational culture serves as an informal mechanism that reinforces formal company policies, allowing strategies to be implemented consistently across various operational units.

Evaluation of Sustainability Strategy and Impact

Research findings indicate that the evaluation of KG Media's carbon footprint reduction strategy is conducted through internal measurement and reporting mechanisms that adhere to carbon emission management standards. Sustainability reporting serves as a managerial control tool to monitor the progress of strategy implementation and identify areas for improvement.

However, strategy evaluation still faces challenges, particularly in managing indirect emissions (scope 3) originating from supply chains and external digital activities. Limited data and coordination with third parties are major obstacles to expanding carbon management coverage.

These findings are consistent with the literature indicating that managing scope 3 emissions is a common challenge for many organizations, particularly in the service and media sectors. This suggests that KG Media's carbon reduction strategy is still in its early stages of development and has room for future improvement.

Impact of Strategy on Triple Performance Bottom Line

The strategy's impact analysis shows that implementing a carbon footprint reduction strategy positively contributes to three dimensions of sustainability. Environmentally, the strategy contributes to reduced energy consumption and operational emissions intensity. Economically, energy efficiency and digitalization result in cost savings and increased business process efficiency. Socially, the strategy increases employee environmental awareness and strengthens the company's image as a socially responsible organization.

These findings reinforce the argument that environmental performance and economic performance are not always a trade-off. In the context of KG Media, the carbon reduction strategy actually demonstrates the potential synergy between environmental sustainability and business sustainability. Even events related to reducing the carbon footprint have positively contributed to the company's bottom line.

Table 2. Triple Theory Bottom Line

Dimensions	Main Focus	General Indicators	Relevance in Research
People (Social)	The impact of organizational activities on human and societal well-being	Employee welfare, occupational safety, environmental participation and awareness, social contribution	The carbon footprint reduction strategy drives increased environmental awareness and a low-carbon organizational culture at KG Media.
Planet (Environment)	The impact of organizational activities on the natural environment	Energy consumption, greenhouse gas emissions, waste management, resource efficiency	Reducing carbon emissions through energy efficiency, digitalization of work processes, and managing the organization's carbon footprint.
Profit (Economics)	Sustainability of economic performance and long-term value creation	Cost efficiency, productivity, corporate reputation, business competitiveness	The integrated carbon strategy with operational efficiency and media business model transformation also made a positive contribution to the events held.

Source: Author's analysis based on interview findings and Elkington's Triple Bottom Line framework (1997)

Repositioning the Media Industry in the Low-Carbon Transition

Overall, the findings of this study indicate that KG Media's carbon footprint reduction strategy reflects the media industry's repositioning as it transitions to a low-carbon economy. Media no longer merely act as communicators of climate change issues, but also as business entities actively managing the environmental impact of their operations.

The main novelty of this finding lies in the integration of internal carbon reduction strategies with social media's role as a public awareness generator. This integration strengthens corporate legitimacy and creates consistency between values, narratives, and business practices. Thus, carbon reduction strategies in the media sector have a dual dimension: as a managerial instrument and as part of institutional social responsibility.

CONCLUSION

This study concludes that the carbon footprint reduction strategy in the media sector, particularly at Kompas Gramedia (KG) Media, demonstrates a structured and adaptive approach despite the sector not being traditionally categorized as high-emission. The initiative is primarily driven by top management commitment and reputational pressures, especially the need to align the company's role as a communicator of environmental issues with its internal practices. Strategically, the company adopts a phased approach by mapping controllable emission sources, with an initial focus on scope 1 and scope 2 emissions due to their measurability and manageability. Implementation is carried out through concrete actions such

as energy efficiency improvements, digitalization of operational processes, and the strengthening of sustainability governance alongside the development of a low-carbon organizational culture. Importantly, the findings reveal that integrating carbon footprint reduction into strategic management does not hinder economic performance; instead, it can generate added value through increased operational efficiency, business model transformation, and enhanced organizational legitimacy. Furthermore, this research highlights the dual role of the media industry in supporting the transition to a low-carbon economy, not only as a business entity responsible for its environmental impact but also as a social actor that actively shapes public awareness and discourse on climate change issues.

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