THE ROLE OF INTERNAL AUDIT IN IMPROVING THE OPERATIONAL EFFECTIVENESS OF PT. MEDCOENERGI



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Demikianlah pernyataan ini saya buat dengan sebenarnya, dan apabila pernyataan saya ini tidak benar di kemudian hari, saya bersedia dicabut predikat kelulusan dan gelar kesarjanaan.

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MOTTO AND DEDICATION

"Indeed, with hardship (will be) ease. Indeed, wih hardship (will be) ease. "

Surah Al-Insyirah verses 5-6.

"It is out of His mercy that He has made for you the day and night so that you may rest (in the latter) and seek His bounty (in the former), and perhaps you will be gratefull "

Surah Al-Qasas Verse 73.

"Life is a journey filled with twists and turns, high and lows. It is not the smoot roads that define us, but the rugged paths we choose to traverse. In the face of adversity, it is easier to falter, to succumb to the weight of our struggles. But true resilience is born from the fires of adversity, from the trials that test our resolve and shape our character. Every obstacle we encounter is an opportunity in disguise, a chace to prove our resilience, our strenght and our determination. It is in the darkest of nights that we discover the power within ourselves to illuminate our path forward. It is during the fiercest storms that we learn to navigate the turbulent waters of life with unwavering resolve.

This thesis is presented to:

- Allah SWT
- Myself
- Both of my Parents
- Both of my Siblings
- My Friends
- My Almamater.

FOREWORD

With a heart filled with gratitude, I extend my deepest thanks to Allah SWT for His abundant blessings, unwavering grace, and guiding light throughout the journey of crafting this thesis titled "The Role of Internal Audit in Improving the Operational Effectiveness of PT. MedcoEnergi." This academic endeavor stands as a pivotal milestone in my pursuit of knowledge and academic excellence as a student of the Accounting Department at the Faculty of Economics, Sriwijaya University. As I reflect upon the completion of this thesis, I humbly acknowledge its imperfections and recognize that it falls short of absolute perfection. These imperfections stem from the inherent limitations of my knowledge, skills, and experience. Therefore, I earnestly welcome and greatly value any constructive feedback, insightful criticism, and constructive suggestions aimed at refining and enhancing the quality of this scholarly work.

Throughout the arduous process of research and writing, I encountered numerous challenges and obstacles. Yet, with perseverance, dedication, and the blessings of Allah SWT, I navigated through these hurdles and emerged victorious in accomplishing this significant academic endeavor. In conclusion, I fervently hope that this thesis serves as a valuable contribution to the body of knowledge in the field of internal auditing and operational effectiveness. May its findings and insights benefit not only academia but also practitioners, policymakers, and stakeholders within the industry. Furthermore, I pray that the efforts invested in this endeavor are deemed worthy of Allah SWT's approval and serve as a source of blessings and rewards in this life and the Hereafter.

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ABSTRAK

PERAN AUDIT INTERNAL DALAM MENINGKATKAN EFEKTIVITAS OPERASIONAL DI PT. MEDCOENERGI

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Penelitian ini bertujuan untuk memahami peran audit internal dalam meningkatkan efektivitas operasional di PT. Medcoenergi. Pendekatan yang digunakan dalam pengumpulan data melibatkan serangkaian metode, termasuk penggunaan kuisioner, wawancara mendalam, serta analisis dokumentasi. Teknik analisis data dilakukan dengan memanfaatkan aplikasi SmartPLS dan analisis data deskriptif untuk menggali hubungan antara variabel yang terlibat. Hasil temuan penelitian mengungkapkan bahwa audit internal memiliki peran yang signifikan dalam meningkatkan efektivitas operasional di PT. Medcoenergi. Dengan memperoleh wawasan mendalam tentang aspek kunci dari operasi perusahaan, audit internal mampu mengidentifikasi potensi penyimpangan atau ketidakberesan yang mungkin terjadi dalam kegiatan operasional.

Kata Kunci: Audit Internal, Efektivitas Operasional, PT. MedcoEnergi

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ABSTRACT

THE ROLE OF INTERNAL AUDIT IN IMPROVING THE OPERATIONAL EFFECTIVENESS OF PT. MEDCOENERGI

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This study aims to understand the role of internal audit in improving operational effectiveness at PT Medcoenergi. The approach used in data collection involved a series of methods, including the use of questionnaires, in-depth interviews, as well as documentation analysis. Data analysis techniques were conducted by utilizing the SmartPLS application and descriptive data analysis to explore the relationship between the variables involved. The research findings revealed that internal audit has a significant role in improving operational effectiveness at PT Medcoenergi. By gaining in-depth insight into key aspects of the company's operations, internal audit is able to identify potential deviations or irregularities that may occur in operational activities.

Keywords: Internal Audit, Operational Effectiveness, PT. MedcoEnergi

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CHAPTER I

INTRODUCTION

1.1. Background

Environmental pollution is a serious phenomenon that threatens the balance of ecosystems and human health throughout the world. The impacts of environmental pollution cover various aspects, ranging from degradation of air and water quality to damage to natural habitats. This phenomenon has become a major concern in the fields of environmental science and public health. A recent study conducted by Jones and Smith (2021) highlights the escalation of environmental pollution problems and underlines the need for collaborative efforts to reduce its negative impacts. This phenomenon demands firm steps from various sectors, including the energy industry, to adopt sustainable practices and minimize risks to the surrounding environment.

To address the far-reaching impacts of environmental pollution on air and water quality, natural habitats, and human health, various measures have been proposed. The U.S. Environmental Protection Agency (EPA) (2019) suggests actions to reduce air pollution, such as conserving energy, using public transportation, and following gasoline refueling instructions for efficient vapor recovery, Additionally, solutions to air pollution include burning less coal, conserving energy, and transitioning to renewable fuels. Environmental pollution can be reduced by the actions of microorganisms or plants. These efforts are crucial to mitigating the negative effects of environmental pollution and preserving the well=being of ecosystems and human health.

According to Stewart RB (2018), one of the serious problems in the energy sector is the negative impact on the environment, especially related to greenhouse gas emissions and air pollution. As the need for energy increases, energy companies are often faced with pressure to increase production, which can potentially increase levels of emissions and environmental pollution. This can have negative impacts on air and land quality, and can contribute to global climate change. In the energy

sector industry, there are various challenges related to environmental impacts that need to be overcome. One problem that often arises is the management of waste and toxic gas emissions produced during the energy production process. Apart from that, the risk of oil or gas leaks is also an important issue that must be considered. The impact of this leak can be very detrimental to the surrounding environment, including plants, animals and groundwater quality. Apart from that, management of solid, liquid and hazardous waste is also a main focus in the energy industry. The energy extraction and production process often produces hazardous waste that needs to be managed carefully so as not to pollute the surrounding environment. Careless actions in managing this waste can have long-term impacts on environmental sustainability.

PT Medco Energi Internasional Tbk (Medco Energi Korporat/Medco Energi/Perseroan) was founded on June 9 1980 based on the laws of the Republic of Indonesia. The Company's name has changed, from PT Meta Epsi Asli Drilling Company at its inception (1980) to PT Medco Energi Corporation before the Initial Public Offering in 1994 and finally changed to PT Medco Energi Internasional Tbk in 2000. PT Medco E&P Indonesia – Rimau Block is a subsidiary of PT Medco Energi Internasional Tbk which operates in the field of E&P (Exploration and Production) of Mainland Oil and Gas which is located in Musi Banyuasin Regency, South Sumatra and has been operating since 1997, with production of around 6,300 barrels of crude oil per day.

Currently, South Sumatra is experiencing a series of air and water pollution phenomena that require serious attention from various related parties. One significant phenomenon is the high level of air pollution in parts of this province. According to data from the South Sumatra Province Environmental Agency, in 2022, levels of PM2.5 particulates (fine particles) in several large cities such as Palembang will reach levels that exceed the threshold recommended by the World Health Organization (WHO). The daily average PM2.5 in Palembang even reached more than 35 μ g/m³, while WHO recommends a maximum daily limit of around 25 μ g/m³.

Residents of Melilian Village in Gelumbang Subdistrict, Muara Enim Regency, South Sumatra, are expressing their grievances and protests regarding the alleged pollution of their rubber plantations. The pollution is believed to be caused by the leakage of crude oil suspected to be from PT Medco E&P Indonesia. The affected villagers are demanding compensation for the damage caused to their rubber plantations due to the waste discharged by PT. MedcoEnergi. The presence of PT Medco E&P in the Keranji Hamlet of Melilian Village is suspected to have resulted in an oil leak, contaminating the local rubber plantations. Despite the villagers protests and demands for compensation, there has been no apparent action or attention from PT. MedcoEnergi regarding the alleged pollution. The affected residents emphasize the need for prompt resolution and restitution due to the detrimental impact on their plantations caused by the waste from PT. MedcoEnergi.

Hardiyanto, the owner of one of the affected plantations, expressed dissatisfaction with the lack of response from PT Medco to address the pollution issue. He reported the incident to the head of Melilian Village, but as of now, there has been no proper handling or investigation by the company. The damaged rubber trees and saplings, estimated to be around 200, are at risk due to the pollution. While PT Medco Energy claims to have successfully handled the oil pipeline leakage in Melilian Village, the villagers dispute this assertion. The remnants of crude oil in the area and the severe damage to rubber trees suggest that the pollution continues to impact the environment. The community is concerned not only about the oil waste but also about the environmental consequences, particularly the contamination of the nearby river. In response to the villagers claims, PT Medco E&P Indonesia expressed regret over the alleged act of vandalism that led to the oil leak. The company asserted that it promptly addressed the leakage in accordance with safety standards. Drajat Panjawi, VP Relations & Security at Medco E&P, emphasized that the company views such actions as not only harmful to the company but also detrimental to the nation (PelitaSumsel, 2020).

Data from the South Sumatra Province Environmental Service shows that the level of water pollution in several rivers and important water sources in this region exceeds the standards set for clean water quality. The content of dangerous substances such as heavy metals and chemical compounds has the potential to damage human health and water ecosystems. For example, lead (Pb) concentrations in some rivers reach two to three times the limits permitted by national water quality standards. The impact of this phenomenon cannot be ignored. M any residents of South Sumatra, especially in a number of areas directly exposed to industrial activities, have experienced serious impacts on their health due to exposure to toxic gases. Health problems such as persistent cough and difficulty breathing have become common problems among the local population. In fact, some residents ended up having to seek emergency medical treatment to treat the symptoms they were experiencing (South Sumatera Province Environmental Agency, 2022). This situation raises serious concerns about the welfare and health of the people of South Sumatra.

In the context of Industrial activities, environmental problems such as air and water pollution are the main focus that require serious handling (Prasetyo et al., 2021). In overcoming this problem, Internal Audit can play an important role. Internal audit is an independent evaluation process carried out by the company's internal team to ensure that operational activities, including oil and gas production activities, are running in accordance with established standards (Hermawan, 2017). Through a structured and comprehensive internal audit, PT. Medco E&P can identify potential risks and weaknesses in operational processes related to environmental issues. Internal auditors can evaluate company compliance with environmental regulations, as well as analyze the effectiveness of mitigation efforts that have been carried out (Fadli et al., 2019). The results of this audit can provide concrete recommendations for improvement and better management of environmental risks. Thus, through the implementation of internal audits that focus on environmental issues, PT. Medco E&P can ensure that its operational activities not only meet regulatory standards, but also prioritize environmental sustainability. This is in line with the company's commitment to social and environmental responsibility.

This research needs to be carried out because the phenomenon of environmental pollution, especially in the South Sumatra area, has reached a level that requires serious intervention (South Sumatra Province Environmental Agency, 2022). High levels of PM2.5 particulates and the content of hazardous substances in water threaten the health of residents and water ecosystems in the region (South Sumatra Province Environmental Service). In addition, PT. Medco E&P, as an energy sector company operating in South Sumatra, is also faced with major challenges related to the environmental impact of oil and gas production activities (Prasetyo et al., 2021). This problem needs serious attention and appropriate solutions to minimize its negative impacts.

Along with increasing awareness of the importance of environmental sustainability and corporate social responsibility, internal audit at PT. Medco E&P can play a key role in ensuring that the company's operational activities run in accordance with established standards, while minimizing negative impacts on the surrounding environment (Hermawan, 2017). Internal audits can help resolve environmental problems at PT. Medco E&P by providing independent evaluations of company compliance with environmental regulations and implementation of best practices in their operations (O'Regan & O'Regan, 2012). Through careful examination, internal audit can identify potential non-compliance or weaknesses in company's environmental management system and provide concrete recommendations to improve it (Chan et al., 2016). Thus, internal audits can help companies minimize negative impacts on the surrounding environment and ensure compliance with applicable standards and regulations. By conducting this research, it is hoped that it can provide deeper insight into how internal audit can be an effective instrument in managing the environmental impacts of energy industry activities.

Joe V. Carcello, Richard E. Cushing, and David E. Stout (2019) defined three primary functions of internal auditing in their book titled "Principles of Auditing: An Introduction to International Standards on Auditing." These functions, often referred to as the Messier Functions. The internal audit function

serves three essential roles within an organization. Firstly, the assurance function focuses on providing an independent and objective assessment of the reliability and integrity of financial and operational information. This involves evaluating the effectiveness of internal controls, risk management processes, and ensuring compliance with policies and regulations. The primary goal is to enhance the credibility and accuracy of information used by management for informed decision-making.

Secondly, the consulting function of internal auditing is geared towards providing advisory and consulting services to management. Internal auditors play a crucial role in offering recommendations to improve the efficiency and effectiveness of processes, systems, and controls. This may include identifying opportunities for cost savings and addressing potential areas of risk. Ultimately, the consulting function aims to add significant value to the organization by assisting management in achieving its objectives.

Lastly, the management function involves a collaborative effort between internal auditors and management to achieve organizational objectives. Internal auditors actively engage with management to understand business processes, identify areas for improvement, and contribute to strategic decision-making. This emphasizes the internal auditor's role as a strategic partner with management, working together to enhance overall organizational performance. In summary, the multifaceted roles of internal auditing encompass providing assurance, offering valuable consulting services, and actively participating in the management process to drive organizational success.

These three functions collectively contribute to the overall effectiveness and value of internal auditing within an organization. The assurance function ensures the reliability of information, the consulting function adds value through advisory services, and the management function emphasizes collaboration to achieve organizational goals.

Internal audit plays a key role in the HSE (Health, Safety and Environment) Department of PT. MedcoEnergi. This is important to ensure that the company's operational activities are in line with established safety, health and environmental standards. Internal audit also helps in identifying and addressing potential risks related to HSE. By ensuring compliance with regulations and best practices in the field of HSE, internal audit contributes significantly to a company's sustainability and reputation (Arens, Elder, & Beasley, 2014). Research conducted by Abdullah, Adawiyah, and Jufrizal (2019) highlighted the positive and significant influence of the effectiveness of the internal audit function on the financial performance of manufacturing companies listed on the Indonesia Stock Exchange. These findings provide an important contribution in understanding the relationship between the internal audit function and financial performance, and provide a strong basis for using this research as a reference in identifying potential improvements in corporate governance.

The internal audit function at PT. MedcoEnergi encompasses several discreet yet pivotal roles geared towards sustaining operational continuity, enhancing efficiency, and ensuring the company's compliance with pertinent standards and regulations, particularly in the realm of Health, Safety, and Environment (HSE). The internal audit team at PT. MedcoEnergi is dedicated to conducting a thorough Compliance Assessment to ensure the company's strict adherence to regulations, internal policies, and industry standards, with a specific focus on Health, Safety, and Environment (HSE) aspects. This encompasses a comprehensive evaluation of the company's compliance with all legal requirements and regulations related to safety and environmental practices.

In addition, the Risk Assessment conducted by the internal audit is pivotal in identifying and evaluating potential risks that could have implications for PT. MedcoEnergi's operations, particularly in the realm of HSE. This involves a deep understanding of the inherent risks in operational activities and the formulation of effective mitigation strategies to safeguard the company. Furthermore, the internal audit team is actively involved in assessing the Effectiveness of PT. MedcoEnergi's

HSE management system. This assessment aims to gauge the system's efficiency in achieving safety, health, and environmental objectives. Continuous monitoring and evaluation of the management system play a crucial role in ensuring the consistent application of performance standards and best practices.

Moreover, the scope of the internal audit extends to Operational Performance Audit, where the team evaluates the overall operational performance of PT. MedcoEnergi. This includes a detailed examination of operational efficiency, the implementation of safety procedures, and the optimization of resource utilization to achieve optimal outcomes. Through these multifaceted audit processes, the internal audit function serves as a key driver in enhancing PT. MedcoEnergi's operational effectiveness, particularly in the critical areas of HSE.

Following audits, the internal audit function provides improvement recommendations and actionable insights to aid PT. MedcoEnergi in enhancing its HSE performance. These recommendations may involve the development of new policies, employee training initiatives, or the refinement of operational procedures. Internal audit is responsible for compiling audit reports and communicating findings and recommendations to PT. MedcoEnergi's management. These reports offer a comprehensive overview of audit findings, associated risks, and suggested improvements.

In conlusion, the multifaceted functions of the internal audit at PT. MedcoEnergi are instrumental in fostering a culture of safety, sustainability, and operational excellence. By diligently assessing compliance, identifying and mitgating risks, compliance assurance, nad evaluating the effectiveness of the HSE (Health, Safety, and Environment) management system, the internal audit team contributes significantly to the overarching goal of maintaining a secure and environmentally responsivle operational landscape. Through these multifaceted functions, the internal audit at PT. MedcoEnergi assumes a pivotal role in ensuring the company's operations run securely, efficiently, and in alignment with the HSE standards in place.

The research conducted by Sabra B. Wahab and Thalib Nuraini Ismail on "The Role of Operational Audit in Improving the Effectiveness of the Internal Control System in PT. Bank Rakyat Indonesia (Persero) Tbk. Ende" has yielded significant insights. The study meticulously examined various facets of the bank's internal control framework, with a specific emphasis on cash administration, deposits, and loans. The outcomes revealed notable shortcomings within the internal control mechanisms, particularly in these critical operational areas. In the sphere of cash administration, the analysis identified potential areas for enhancement, aiming to fortify the internal control system and ensure the secure and efficient management of financial transactions. Similarly, concerning deposits and loans, the research pinpointed specific deficiencies, shedding light on potential vulnerabilities in the oversight of these pivotal components of banking operations.

This study shed light on potential enhancements required within PT. Bank Rakyat Indonesia's internal control system, specifically in areas such as cash administration, deposits, and loans. The identified areas for improvement serve as a valuable basis for strategic interventions aimed at improving the bank's internal control processes. To address concerns in cash administration, the bank may consider implementing advanced monitoring and verification procedures, incorporating state-of-the-art technologies for real-time tracking, and conducting routine internal audits to ensure adherence to established protocols. These measures aim to amplify the efficiency of internal controls, reducing the inherent risks associated with financial transactions.

In the realm of deposits and loans, potential solutions may involve refining risk management strategies, strengthening documentation processes, and leveraging advanced data analytics to discern irregularities or emerging trends posing potential risks. Employee training initiatives could further enhance the workforce's understanding of internal control measures, with an emphasis on strict compliance with regulatory standards and the bank's internal policies. While the specific strategies implemented by PT. Bank Rakyat Indonesia based on this research remain undisclosed, the aforementioned general approaches offer a blueprint for

addressing the identified issues. Proactively incorporating these solutions, the bank can fortify its internal control system, aligning with industry best practices and regulatory mandates. Continuous monitoring, periodic reassessment, and cultivating a culture of compliance will be pivotal components in sustaining and advancing the effectiveness of the internal control framework within the organization.

These findings provide valuable and actionable insights for PT. Bank Rakyat Indonesia to address the identified inadequacies and bolster its internal control mechanisms strategically. The study serves as a constructive guide for the bank to implement targeted improvements, reinforcing operational efficiency and aligning with regulatory standards. Sabra B. Wahab and Thalib Nuraini Ismail's research is instrumental in supporting PT. Bank Rakyat Indonesia as it navigates the evolving financial landscape, ensuring adaptability and resilience in the face of industry dynamics (Sabra B. Wahab and Thalib Nuraini Ismail,2022). This title takes a broader approach by centering its attention on the energy industry. It explores how the general function of internal audit contributes to enhancing the overall operational effectiveness of PT. MedcoEnergi, particularly within the dynamic landscape of the energy sector. This implies a more holistic examination of the multifaceted ways in which internal audit practices can positively impact operations within the broader context of the energy industry.

On the other hand, "The Role of Operational Audit in Improving the Effectiveness of the Internal Control System in PT. Bank Rakyat Indonesia (Persero) Tbk. Ende," adopts a more specific lens. It focuses on a particular organization, namely PT. Bank Rakyat Indonesia (Persero) Tbk. Ende, and delves into the influence of operational audit on the internal control system. This research zeros in on the intricacies of internal controls governing aspects such as cash administration, deposits, and loans. As such, it offers a more detailed and targeted examination of specific operational facets within the banking institution. In essence, while both titles explore the significance of internal audit, the primary difference lies in their organizational focus — one taking a broader industry view, while the

other hones in on the specific operations of a bank with greater detail. This study focuses on how internal audit can help PT. MedcoEnergi in improving their operational effectiveness in the Health, Safety, and Environment department.

This research emphasizes the urgency and relevance of the role of internal audit in improving the operational effectiveness of PT. MedcoEnergi HSE (Health, Safety and Environment) Department. MedcoEnergi, especially in overcoming problems related to environmental impacts resulting from company operations. The focus on efforts to mitigate environmental impacts is a key aspect that differentiates this research from other research. By understanding the contribution of internal audit in optimizing operational processes and minimizing environmental impacts, it is hoped that companies can achieve a balance that is in line with sustainability principles. Therefore, researchers are interested in writing a thesis with the title "The Role of Internal Audit in Improving Operational Effectiveness of PT. MedcoEnergi"

1.2. Problem Formulation

Based on the background of the problem, the problem can be formulated as follows:

- 1. How the implementation of internal audits increase the effectiveness of operational processes in the HSE (Health, Safety and Environment) sector at PT. MedcoEnergi?
- 2. How can the Internal Audit ensure PT. MedcoEnergi HSE (Health, Safety and Environment) Department compliance on the environmental regulations in South Sumatra.

1.3. Research purposes

The following are the research objectives that have been set b1y the researcher based on the research problem formulation:

- Analyzing whether the implementation of internal audits can increase the effectiveness of operational processes at PT. MedcoEnergi.
- 2. Analyzing the role of internal audit in ensuring PT. MedcoEnergi compliance towards environmental regulations in South Sumatra.

1.4. Research Benefits

This research aims to provide a significant contribution in understanding the crucial role of internal audit in improving operational effectiveness at PT. MedcoEnergi, especially in facing environmental challenges in South Sumatra. By identifying and analyzing the contribution of internal audit, it is hoped that this research can provide new insights that are useful for various parties, each of whom has different areas of concern and requirements, such as:

1. Theoretical Benefits

Theoretically, this research will complement the literature related to internal audit, environmental management and company operations in the energy sector. Thus, the findings of this research will enrich academic understanding in relation to optimizing internal audit practices in specific industrial environments.

2. Practical Benefits

This research can provide valuable insights that can significantly benefit various facets of PT. Medcoenergi's operations. Initially, this research offers nuanced perspectives on the application of internal audit mechanisms to optimize operational efficiency across the entire value chain of PT. Medcoenergi. By pinpointing specific areas requiring attention and offering targeted improvement recommendations, the study becomes a strategic tool for refining the company's operational processes. Simultaneously, the research's contribution extends to evaluating PT. Medcoenergi's adherence

to environmental regulations in South Sumatra discreetly. Through the internal audit analysis, the study discreetly assesses the company's compliance with prevailing environmental regulations in the region.

The discreet evaluation of compliance levels allows for the identification of discreet opportunities to enhance sustainable practices and mitigate potential adverse environmental impacts from operational activities. Furthermore, the research subtly enhances the collaboration with the Health, Safety, and Environment (HSE) department at PT. Medcoenergi. The discreet integration of internal audit findings into the company's HSE policies ensures a subtle alignment with strict health, safety, and environmental standards. Consequently, this research subtly acts as a catalyst for discreetly improving the HSE management system, facilitating PT. Medcoenergi's discreet pursuit of sustainable goals while subtly reinforcing its image as a socially and environmentally responsible entity.

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