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The evolution of CSR reporting in the oil and gas industry and its future direction: A conceptual review

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Abstract

Corporate Social Responsibility (CSR) reporting has become increasingly important for industries worldwide, particularly in sectors with significant environmental and social impacts such as the oil and gas industry. This paper presents a conceptual review of the evolution of CSR reporting within the oil and gas sector, examining its historical development, current practices, and future directions. The evolution of CSR reporting in the oil and gas industry can be traced back to growing societal and stakeholder pressures for transparency and accountability. Initially, CSR reporting focused primarily on philanthropic activities and compliance with regulations. However, with mounting concerns over environmental degradation, climate change, and social justice issues, stakeholders demanded more comprehensive reporting practices. In response, oil and gas companies have adopted various frameworks and standards, such as the Global Reporting Initiative (GRI) and the United Nations Sustainable Development Goals (SDGs), to guide their CSR reporting efforts. These frameworks help companies disclose their environmental, social, and governance (ESG) performance in a systematic and comparable manner, enhancing accountability and facilitating stakeholder engagement. Looking ahead, the future direction of CSR reporting in the oil and gas industry is likely to be shaped by emerging trends such as increased emphasis on climate-related disclosures, integration of ESG factors into corporate strategy and decision-making, and the rise of digital technologies for data collection and reporting. Moreover, there is a growing recognition of the need for industry-wide collaboration and standardization to improve the credibility and effectiveness of CSR reporting. This conceptual review highlights the evolving landscape of CSR reporting in the oil and gas industry and underscores the importance of continuous improvement and innovation in meeting the evolving expectations of stakeholders and society.

Keyword: Evolution; CSR; Oil and Gas; Industry; Review

1. Introduction

Corporate Social Responsibility (CSR) reporting has emerged as a vital tool for companies to communicate their environmental, social, and governance (ESG) performance to stakeholders (Hoang, 2018.). In the context of the oil and gas industry, where operations often have significant environmental and social impacts, CSR reporting plays a crucial role in addressing concerns and fostering transparency and accountability (Bernardino, 2021).

CSR reporting refers to the process through which companies disclose information about their social, environmental, and economic impacts and activities (Andrew and Baker, 2020). This reporting typically includes data on sustainability

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initiatives, community engagement efforts, environmental performance, and adherence to ethical standards and regulations (Millar and Searcy, 2020).

In the oil and gas industry, CSR reporting holds immense importance due to the sector's considerable influence on the environment, communities, and economies. Given the environmental risks associated with oil and gas extraction and production, along with the industry's social and economic significance, stakeholders expect robust CSR reporting to assess companies' impacts and contributions (Karaman *et al.*, 2021).

The purpose of this conceptual review is to provide an in-depth analysis of the evolution of CSR reporting within the oil and gas industry. By examining historical trends, current practices, and future directions, it will identify key drivers and catalysts that have shaped CSR reporting in the oil and gas sector over time. Evaluate the effectiveness and limitations of existing CSR reporting practices within the industry. Explore emerging trends and challenges that are likely to influence the future of CSR reporting in the oil and gas industry. Offer insights and recommendations for enhancing the credibility, transparency, and relevance of CSR reporting in the sector. Through this conceptual review, stakeholders, including companies, investors, regulators, and civil society organizations, can gain a deeper understanding of the role of CSR reporting in the oil and gas industry and its implications for sustainability and responsible business practices.

2. Historical Evolution of CSR Reporting in the Oil and Gas Industry

The historical evolution of CSR reporting in the oil and gas industry traces back to the early 20th century when companies primarily focused on philanthropic activities and community relations to enhance their corporate image (Lulek and Sadowska, 2020). During this period, CSR reporting was rudimentary and often limited to sporadic disclosures of charitable donations and sponsorships, with little emphasis on environmental or social impacts.

However, as the industry expanded globally and began operating in diverse socio-economic contexts, concerns over environmental degradation and social injustices started to emerge. In response to growing public scrutiny and regulatory pressures, oil and gas companies gradually began to recognize the importance of formalizing their CSR efforts through reporting mechanisms (Borbor *et al.*, 2021).

The emergence of stakeholder pressures played a pivotal role in shaping the evolution of CSR reporting in the oil and gas industry. Communities affected by oil and gas operations, environmental activists, investors, and governments increasingly demanded transparency and accountability from companies regarding their social and environmental performance (Herbert *et al.*, 2020). Incidents such as oil spills, air and water pollution, and human rights violations garnered significant media attention and public outcry, prompting companies to reassess their approach to CSR reporting. Stakeholders demanded access to detailed information about companies' activities, impacts, and mitigation measures, leading to a shift towards more structured and comprehensive reporting practices (Arvidsson and Dumay, 2022).

The shift towards comprehensive CSR reporting in the oil and gas industry gained momentum in the late 20th century with the development of voluntary reporting frameworks and standards. Organizations such as the Global Reporting Initiative (GRI) and the International Petroleum Industry Environmental Conservation Association (IPIECA) played instrumental roles in promoting standardized reporting practices within the industry (Arena *et al.*, 2023).

These frameworks provided guidelines for companies to report on a wide range of ESG issues, including environmental management, human rights, labor practices, community engagement, and corporate governance. Moreover, the emergence of sustainability reporting standards, such as the GRI Sustainability Reporting Standards and the United Nations Sustainable Development Goals (SDGs), encouraged companies to align their reporting with internationally recognized principles and benchmarks (Calabrese *et al.*, 2021).

As a result, CSR reporting in the oil and gas industry evolved from a mere public relations exercise to a strategic business imperative. Companies began integrating CSR considerations into their core business strategies and decision-making processes, recognizing the potential benefits of proactive risk management, stakeholder engagement, and long-term value creation (Settembre-Blundo *et al.*, 2021).

Furthermore, advancements in technology and data management facilitated the collection, analysis, and dissemination of CSR-related information, enabling companies to enhance the accuracy, reliability, and accessibility of their reports. Digital platforms, interactive dashboards, and stakeholder engagement tools have become integral components of CSR reporting, enabling companies to communicate effectively with diverse audiences and solicit feedback in real-time (Oladeinde *et al.*, 2023).

In conclusion, the historical evolution of CSR reporting in the oil and gas industry reflects a gradual transition from reactive and ad hoc approaches to proactive and comprehensive reporting practices (Michelon *et al.*, 2022). While significant progress has been made, ongoing challenges such as data quality, transparency, and stakeholder engagement persist, underscoring the need for continuous improvement and innovation in CSR reporting.

3. Current Practices in CSR Reporting

In the contemporary landscape of corporate social responsibility (CSR) reporting within the oil and gas industry, companies are adopting increasingly robust frameworks and standards, integrating environmental, social, and governance (ESG) factors into their reporting, and leveraging digital technologies to enhance transparency and engagement.

One of the prominent trends in CSR reporting in the oil and gas industry is the widespread adoption of established frameworks and standards (Banerjee, 2020). Organizations such as the Global Reporting Initiative (GRI) provide comprehensive guidelines for companies to structure their CSR reports, ensuring consistency and comparability across industries. The GRI Standards offer a framework for reporting on various sustainability aspects, including environmental impacts, labor practices, human rights, and anti-corruption measures (Michalczuk and Konarzewska, 2020). Many oil and gas companies align their reporting with the GRI Standards to enhance credibility and meet stakeholder expectations.

Moreover, the United Nations Sustainable Development Goals (SDGs) have become another influential framework for CSR reporting in the industry. The SDGs provide a universal roadmap for addressing global challenges, such as climate change, poverty, and inequality. Oil and gas companies align their CSR initiatives and reporting with specific SDGs to demonstrate their contributions towards sustainable development objectives (Borges *et al.*, 2022). By mapping their activities to the SDGs, companies can communicate their impacts in a globally recognized context and contribute to broader societal goals.

In response to evolving stakeholder expectations and regulatory requirements, oil and gas companies are increasingly integrating ESG factors into their CSR reporting. ESG factors encompass a wide range of issues, including climate change mitigation, environmental stewardship, labor practices, human rights, diversity and inclusion, and corporate governance (Aich *et al.*, 2021). By incorporating ESG considerations into their reporting, companies aim to provide a more holistic view of their performance and demonstrate their commitment to sustainable and responsible business practices.

For example, oil and gas companies report on their efforts to reduce greenhouse gas emissions, manage water and energy resources efficiently, minimize environmental impacts, and engage with local communities. They also disclose information about their corporate governance structures, board diversity, executive compensation, and adherence to ethical standards. By addressing ESG issues transparently, companies can build trust with stakeholders, attract investors, and mitigate risks associated with environmental, social, and governance factors (Oncioiu *et al.*, 2020).

Digital technologies play a significant role in enhancing the effectiveness and efficiency of CSR reporting in the oil and gas industry. Companies are leveraging digital platforms, data analytics, and visualization tools to collect, analyze, and present CSR-related information in a more accessible and engaging manner. Digital reporting platforms enable companies to streamline data collection processes, improve data accuracy, and generate real-time insights into their ESG performance (Cerchiaro *et al.*, 2021).

Moreover, digital technologies facilitate interactive and multimedia-rich CSR reports, allowing companies to communicate complex information effectively to diverse stakeholders. Interactive dashboards, infographics, and storytelling techniques enhance the readability and impact of CSR reports, enabling stakeholders to navigate through data and understand key messages more intuitively (Bhat and Alyahya, 2023.). Additionally, digital platforms enable companies to engage with stakeholders directly, solicit feedback, and respond to inquiries in a timely manner, fostering greater transparency and accountability.

In conclusion, current practices in CSR reporting within the oil and gas industry reflect a growing emphasis on adopting standardized frameworks, integrating ESG factors into reporting, and leveraging digital technologies to enhance transparency and engagement. By aligning their reporting with established standards, addressing ESG issues comprehensively, and harnessing the power of digital tools, oil and gas companies can demonstrate their commitment to sustainability and responsible business practices while meeting the evolving expectations of stakeholders (Alkaraan *et al.*, 2022).

4. Challenges and Critiques

Corporate social responsibility (CSR) reporting within the oil and gas industry faces various challenges and critiques, including limitations of current reporting practices, issues of transparency and accountability, and evolving stakeholder expectations and demands (Ewim *et al.*, 2021; Olanipekun *et al.*, 2021).

Despite significant progress in CSR reporting, there are limitations to current practices within the oil and gas industry. One of the primary challenges is the lack of standardization and consistency across reports. While frameworks like the Global Reporting Initiative (GRI) provide guidelines, there is still considerable variability in how companies interpret and apply these standards, leading to inconsistency in reporting metrics and methodologies (Rowbottom, 2023). Moreover, CSR reports often focus on positive achievements and initiatives while downplaying or omitting negative impacts and challenges. This selective reporting can result in a skewed perception of a company's overall sustainability performance, undermining the credibility and reliability of CSR disclosures. Furthermore, CSR reporting tends to prioritize quantitative metrics over qualitative assessments, leading to an overemphasis on easily quantifiable indicators such as carbon emissions or philanthropic spending (Ikwuagwu *et al.*, 2020). This narrow focus may overlook more nuanced aspects of CSR, such as the quality of community engagement or the effectiveness of stakeholder dialogue.

Transparency and accountability are fundamental principles of CSR reporting, yet they remain significant challenges within the oil and gas industry. Companies often face criticism for lack of transparency in disclosing critical information, such as environmental incidents, regulatory violations, or social conflicts associated with their operations (Maduka *et al.*, 2023). Moreover, there are concerns about the reliability and accuracy of CSR data reported by companies. Without independent verification or assurance mechanisms, stakeholders may question the integrity of reported information, leading to skepticism and distrust. Companies may also face challenges in tracking and verifying data across complex supply chains or joint venture partnerships, further complicating transparency efforts (Okunade *et al.*, 2023).

Additionally, there is a need for greater accountability in CSR reporting, particularly regarding the alignment of reported actions with stated commitments and goals. Companies may face scrutiny for greenwashing—making exaggerated or misleading claims about their environmental or social performance to improve their public image without meaningful action (de Freitas Netto *et al.*, 2020; Mouchou *et al.*, 2021). Without robust monitoring and accountability mechanisms, companies risk damaging their reputation and eroding stakeholder trust.

Stakeholder expectations and demands regarding CSR reporting continue to evolve, posing challenges for companies to keep pace with changing priorities and standards. Investors, consumers, regulators, and civil society organizations are increasingly demanding more comprehensive and transparent CSR disclosures from oil and gas companies (Nwagbara and Kalagbor, 2021). For instance, investors are integrating ESG factors into their investment decisions and actively engaging with companies on sustainability issues. As a result, there is growing pressure on oil and gas companies to disclose material ESG risks and opportunities that could impact financial performance and long-term value creation. Similarly, consumers are becoming more conscious of the environmental and social impacts of their purchasing decisions, driving demand for transparent and ethical supply chains. Regulators are also imposing stricter reporting requirements and disclosure obligations, particularly concerning climate-related risks and emissions reductions targets (Ohalete *et al.*, 2023).

Moreover, civil society organizations and advocacy groups are amplifying their calls for greater corporate accountability and transparency, particularly in addressing human rights abuses, environmental pollution, and social injustices associated with oil and gas operations. In conclusion, while CSR reporting has made significant strides within the oil and gas industry, there are still challenges and critiques that need to be addressed. Companies must overcome limitations in current reporting practices, enhance transparency and accountability, and respond effectively to evolving stakeholder expectations and demands to maintain credibility and demonstrate genuine commitment to sustainability and responsible business practices (Owebor *et al.*, 2022).

5. Future Directions of CSR Reporting

Corporate social responsibility (CSR) reporting is expected to evolve significantly in the future, driven by emerging trends and evolving stakeholder expectations (Andrew and Baker, 2020). The oil and gas industry, in particular, is poised to undergo transformative changes in how it communicates its environmental, social, and governance (ESG) performance. Here are four key future directions for CSR reporting in the oil and gas sector:

Climate change is increasingly recognized as one of the most pressing challenges facing the planet, and stakeholders are demanding greater transparency and accountability from companies in addressing their climate-related risks and impacts. In the future, CSR reporting in the oil and gas industry is likely to place a stronger emphasis on climate-related disclosures, including greenhouse gas emissions, energy efficiency measures, and strategies for transitioning to low-carbon energy sources (de Abreu *et al.*, 2021; Sanni *et al.*, 2024).

Companies will be expected to align their reporting with international frameworks such as the Task Force on Climate-related Financial Disclosures (TCFD), which provides guidance on how companies should disclose climate-related risks and opportunities in their financial filings. By adopting the TCFD recommendations, oil and gas companies can enhance their credibility with investors, regulators, and other stakeholders while demonstrating their commitment to managing climate-related risks effectively (Vikas, 2022; Uddin *et al.*, 2022).

Moreover, as the world transitions to a low-carbon economy, there will be increasing pressure on oil and gas companies to disclose their plans for decarbonization and their contributions to global climate goals, such as the Paris Agreement. CSR reporting will play a crucial role in tracking companies' progress towards these objectives and holding them accountable for their commitments (Tamvada, 2020).

In the future, CSR reporting in the oil and gas industry is expected to go beyond mere disclosure of ESG metrics and become more deeply integrated into companies' corporate strategy and decision-making processes. Rather than treating CSR as a separate function, companies will be expected to embed ESG considerations into their overall business strategy, from risk management and investment decisions to product development and supply chain management (Hsu *et al.*, 2022).

This integration of ESG factors into corporate strategy will require a shift in mindset and organizational culture, with top management playing a critical role in championing sustainability and driving change throughout the organization. Companies will need to establish clear governance structures, set ambitious ESG goals, and hold themselves accountable for achieving measurable results (Adegoke, 2023).

Moreover, companies will be expected to engage with a broader range of stakeholders, including employees, customers, suppliers, and local communities, to ensure that their CSR efforts are aligned with stakeholder needs and expectations. By adopting a stakeholder-centric approach to CSR reporting, companies can build trust, enhance reputation, and create long-term value for all stakeholders (Fabian *et al.*, 2023).

Digital technologies are expected to play an increasingly important role in enhancing the effectiveness and efficiency of CSR reporting in the oil and gas industry (Yuen *et al.*, 2023). Companies will leverage advanced data analytics, artificial intelligence (AI), and blockchain technology to collect, analyze, and report on a wide range of ESG metrics in real-time.

Interactive dashboards, visualization tools, and online platforms will enable companies to present CSR data in a more engaging and accessible manner, allowing stakeholders to navigate through complex information and understand key insights more intuitively. Moreover, digital reporting platforms will facilitate two-way communication between companies and stakeholders, enabling greater transparency, dialogue, and collaboration (Uchechukwu *et al.*, 2023).

Furthermore, companies will adopt innovative approaches such as satellite imagery, drones, and IoT sensors to monitor environmental impacts, track biodiversity, and detect potential safety hazards in their operations (Glaviano *et al.*, 2022). By harnessing the power of digital technologies, oil and gas companies can improve their ESG performance, mitigate risks, and enhance their reputation as responsible corporate citizens.

Finally, there is a growing recognition of the need for industry-wide collaboration and standardization to improve the credibility and effectiveness of CSR reporting in the oil and gas industry. Companies, industry associations, regulators, and civil society organizations will need to work together to develop common frameworks, metrics, and reporting standards that can be applied consistently across the sector (Kayode-Ajala, 2023).

Collaborative initiatives such as the Oil and Gas Climate Initiative (OGCI) and the International Association of Oil and Gas Producers (IOGP) have already made significant strides in promoting sustainability and transparency within the industry (Blazquez *et al.*, 2020). Going forward, these collaborative efforts will need to be scaled up and expanded to address emerging ESG challenges and drive meaningful change across the entire value chain.

Moreover, industry-wide collaboration will be essential for sharing best practices, exchanging knowledge, and addressing common challenges such as methane emissions, water management, and human rights (Barbhuiya and Das,

2023.). By working together, oil and gas companies can demonstrate collective leadership on sustainability issues, enhance their social license to operate, and contribute to a more sustainable and responsible energy future.

6. Future Outlook

The future outlook for CSR reporting in the oil and gas industry is promising but challenging. As companies navigate the transition to a low-carbon economy, they will need to adapt their reporting practices to meet evolving stakeholder expectations, regulatory requirements, and industry standards.

While there are significant opportunities for companies to demonstrate leadership on sustainability and drive positive change, there are also risks associated with inadequate transparency, poor governance, and insufficient action on climate change (Kinley *et al.*, 2021). Companies that fail to embrace the shift towards more holistic and integrated CSR reporting may face reputational damage, regulatory scrutiny, and financial penalties.

However, companies that proactively engage with stakeholders, integrate ESG considerations into their corporate strategy, leverage digital technologies for enhanced reporting, and collaborate with industry peers are likely to thrive in the long term (Samans and Nelson, 2022). By demonstrating a genuine commitment to sustainability and responsible business practices, oil and gas companies can build trust, enhance reputation, and create shared value for society and the environment.

7. Conclusion and recommendation

In summary, the analysis of the evolution, current practices, and future directions of CSR reporting in the oil and gas industry reveals several key findings. Firstly, there has been a significant shift from rudimentary philanthropic reporting to more comprehensive and structured CSR reporting, driven by stakeholder pressures and regulatory requirements. Secondly, while current practices have made strides in adopting frameworks, integrating ESG factors, and leveraging digital technologies, there are still limitations and challenges such as variability in reporting, transparency issues, and evolving stakeholder expectations.

Looking to the future, CSR reporting in the oil and gas industry is expected to emphasize climate-related disclosures, integrate ESG factors into corporate strategy, leverage digital technologies for enhanced reporting, and promote industry-wide collaboration and standardization. These future directions reflect the industry's response to emerging sustainability challenges, regulatory trends, and stakeholder demands.

Continuous improvement and innovation are critical for advancing CSR reporting in the oil and gas industry. Companies must remain agile and responsive to evolving stakeholder expectations, regulatory requirements, and industry standards. This entails adopting best practices, embracing emerging technologies, and fostering a culture of transparency, accountability, and sustainability throughout the organization.

Moreover, companies should prioritize innovation in CSR reporting by exploring new approaches, methodologies, and metrics that capture the full spectrum of ESG risks and opportunities. By embracing innovation, companies can enhance the credibility, relevance, and effectiveness of their CSR reporting, driving positive change and creating long-term value for all stakeholders.

Despite the progress made in CSR reporting, there is a need for further research and action to address remaining challenges and gaps in the oil and gas industry. Researchers, practitioners, policymakers, and civil society organizations should collaborate to advance the field of CSR reporting and drive meaningful change in the following areas:

There is a need for greater standardization and harmonization of CSR reporting frameworks, metrics, and methodologies within the oil and gas industry. Companies, industry associations, and regulators should work together to develop common standards that facilitate consistent and comparable reporting practices across the sector. Ensuring the accuracy, reliability, and integrity of CSR data remains a challenge for companies. Further research is needed to improve data collection methods, enhance data verification processes, and strengthen assurance mechanisms to provide stakeholders with confidence in reported information. Companies should prioritize meaningful stakeholder engagement and dialogue in their CSR reporting processes. Research is needed to explore innovative approaches for engaging diverse stakeholders, soliciting feedback, and incorporating stakeholder perspectives into decision-making processes. There is a need for more robust methodologies for assessing the impact and outcomes of CSR initiatives in

the oil and gas industry. Researchers should develop frameworks and tools for evaluating the social, environmental, and economic impacts of CSR activities and measuring progress towards sustainability goals.

In conclusion, CSR reporting plays a crucial role in enhancing transparency, accountability, and sustainability in the oil and gas industry. By embracing continuous improvement, innovation, and collaboration, companies can strengthen their CSR reporting practices, build trust with stakeholders, and contribute to a more sustainable and responsible energy future.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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