

BUSINESS MODEL INNOVATION AND REPORTING FOR THE SDGS: A QUALITATIVE STUDY OF AN IRAQI PETROLEUM FIRM

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ABSTRACT

Sustainable development has emerged as a crucial strategic priority for companies worldwide. This study aims to guide an Iraqi firm in reconfiguring its business model and corporate reporting tools to align with the United Nations' Sustainable Development Goals (SDGs). By employing a qualitative approach, the research collects primary and secondary data through in-depth interviews, semi-structured questionnaires, and analysis of corporate documents, drawing on stakeholder and legitimacy theories. The study reveals the need for

improved sustainability and climate change integration within the firm's business model and reporting practices. Stakeholder participation and awareness regarding climate change mitigation efforts can be enhanced through these improvements. However, it is important to note that the study's results are limited to the Italian context and cannot be generalized statistically or capture regulatory variations across countries.

The study provides practical implications for managers, offering guidance on experimenting, orienting, testing, and implementing business model transformations to enhance organizational sustainability. Furthermore, the study emphasizes the urgency of disclosing climate change risks and opportunities, including their financial impacts, to support the SDGs and facilitate stakeholders' decision-making processes. This recognition of climate change disclosure as a key component of corporate social responsibility contributes to the existing literature by addressing necessary developments in governance and strategy. The research findings offer valuable insights for investors and other stakeholders, aiding their decision-making processes regarding corporate social responsibility. By embracing sustainable practices, disclosing climate change risks, and enhancing reporting, companies can contribute to sustainable development and align with the United Nations' SDGs.

Keywords: Business model innovation, Reporting, Sustainable Development Goals, Qualitative study, Iraqi firm, Sustainability, Climate change, Stakeholder theory

1. Introduction

Sustainable development has become a key goal for companies in recent years, as they face challenges such as climate change, resource depletion, poverty and inequality. (Arevalo et al., 2011). Because of how climate change affects businesses, managers have had to adjust to changing environmental rules and market demand for low-carbon choices. (Ferlito and Faraci, 2022). Unlike before, when there was no clear regulation on carbon emissions, (Zhang and Wei, 2010), The world has agreed on how to tackle its big problems, like poverty, climate change, environmental damage and health emergencies. This has made many companies invest more in reducing their impact on the climate. (Beardsworth, 2020; Efimova et al., 2021). To be more aware, companies need to know how climate risks affect them differently depending on their industry. They also need to pay attention to how the nature and the resources they use are changing. (Wright and Nyberg, 2017). Stakeholders, like customers, investors and partners, want companies to act on climate change. Companies that listen to and involve their stakeholders can improve their image and gain an edge over their competitors. (Rondinelli and London, 2003). This means that companies act in harmony with the values of their society. (Nishitani et al., 2021; Silva, 2021). Failure to prioritize sustainable development and align with societal values can jeopardize businesses' competitiveness, profitability, and ultimately their long-term viability. (Azlan et al., 2016). The business landscape has undergone significant changes in recent years, with the emergence of new business models and the need for adaptation to cope with the evolving competitive environment. In response to these changes, organizations must undertake a renewal of their missions and core values. It is crucial to embed social sustainability goals, such as poverty reduction, social justice, equality, welfare, and community development, as well as environmental sustainability, including long-term resource availability and biodiversity protection, into corporate leadership and integrate them into business models. This

ensures that organizations align their operations with the principles of sustainable development and effectively address the challenges of the present time. (Hörisch et al., 2020). Stakeholder engagement is vital in transforming strategies and business models to effectively incorporate environmental, social, and governance (ESG) sustainability issues. By actively involving stakeholders, companies can gain valuable insights, perspectives, and support that enable them to align their operations with sustainable practices. Through meaningful engagement, organizations can foster collaboration, identify and address sustainability challenges, and create business models that integrate ESG considerations. Ultimately, stakeholder engagement enhances the company's ability to achieve its sustainability goals and contribute positively to the broader community and environment. (Geissdoerfer et al., 2018). Stakeholder theory also highlights how stakeholders contribute to creating value. (Vos, 2003). Another crucial aspect to consider is that the creation of shared value relies on transparency regarding the information organizations are willing to disclose regarding the risks and opportunities associated with climate change and their impact on business performance. Non-financial disclosure, including goals, risks, and social and environmental performance, has become integral to managerial decision-making. By openly sharing this information, organizations can enhance trust, accountability, and informed decision-making among stakeholders, fostering a more sustainable and responsible business environment. (du Toit et al., 2017). In this regard, integrated reporting (IR) encompasses a comprehensive approach focused on disclosing six types of capitals (financial, manufactured, intellectual, human, social and relationship, natural) that contribute to the overall value creation for the company. By adopting integrated reporting, organizations take a holistic view, recognizing the significance of these diverse capitals in generating sustainable value. This approach allows for a more comprehensive understanding of the company's overall performance, enabling stakeholders to assess its

long-term sustainability and impact on various forms of capital. (Tili et al., 2019). Telling about climate change is very important for IR resources, especially for nature and society. (Nadeem et al., 2020). Telling about social and environmental issues that matter for a company's long-term value (materiality) varies with the company's business plans and industries. (Eccles et al., 2012) They said that materiality should be different for each industry because different things matter for them. For instance, some studies have found that different industries report differently and differently on environmental issues. (Gonzalez-Benito and Gonzalez-Benito, 2006) The authors acknowledge that different industries face different environmental challenges and expectations from various stakeholders. Industries that emit more carbon are seen as more damaging to the environment and face more pressure from institutions, activists and customers. Therefore, they are more motivated to disclose their environmental information to show transparency than industries emitting less carbon. Based on this assumption, the authors aim to examine how companies design and adopt business models, corporate strategies, corporate governance and non-financial reporting tools that can indicate their cultural change towards climate risk. There is a lack of comprehensive studies on the emerging and critical issues related to the need for corporate strategic and organizational change to create and sustain value for all stakeholders and the benefits of a smooth transition to low-carbon economies (Brunelli et al., 2021). The authors used a case study method and two related theoretical frameworks – legitimacy and stakeholder theories – to examine how companies are changing their business models to achieve sustainable and shared value-creation processes.

business model innovations can enhance economic growth by decreasing environmental harm or increasing environmental and social benefits. They also observed that companies disclose more nonfinancial information to justify their business practices and earn or keep more

social approval. This is consistent with international standards and the United Nations' Sustainable Development Goals (SDGs) (2015). This enables stakeholders to understand the climate issue better and join the efforts that companies make to reduce it (Hazboun et al., 2020). The paper is organized as follows. Section 2 reviews the literature and develops the hypothesis, Section 3 describes the methodology, and Sections 4 and 5 report and discuss the results. Section 6 ends the paper by pointing out the study's weaknesses, implications and suggestions for further research.

2. Theoretical background

2.1 Climate change and business model innovations In a dynamic and sustainability-conscious context, organizations are adopting a more holistic view and strict corporate governance principles to create sustainable value shared with all stakeholders (Nosratabadi et al., 2019). Stakeholders are "groups and individuals who can affect or be affected by actions related to value creation" (Freeman, 1984). The relationship between an organization and its stakeholders is strengthened by stakeholder theory, which proposes that a company's role "is to serve the interests of other non-investor stakeholders as well", thus creating value and anticipating changes that the socio-economic environment demands (Jiang et al., 2021). According to this theory, stakeholder engagement is based on the idea that because stakeholders can influence or be influenced by the achievement of an organization's objectives, they should have the chance to participate in the business's decision-making (Freeman et al., 2004). Managers are responsible for aligning their corporate value system with that of the society in which they operate to achieve optimal performance and sustainable success (Nishitani et al., 2021; Silva, 2021). Top management must, therefore, aim to implement sustainable business models (SBMs) to maintain corporate social responsibility (Bocken et al., 2019; Tran et al., 2021). SBM is an innovation through which an organization creates, delivers and captures value, giving more attention to all stakeholders' interests,

responsibilities and externalities (Dal Mas et al., 2018; Mähönen, 2020). Business model innovations to enhance corporate sustainability allow for evidence of commitment to meeting the expectations of internal and external stakeholders, thereby preserving the image of a business with legitimate goals and methods (legitimacy theory) (Suchman, 1995). Sustainability legitimacy has been defined as “the general assumption by supplier stakeholders that the company’s actions genuinely respect the three components of sustainability; namely, economic performance, social equity and environmental stewardship” (Crespin-Mazet and Dantenwill, 2012). Changes in the economic scenario make it increasingly necessary to establish corporate sustainability strategies (CSSs) to limit energy consumption, reduce the ecological footprint and promote actions to mitigate climate change (Ferlito and Faraci, 2022; Snihur and Wiklund, 2019). The associated benefits can be traced to the acquisition of legitimacy (Faisal et al., 2018), increased awareness and governance of climate change (Widerberg and Pattberg, 2017) and increased environmental responsibility (Haque and Irvine, 2018). Recent studies have suggested that corporate governance and SSC are not independent of each other (Amorelli and García-Sánchez, 2021) but, rather, are bidirectionally linked. Indeed, while some SSC activities are not very useful when the corporate social responsibility orientation is not rooted in corporate governance, corporate governance is not fully effective without an SSC unit that responds to the needs of various stakeholders (Naciti, 2019). Based on this assumption, it is interesting to examine how companies address climate-related issues by integrating them into the business model to improve communication with different stakeholder groups and, therefore, to better manage legitimacy among them (Grassmann, 2021; Tamvada, 2020). Few studies have comprehensively explored the emerging and critical issues of climate change accountability (Brunelli et al., 2021). Researchers mostly examine governance- or process-related accountability for climate action, without giving a fully integrated overview of corporate strategies and processes that are useful for improving reputation and legitimacy through a growth path

based on climate change risk management (Efimova et al., 2021). The research gap identified in the above literature is the main input of our research, leading us to ask the following research question:

RQ1. How has the business model changed for value creation regarding climate change issues?

2.2 Climate change and implications for corporate reporting Corporate reporting plays a key role in managing legitimacy, as it reveals the organization's values to society, thereby creating transparency and reducing information asymmetry (Nishitani et al., 2021). Legitimacy theory has always been used to explain why companies report on their social and environmental performance (Deegan, 2019; Dumay et al., 2018). The increasing attention of the market, the authorities and public opinion on disclosure that shows the interdependencies between strategy, governance, operations and financial and socio-environmental performance (Abhayawansa et al., 2019; Dumay and Dai, 2017) has led to integrated accountability systems (Brunelli et al., 2021). ARJ 36,1 24 IR, proposed by the International Integrated Reporting Council (IIRC, 2021), has the potential to provide a non-fragmented representation of the external environment, strategy, business model and the forms of financial and non-financial capital involved in value creation, as well as to improve communication with different groups of stakeholders (Beardsworth, 2020; Panchal et al., 2022; Du Toit, 2017). The interconnections between financial and nonfinancial information can help identify ESG aspects that are relevant to increasing corporate prosperity and communicate the suitability of actions within a socially constructed system of norms, values and beliefs (Grassmann, 2021). IR considers the legitimate interests of all stakeholders and allows their sustainability concerns to be addressed (Biloslavo et al., 2020; Tili et al., 2019; de Villiers et al., 2014), in addition to highlighting ESG aspects that could positively impact an organization's financial value (Depoers et al., 2016; Nishitani et al., 2021). Climate issues in particular are increasingly discussed and have received interest from numerous fields of

research (Kalu et al., 2016; Liao et al., 2015; Nadeem et al., 2020; Tiscini et al., 2022). Stakeholders, especially regulators, institutional investors and environmental associations, require more information about the impact of organizations' actions on climate change (Haque and Islam, 2015). Indeed, it is believed that climate change is one of the most relevant risks in the area of sustainability that financial investors, in particular, need to be able to know about and monitor for in their portfolio investments (Milne et al., 2011). Therefore, information about this issue must be central to dialogue with and among stakeholders to legitimize organizations' activities and maintain or gain more social acceptance (Mallin et al., 2013). By engaging stakeholders, companies increase external trust in their intentions and activities (reducing environmental impacts along the value chain), thus helping improve corporate reputation and catalyze the spread of more sustainable practices within the corporate system (Turzo et al., 2022; Vitolla et al., 2019). According to researchers, firm size, industry, assurance, business model and corporate governance are the most important factors that influence IR quality. The quality and trustworthiness of both generic, sector-agnostic and sector-specific non-financial information are also guaranteed by specific limited assurance requirements introduced in a proposed European directive "Corporate Sustainability Reporting Directive [CSRD]". This European directive implies a change in perspective that requires overcoming the separation between economic– financial and sustainability disclosures. This study situates the increasing demand from international standards and the SDGs (2015) for non-financial information and enables stakeholders to understand the climate issue better and the actions companies are taking to ensure the well-being of humanity and the natural environment. Therefore, the study provides a valuable opportunity to spread and raise awareness of environmental and sustainability reporting among companies in light of the pressures created by various stakeholders. To examine how companies respond to external pressures to report on their contribution towards the SDGs, especially those related to climate change (SDG 13 – Climate Action), the second research question is:

RQ2. What is the role of IR in climate change disclosure?

3. Methodology

The paper studies a single case of Iraq Petroleum Company (IPC), a large and leading company in Iraq in the oil and gas sector. Our study used an interpretivist approach, using a qualitative research design to analyze and understand the phenomenon in its social context of Climate-related financial disclosure 25 reference (Humphrey and Lee, 2004). Using this design, researchers study things in their natural settings to make sense of or interpret their meanings (Blaikie, 2000). Three elements relevant to decision-making formed the basis for choosing the case study (Miles and Huberman, 1994). The first is the national relevance of the selected company. IPC is the largest company in Iraq's oil and gas sector and a leader in the energy industry. It is unique in Iraq regarding size (\$100bn in financial assets and 50,000 employees), coverage (a network of 500 oil fields) and customer trust (around 10 million customers). The second element leading to the selection of this case concerns the high degree of integration of sustainability policies into the company's strategy. This led it to rank first in a new survey area introduced in 2020 called "ESG Digital Governance", which relates to the application of digital systems and platforms in the management of ESG data. IPC's virtuous path is confirmed by its appearance in the most important international indices. Chronologically, its first entry was in the Dow Jones Sustainability Index. This is the first such segment dedicated to Iraqi blue chips that adopt best practices in environmental, social and corporate governance issues. The third aspect concerns the excellent maturity the company has achieved regarding disclosure, quality of information and clarity of presentation. IPC's efforts to promote the continuous improvement of reporting activities and ensure clear and complete information by following the principles of integrity and transparency underlying its identity. Case study development was based on IR documentary analysis (secondary data) and four semi-structured interviews (primary data) (Table 1). With reference to the latter, the choice

to interview different professional figures enabled an analysis of different perspectives arising from the diversity of functions of the company and, conversely, the triangulation of sources. This is an element that, according to the main methodological references on the subject (Patten, 2015; Yin, 2015), increases the reliability of the results, which, for this study, are qualitative. Regarding triangulation (Denzin, 2017), recourse was made to that between the researchers in addition to that of the data or sources. All researchers individually analyzed the documents. Two researchers conducted The interviews personally, and their contents were subsequently analyzed individually.

PRIMARY DATA**SECONDARY DATA**

INTERVIEWS	Documents
HEAD OF RISK ASSESSMENT	Annual report 2022
HEAD OF GROUP RISK MONITORING AND REPORTING	Annual report 2021
HEAD OF GROUP RISK MANAGEMENT	Annual report 2020
DIGITAL MEDIA MANAGER	Annual report 2019
	Corporate journal
	Press releases

and jointly by all researchers. In addition, the interview transcript was checked with the interviewees. The semi-structured interview approach allowed the interviewees to express opinions or explore certain areas of research analysis and address themes that may emerge during the interview (Qu and Dumay, 2011). Each interview lasted about 60 min. We

developed 20 interview questions and organized them into two macro areas aimed at understanding the company's integrated policy and analyzing its commitment as a major player in the energy transition that, through a redefinition of its business model and strategy, also takes the form of more transparent reporting focused on climate change. The composition of the interviews varied depending on the specific skills and roles of the interviewees. Specifically, the following people were interviewed:

- Head of risk assessment, an Iraqi woman with a degree in engineering and management employed for 14 years at IPC. She initially worked in the Operations and Quality Control System sector and, in the past six years, as the Head of Risk Assessment.
- Head of Group Risk Monitoring and Reporting, an Iraqi man with a degree in engineering and management. He has worked at IPC for 15 years, and in the first eight years, he held the position of Head of Methodologies and Reporting over Operational Internal Control.
- Head of Group Risk Management, an Iraqi man with a degree in engineering and management. He has worked at IPC for 4 years after 10 years of work experience at Iraq Electricity as the Director of Corporate Protection, preceded by employment and 10 years at the Ministry of Oil.
- Digital Media Manager, an Iraqi man with a computer science degree. He has worked at IPC for almost seven years, after two years as the Head of Strategy and Business Development at IPCpay, six years at Alsumaria TV as the Director of Communication and Web and eight years at Zain as Director of Portal and Content.

4. Results

4.1 Sustainable business models as a strategy to address climate change
Sustainable value creation at IPC is achieved by adopting a business model capable of generating economic, environmental and social outcomes and

contributing to the achievement of the SDGs. As stated by the Head of Group Risk Management: Compared to the past, risks characteristic of the business, including those related to climate, must be properly identified and addressed through the adoption of risk assessment techniques. Starting in 2018, this has required the evolution of business strategies and the creation of sustainable business models directed towards ecological transition. The innovation of the company's business model represents, first and foremost, a response to regulatory evolution. This is evidenced by its participation in various technical roundtables to ensure the correct transformation to new norms and to represent the company's position on these issues to national and international bodies. In addition to responding to normative pressures, the company also considers changing market demand, which is becoming increasingly environmentally conscious, with substantial adjustments to its services and products to comply with high ethical standards and environmental criteria. The integration of sustainability issues into company policies, processes and long-term strategies is now a consolidated feature of the business model. Especially since the start of the Climate-related financial disclosure 27 COVID-19 pandemic, the company attaches primary importance to the issue of environmental protection, making it a goal to promote innovative solutions capable of protecting natural capital by minimizing environmental impacts. As the Head of Risk Assessment states: Operating in a carbon-intensive industry, the company's economic activity produces environmental externalities that require careful analysis of processes to assess climate change's economic and environmental impact.

IPC's extensive presence in the country and the related environmental impact of its activities require it to adopt a responsible approach and be aware of what climate change may entail for its business activities. First, it is committed to preventing, managing and, where possible, reducing the environmental impacts generated through its operations, especially the use of buildings and logistics and transport activities, whether carried out directly or through suppliers and partners. To address the challenges posed by climate change, the company has put in place activities necessary to limit

climate change and achieve global net zero, including reduced industrial carbon emissions and minimum environmental requirements for outsourced transport providers. Through stakeholder engagement activities and a diversified monitoring system – IPC identifies and analyses the range of risks associated with the most significant environmental aspects and sets objectives to monitor, contain and optimize its performance. The importance of stakeholder engagement emerges clearly in the words of the Head of Group Risk Management: IPC is aware of socio-economic changes and how they impact the organization's performance, so it chooses to establish relationships with stakeholders as a means to manage the impact of these global changes and to legitimize its operations. The founding element in managing key climate change and sustainability issues in the business model is the corporate governance system, which is inspired by principles of transparency and integrity. Achieving sustainable success requires a reconfiguration of the governance system, which is useful for defining CSSs and improving the relationship between the company and its stakeholders. In this regard, as described by the Head of Group Risk Management: The organizational and corporate governance structure provides for specific roles and responsibilities for environmental issues. The Board of Directors approves the strategies and guidelines on sustainability, considering, amongst others, the risks and opportunities related to climate change. The Sustainability Committee has the task of supporting the evaluations and decisions of the Board of Directors related to the internal control and risk management system, such as climate risk. As evidence of this approach, the Head of Risk Assessment stated: The 2020 incentive system also includes sustainability goals for all managers. Sustainable compensation policies are motivational tools for better performance. Corporate governance practices and the implementation of an SBM promote corporate reputation. In this context, the higher returns from social and governance screening can be explained by a long-term view that protects the company from future challenges that may damage its

reputation. These benefits also emerge in the words of the Head of Group Risk Monitoring and Reporting, who states:

The optimal use of financial and non-financial capital and the integration of the Business Plan with ESG objectives enables the company to generate an economic, environmental and social outcome that contributes to the achievement of the SDGs.

The company is constantly striving to serve the interests of all stakeholders by creating value and anticipating changes in the socio-economic environment through as open a dialogue as possible on critical issues to increase the chance of managing risks successfully.

4.2 Climate change risk reporting Attention to environmental issues and compliance with new accountability and transparency requirements led the company towards integrated disclosure in 2018. Over the years, the company's renewed commitment to strengthening its economic and social–environmental accountability towards stakeholders has led to a further alignment of corporate reporting with major international reference frameworks and standards. To the IR framework and Global Reporting Initiative Standards have been added others of international importance – such as the SASB Standards, the Material ESG Metrics presented at the World Economic Forum 2020 and the recommendations of the Task Force on Climate Related Disclosures – to better support the company in reporting transparently and comprehensively on the risks and opportunities that climate change may pose to corporate performance. The Head of Group Risk Monitoring and Reporting underlines that: IR puts special emphasis on climate change by considering the environmental impact of the business activity. Non-financial disclosure on climate is a means of maintaining legitimacy and demonstrating a responsible approach. The Head of Risk Assessment adds that Human rights and climate change issues were considered material themes because they could substantially influence stakeholder decision-making and performance. The materiality of these

issues was defined through stakeholder engagement. In IPC, stakeholders play a critical role in the company and make their demands through direct pressure or through integrated environmental and social disclosure. The Head of Group Risk Monitoring and Reporting points out that: The need to ensure that the company's actions and practices comply with existing norms in the relevant environment is not only a response to external, coercive and regulatory pressures but also a way to gain consensus and, thus, legitimacy from various categories of stakeholders. The goal is to ensure an integrated business ethics culture at all organizational levels and to give evidence of the company's commitment to internal and external stakeholders, with a view to accountability and transparency. This is shown by the definition of values and behaviour models that balance corporate strategies with environmental protection. All interviewees agreed that IPC reports its environmental performance to reduce its ecological footprint, spread a culture of environmental protection and encourage conscious use of natural resources and waste management. In the assessment process of material issues for reporting, IPC introduced for the first time in 2021 a dual perspective: "inside-out" and "outside-in", thus moving ahead of the requirements introduced by the CSRD. External engagement (inside-out) allows the company to consider significant current or potential impacts on society and the environment generated by its own activities and the activities of its value chain.

Conversely, through internal (outside-in) engagement, the company considers sustainability issues that can positively or negatively influence its strategy, performance and positioning in the short, medium or long term and thus create or erode value. IR represents an important step in the challenging path towards contributing to the achievement of the 2030 Agenda objectives, putting sustainability at the core of the business and value creation process. In addition, in 2019, IPC defined an integrated compliance model that allows for creating and strengthening operational synergies between the various actors specializing in risk safeguards. These activities are aimed at the evolution and efficiency of governance heads and

the continuous strengthening of companies' capabilities to manage and communicate climate risk analysis processes in an organized and integrated manner.

5. Discussion

The discussion presented in this section will focus on trying to answer the research questions based on the results described in the previous section and the theoretical background. RQ1 investigates the changes needed within the business model for sustainable value creation. The industry specificity of the case study analyzed and the environmental impact resulting from the business's activities required an innovative business model and the integration of sustainability into the business strategy. In this way, the company aims to improve the perception that its actions are agreeable, correct and appropriate within a social system of norms, values and expectations. Strategic resource allocation decisions are based on an approach that integrates social, human and environmental interests to create value for all stakeholders. Therefore, the company's approach is not about manipulating public opinion but is based on a change from current practices and business as usual, from which emerges the efforts to achieve the SDGs deemed necessary for sustainable development by 2030 (Geissdoerfer et al., 2018). The connection between the company and its stakeholders is crucial to the new SBM's success. Following the stakeholder theory perspective, companies need to engage with stakeholders on a multitude of social and ecological issues to improve public perceptions of their sustainability performance and legitimize their contribution to achieving sustainable success. RQ2 investigates the relevance of climate change disclosure in IR. The case study revealed the importance of involving all key stakeholders in identifying the most relevant issues to adequately understand the economic, social and environmental trends and the impacts of the company's activities. From the perspective of stakeholder approach and legitimacy, IR is used as a tool to enhance stakeholder dialogue and balance different interests, in addition to being a strategy for legitimizing

transparency. The priority of the issues to be reported on is defined by considering the strategic relevance of each issue to the company and the perceived relevance of all stakeholders. As a result of multi-stakeholder engagement, it was possible to detect, compared to 2020, greater importance being attached to the environmental impacts of real estate and logistics. The above has made it necessary to supplement non-financial disclosures with indications of climate change risks, as well as related opportunities and specific mitigation actions. By making choices aimed at enhancing natural, human and social resources in a lasting and sustainable way (i.e. raising employee awareness of energy efficiency and greener production, providing customers with more sustainable products and improving supply chains), the company is working to respond to external pressures from civil society (public interest) and come into line with the cultural change (value shift) driven

by concerns for the environment that are increasingly shared by public opinion, including through the stakeholder perspective. As more stakeholders call for greater data transparency, the company is using the TCFD framework to voluntarily report climaterelated risks and opportunities. Stakeholder engagement leads to developing and achieving a strategic response to sustainability and understanding decisions, actions, performance and disclosure related to material issues. In this way, companies can legitimize their policies, processes and management decisions and comply with social norms addressing the interdependence of the organization and its social and natural environment.

6. Conclusions

In the current socio-economic scenario, regulations, the natural environment and stakeholders put great pressure on businesses to become socially responsible (Dwekat et al., 2020; Zahid et al., 2020). For companies

to contribute to the well-being of society, they need to link sustainable development to their core business (Husted and Sousa-Filho, 2017) through SBMs and successful corporate governance practices (Latapí Agudelo et al., 2019) that improve the stakeholder relationship (Michelon and Parbonetti, 2012). Social and environmental efforts with a clear link to business strategy and corporate governance enable sustainable value creation by minimizing negative impacts and maximizing the positive externalities generated by business operations. Identifying potential and actual impacts, suffered and generated, and thus knowing and communicating the materiality of ESG issues, supports the definition of corporate strategy and the business model. Non-financial and climate change-related disclosures, in particular, play key roles as enablers of ecological and sustainable business transformation. From this perspective, IR is a reporting tool for gaining and maintaining legitimacy through the provision of information in response to stakeholder pressure (Du Toit, 2017). As companies have often managed their legitimacy and communicated their sustainability performance in corporate reports, generic and sector-specific material issues need to be identified. Stakeholder engagement is essential for defining material issues and promoting awareness that current conduct in changing scenarios is geared towards sustainable development. The research development allowed us to determine the practical and theoretical implications. From a practical point of view, the results demonstrate the importance of integrating sustainability issues into corporate strategy and business models focused on energy efficiency, waste management and climate change. These initiatives seek to promote greater corporate sensitivity to emerging climate risks. The risks and opportunities disclosure and its related impacts, including financial impacts, are now recognized as a key urgency for all stakeholders. From a theoretical perspective, the results of this study may be useful in understanding the benefits associated with the definition of SBM and the availability of more integrated information that has now become more critical to the investment process than in the past. The relevance and urgency of the energy transition and the debate for

establishing concrete climate change mitigation measures are reflected in stakeholder engagement with the impacts of companies on the environment and climate change and the effects of the latter in terms of value creation. The results cannot be subject to statistical generalization, as they focus on the Iraqi context and do not capture the regulatory divergence that characterizes different countries. However, our study can be seen as a preliminary approach to understanding the impact of integrating climate change into business strategies. These considerations may constitute a basis for future development of this research to define best practices, through the study of Climate-related financial disclosure 31 successful cases, for the development of SBMs and reporting practices that allow us to communicate how value is created and preserved for all stakeholders.

7. Reference

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