

Green Ambidexterity and SDG Disclosure: Examining the Role of Green Exploration and Green Exploitation in Enhancing Social Reputation

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Abstract

This study investigates how green ambidexterity, comprising green exploitation and green exploration, influences Sustainable Development Goal (SDG) disclosure among Indonesian listed firms and whether SDG disclosure subsequently improves firms' social reputation. Using a quantitative research design, this study examines non-financial companies listed on the Indonesia Stock Exchange (IDX) during 2020–2024. The initial sample consists of 4,770 firm-year observations, which is reduced to 989 firm-year observations after excluding financial sector firms and observations with missing data. Green exploitation, green exploration, and social reputation are measured using content analysis and archival data from sustainability reports, while SDG disclosure is measured using an index-based approach. Panel data regression is employed with controls for firm characteristics, corporate governance, and financial factors. The results show that both green exploitation and green exploration have a positive and significant effect on SDG disclosure. Higher SDG disclosure is also associated with stronger social reputation, indicating a sequential relationship in which green strategies enhance sustainability transparency and subsequently strengthen stakeholder recognition. In addition, board size and the presence of a sustainability committee contribute to higher disclosure quality. These findings highlight the importance of combining green exploitation and exploration to improve sustainability transparency and corporate reputation. This study contributes to the green ambidexterity literature by distinguishing the roles of green exploitation and green exploration in SDG disclosure and by identifying social reputation as an outcome of sustainability transparency in an emerging market in Indonesia.

1. Introduction

The concept of sustainable development has been the key issue in the global agenda for the last decade [1][2][3]. When the Sustainable Development Goals (SDG) were announced by the United Nations (UN) in 2015, there was a significant public expectation that company operations would be in line with the global objectives [4][5][6]. Many countries are working to achieve sustainable development, and various parties, including governments, businesses, and stakeholders are encouraged to pursue economic development in a way that is consistent with environmental conservation and social welfare [5][6][7]. As sustainability issues have been growing rapidly within recent years including climate change, natural resources exhaustion, and social inequalities among others, businesses are expected not only to report on the economic performance of the firm but also on its contribution to sustainable development [8][9][10]. Thus, sustainability is now an integral part of the strategy of any business and influences the business decision making process, relationships with stakeholders, and competitive advantage in the long run [11][12]. In this case, the role of transparency becomes crucial as the parties ask for additional information about the integration of SDGs in the business strategies [13][14].

While global commitment to sustainable development has increased substantially, achieving sustainable development remains especially challenging and therefore highly relevant for emerging economies such as Indonesia [15][16]. Being one of the biggest economies in Southeast Asia, Indonesia officially accepted the SDGs into the national strategy of development and has made some regulations promoting the disclosure of sustainability reports by listed companies [4]. Non financial companies in particular come under much more public criticism due to the environmental and social impact of their business activities [11][17]. However, despite the increasing popularity of sustainability reports, the depth and variety of the disclosed information in relation to sustainable development in Indonesia still vary greatly among different companies, with many of them disclosing little information on this topic [18][19]. It becomes evident that despite the growing popularity of sustainability reporting, the transparency of the information related to SDGs has not reached its desired level yet [20][21][22].

In light of these developments, the disclosure of information on Sustainable Development Goals (SDG) has become a major avenue through which corporations can demonstrate their commitment towards sustainable development [10][17][23]. According to [24], SDG disclosure involves the sharing of information pertaining to corporate efforts, policies, and performance aimed at achieving the Sustainable Development Goals. In addition to fulfilling the obligation of reporting,

full SDG disclosure ensures that there is reduced information asymmetry between firms and stakeholders, besides increasing corporate accountability and transparency [25][26][27]. Recent research further highlights that good SDG disclosure is positively related to favorable firm performance, such as financial performance, firm value, and ESG performance [14][28] [29].

As firms become more transparent about their sustainability efforts, stakeholders can better assess whether companies are genuinely contributing to sustainable development [28][30][31]. This transparency is particularly important because stakeholders' perceptions of a firm's social responsibility, ethical practices, and contribution to society can shape its social reputation [3][32][33]. The concept of social reputation can be defined as the evaluation of the firm regarding its social behavior, its ethicality, its responsibilities, and how it has contributed to society. In other words, social reputation is how the firm is perceived by society due to its actions [34][35]. Unlike corporate reputation, which includes multiple dimensions such as the financial situation of the company, its products, innovations, and even its ability to manage and so on, social reputation is more focused on social and ethical aspects of a company's operations [36][37]. The issue is about whether the firm is perceived to be responsible, honest, ethical, and willing to make positive contributions to society beyond the economic goals [32][38]. Social reputation is not something a firm declares but rather something that is formed by stakeholders' perceptions of the firm's activities and contributions to society [39][40].

A feature of the social reputation of an organization is that it not only depends on corporate behavior but also on corporate communication [41]. The stakeholder cannot always have access to or understand all the activities carried out internally by a company [2]. A strong social reputation is valuable because it can enhance stakeholder trust, strengthen the firm's legitimacy, and support positive relationships with external stakeholders [2][22][42]. In other words, firms that disclose more SDG information and in a better manner are bound to be appreciated by external stakeholders, which includes the government, industrial organizations, and society, and hence, their social reputation will be improved [8][33] [43]. In addition, such reporting could allow the stakeholders to understand what kinds of sustainability activities the firm is involved in [44]. For instance, reporting on how the activities of a firm affect the goals of decent work, gender equality, responsible consumption, climate action, or reduced inequalities would allow the stakeholders to evaluate the firm's societal contribution [8][45]. Of course, such transparency does not occur just because firms adhere to regulations, but they must have the appropriate strategic capabilities to create and communicate sustainability efforts [46][47][48].

However, the realization of SDG disclosure is not limited only to regulatory compliance [18][49]. Firms need to have certain strategic competencies internally, which would help them incorporate sustainability into their operations and respond to changes in the environment continuously [17][50][51]. This competency includes green ambidexterity, which is described as a firm's capacity to exploit the available environmental knowledge while exploring new green opportunities [40][50][52]. The idea of green ambidexterity is built on the concept of organizational ambidexterity and includes two different, yet complementary, aspects: green exploitation and green exploration [53][54][55]. While the former refers to the development and enhancement of available environmental technologies and processes in order to improve efficiency, the latter means gaining new environmental knowledge and searching for new ways of dealing with emerging environmental issues [56][57]. These two aspects can be seen as not competing strategies but rather two parts of a whole, which will help firms ensure their efficiency and innovativeness at the same time [1][58][59]. The increased significance of green exploitation and green exploration has been due to the mounting pressure on organizations to be sustainable in their conduct of business [60]. It is important for organizations not only to make their processes sustainable through greater environmental efficiencies, but also to come up with innovative approaches which will enable the firm to tackle issues of sustainability [61][62][63].

Under this view, green exploitation and green exploration are anticipated to motivate firms to share information on their sustainability activities more extensively via SDG disclosure [64][65]. Green exploitation creates gradual environmental enhancements that could be reported transparently to various stakeholders, while green exploration helps to create new sustainability efforts that showcase firm's long-term commitment to sustainable development [54][66]. Both of these

competencies allow firms to produce credible sustainability information, thus ensuring improved quality and extent of SDG disclosure [48][60][67]. Most of existing literature suggests that firms with high levels of green competencies tend to be more environmentally transparent and sustainable in their reporting [40][68][69]. However, little empirical research is available regarding how the two dimensions of green ambidexterity affect SDG disclosure individually, especially for emerging economies [44][70][71].

Despite the considerable number of studies that have analyzed the relationship between green innovation, environmental performance, and sustainability reporting, there are some research gaps that should be noted. The first gap relates to the fact that very few scholars have paid sufficient attention to the different roles played by green exploitation and green exploration in the process of disclosing SDG. In other words, green ambidexterity has mostly been perceived as a one dimensional construct. The second gap is associated with the role of social reputation; although this variable has been extensively studied as an antecedent or a moderator, very few researchers have focused on its role as a result of sustainability disclosure through SDGs. The last gap is associated with the lack of empirical evidence coming from emerging economies, such as Indonesia, that has become increasingly devoted to sustainable development and sustainability reporting.

This study attempts to fill the identified research voids by exploring the linkages between green exploitation, green exploration, SDG disclosures, and social reputation with the help of firm-year data of 989 observations from non-financial firms listed on the Indonesia Stock Exchange (IDX) for the period 2020–2024. Based on panel data regression, it was found out that green exploitation and green exploration positively impact SDG disclosure, implying that firms with better environmental competencies have greater chances of disclosing their efforts towards SDG. In addition, the study also finds that SDG disclosures have a positive effect on the social reputation of firms, suggesting that firms that provide more extensive SDG information are more likely to gain positive stakeholder perceptions and build a stronger social reputation.

The contribution of this research to the literature includes presenting a new view of how green exploitation and green exploration, as two components of green ambidexterity, influence firms' decisions to improve the SDG disclosure level and how sustainability disclosure increases corporate social reputation. In particular, firms with high levels of green exploitation and green exploration tend to be more engaged in the process of disclosing their contributions to SDG, and higher SDG disclosure may help corporations increase their social reputation through the improvement of the perceptions of the stakeholders concerning the firm's engagement in sustainable development processes. This research provides new insights into stakeholder theory as well since SDG disclosure may become an important way for firms to convey their sustainability commitments to the external stakeholders and form positive relations with them.

The remainder of this paper is organized as follows. Section 2 reviews the relevant literature and develops the research hypotheses. Section 3 describes the research methodology, including the sample selection, variable measurement, and empirical model. Section 4 presents and discusses the empirical findings. Finally, Section 5 concludes the study by highlighting the main findings, discussing their theoretical and practical implications, acknowledging the study's limitations, and suggesting directions for future research.

2. Literature review and hypothesis development

2.1 Stakeholder Theory

Stakeholder theory emphasizes that companies are not only responsible to shareholders, but also to various other parties who have an interest in the company's activities [72]. Stakeholder theory explains that in the decision-making process, businesses must consider and balance the interests of all stakeholders, including suppliers, employees, customers, and the general public [73]. As environmental and social issues receive increasing public attention,

stakeholders expect companies to operate responsibly and provide transparent information regarding their sustainability initiatives [2][14][16].

2.2 Green Exploitation

Green exploitation is described as the capability of an organization to refine its environmental expertise, technologies, and practices already in place to ensure that they produce better environmental outcomes [74]. Green exploitation does not deal with radical innovation but rather with improvement of current products, production process, and environmental management system for efficiency, less waste production, emission reduction, and more efficient use of resources [75][76].

Another aspect of green exploitation is the company's efforts to keep on improving the already developed sustainability processes instead of creating a new environmental technology [50][77]. The improvement of existing environmental competences would allow them to integrate sustainable processes in the work process and show the real environmental performance of the company [78][79]. According to earlier studies, the companies that have higher level of green exploitation usually have higher environmental management and communication readiness [66].

2.3 Green Exploration

Green exploration involves the capacity of a firm to create environmental knowledge, technology, product, and process innovation related to sustainability [80]. Green exploration is different from green exploitation in that while green exploitation deals with improvements in practices, green exploration revolves around experimenting, innovating, and exploring new environmental solutions to emerging problems of sustainability [81][82].

Those firms that are actively engaged in green exploration will invest in research and development, adopt environmental technologies, and create innovative products and processes that minimize the environmental impact of their activities [83]. Such innovation not only contributes to environmental performance but also enhances the competitive advantage of firms [59][84]. In light of the importance of environmental innovation, green exploration has emerged as one of the core capabilities of firms in sustainability management [85][86].

2.4 SDG Disclosure

The SDG disclosure is described as the process through which information about the strategies adopted by companies to help achieve the goals of the Sustainable Development Goals set out by the United Nations is communicated [13][67][87]. Through SDG disclosure, companies are able to communicate to stakeholders on the way they are contributing towards economic, environmental, and social sustainability through their businesses [70][88].

In recent times, SDG disclosure has become one of the major elements of corporate sustainability reporting since there is increasing demand for transparency on the contribution of companies towards sustainable development from stakeholders [89]. Through SDG disclosure, information asymmetry between firms and stakeholders is reduced, corporate accountability is improved, and stakeholders trust on firm sustainability efforts is increased [18][25]. There is also evidence in existing literature suggesting that companies disclosing more SDG achieve greater sustainability performance, stakeholder support, and reputation since stakeholders see such firms as being committed to sustainable development [43][90].

2.5 Green Exploitation and SDG Disclosure

Green exploitation involves the capacity of firms to enhance and optimize the current level of environmental knowledge, technology, and processes to perform better environmentally [45][60][91]. Organizations possessing high green exploitation capabilities can enhance their efficiency with regards to production, resource management, and environmental management through better utilization of the available environmental knowledge and practices [38][92].

This is because green exploitation capabilities give organizations the ability to build more structured and consistent environmental practices, hence allowing them to engage in more sustainability activities [56]. Therefore, firms with better green exploitation will have more sustainability activities and information to disclose via SDG disclosure [93].

Green exploitation and SDG disclosures are interlinked because firms that possess greater skills to enhance their current environmental practices will be capable of disclosing more information related to their efforts in achieving sustainability [76]. Through green exploitation, the firms will always be improving their environmental process and outcomes and hence making it possible for them to report on their contributions to sustainable development [52][81]. In simple terms, firms that work to enhance their current environmental practices have more to disclose regarding their sustainability efforts [4].

Under the lens of stakeholder theory, the expectation is that companies should disclose information about their environmental performance since there is an increasing need among stakeholders for the same [18][94][95]. The reason is that firms having better green exploitation have well established environmental practices [56]. In such a case, it is easier to disclose information about their sustainability performance including the contribution towards SDG [96]. The full disclosure of SDG is a sign of firm commitment to sustainable development, reduces information asymmetry, and builds trust among stakeholders [54][97].

Previous research has also shown that firms having higher levels of green exploitation and practices are likely to be more transparent regarding their sustainability initiatives [98]. It means that firms with higher levels of environmental capabilities have a better base from which they can communicate their sustainability information [80]. But previous studies have not paid much attention to the role of green exploitation in SDG disclosure. Green exploitation is concerned with making improvements in and leveraging existing environmental practices and capabilities, which can directly help the firm generate and communicate sustainability information [53][99]. Hence, it can be said that firms with higher levels of exploitation will have more to disclose in terms of SDG [100]. In light of these results and arguments, we hypothesize the following:

H1. Green exploitation positively affects SDG disclosure.

2.6 Green Exploration and SDG Disclosure

Green exploration is the capacity of the company to innovate with respect to environment, to create new knowledge about environment and to use new technologies for addressing the sustainability challenges [61][75][101]. While green exploitation is concerned with enhancing current environmental efforts, green exploration stresses discovering new information, technologies, and solutions for the environment. Companies that have high green exploration capabilities become more engaged in environmental innovation, R&D, and sustainable practices development [40][77]. Such efforts can bring new initiatives and successes regarding sustainability that will allow companies to disclose more information to their stakeholders in SDG disclosure [42].

The link between green exploration and SDG disclosure could be justified on the basis of the capacity of the environmental innovation to generate new sustainability practices that could be disclosed to the stakeholders [1]. The firms that persistently seek new environmental ideas and knowledge will find themselves involved in the process of undertaking innovative sustainability practices [102]. Such innovative sustainability practices would provide the firm with the sustainability information and proof of their contribution to the SDG [90]. Consequently, the firms with high capacity for green exploration have better chances and more compelling reasons for disclosing their sustainability information and efforts through SDG disclosure [66].

In accordance with the stakeholder theory, firms need to respond to the expectations of the stakeholders and make an effort to improve environmental performance [25]. Green exploration helps firms to come up with new environmental initiatives that show stronger commitment towards sustainable development [82]. Since stakeholders appreciate more

environmental innovations and transparency, companies undertaking green exploration are more likely to provide SDG information [2][103].

From previous literature, it is found that companies with green exploration practices are more prone to initiate sustainability programs and inform them to stakeholders about their sustainability programs [56][66]. However, there is scant literature which has examined the effect of green exploration on SDG disclosure. Green exploration can play a significant role in the disclosure of SDGs since the quest for new environmental information, new technology, and innovative solutions leads to new sustainability programs which need to be communicated to the stakeholders [52][84]. As such, organizations with higher green exploration activities are expected to disclose more information about their SDG practices. In light of these results and arguments, we hypothesize the following:

H2. Green exploration positively affects SDG disclosure.

2.7 SDG Disclosure and Social Reputation

Social reputation is the collective perception of external stakeholders regarding a company's social and environmental performance [104][105]. One concrete manifestation of this can be observed through formal recognition in the form of awards received by the company from external institutions whether government agencies or independent organizations in various categories such as the environment, energy, human resources, products, safety innovation, community development, and emissions [37]. Fombrun & Shanley (1990) in their early study on the formation of corporate reputation, explained that reputation is essentially formed through the accumulation of signals received by the market regarding a company's past behavior. Thus, companies that consistently demonstrate behavior aligned with social norms tend to receive more positive evaluations from their external environment [34][94]. This reputation is intangible assets that have been formed over time due to interaction between the firm and the social environment [33][107]. Therefore, it cannot be bought overnight but it is an outcome of the firm's commitment towards sustainability [14][35].

SDG disclosure may be a method through which firms can create and improve their social reputation [108]. Through SDG disclosure, firms can indicate that they have not been engaging in business activities only for profit maximization, but they have also taken into account the social, economic, and environmental considerations [7][17]. The information about the firm's programs, policies, and contribution in meeting the sustainability can portray the firm as having the willingness to ensure sustainable development and social responsibility [70]. Disclosure of the information can also help create public confidence as the firm openly discloses the efforts they have taken [63]. If the firm shows interest and makes some contributions to the social and environmental issues that are important to the public, then a good image of the firm can emerge [50]. This image would be important in improving the firm's social reputation [34]. Therefore, the more informative an SDG disclosure is, the better the reputation of the firm [37].

Previous research has shown that sustainability disclosure plays an important role in shaping positive perceptions of a company's social reputation. [9] found that companies with higher levels of SDG disclosure tend to have higher enterprise value, suggesting that SDG-related disclosures can send a positive signal regarding a company's quality and commitment to sustainability. In accordance with the stakeholder theory, A company's sustainability depends not only on the interests of its shareholders, but also on its ability to meet the interests and expectations of various stakeholders [31]. In this context, SDG disclosure can serve as a means for companies to communicate to stakeholders their commitments and actions in support of sustainable development [30]. When a company transparently discloses SDG information and demonstrates alignment between its activities and stakeholder expectations, it can earn a more positive assessment from stakeholders [46]. This positive assessment can ultimately strengthen the company's social reputation [18][67]. In light of these results and arguments, we hypothesize the following:

H3. SDG disclosure positively affects Social Reputation.

3. Research design

This study employs a quantitative research approach using secondary data collected from the annual reports and sustainability reports of companies listed on the Indonesia Stock Exchange (IDX) over the 2020–2024 period. The initial dataset consisted of 4,770 firm-year observations. Financial sector companies were excluded because they operate under industry-specific regulations, have distinct financial reporting requirements, and follow a different business model from non-financial firms, which may affect the comparability of sustainability disclosure and financial characteristics [21][28][109]. In addition, observations with incomplete data for the variables used in this study were removed. After applying these sample selection criteria, the final sample comprised 989 firm-year observations. The detailed sample selection procedure is presented in Tables 1.

Table 1
Sample selection criteria

Criteria	Total
Indonesian publicly listed companies on the IDX published	4.770
Financial sector	(525)
Missing Data	(3.256)
Number of samples used as research objects	291
Total final sample	989
Source : Created by author	

3.1 Dependent variable

The dependent variable in this study is Sustainable Development Goals (SDG) disclosure, Following the approach developed by [110] is measured using the Global Reporting Initiative’s (GRI) 77 item framework, with the complete list of items presented in Appendix Table A1. Measurements were conducted using content analysis of each sample company’s sustainability report, where each item was assigned a score of 1 if the information was disclosed and a score of 0 if it was not disclosed. Next, the SDG disclosure score for each company was calculated by summing the scores of all disclosed items and dividing that total by the total of 77 items, resulting in an index ranging from 0 to 1. The higher the index value, the more extensive the SDG disclosures made by the company in question.

3.2 Independent variable

This study uses two independent variables that represent the concept of green ambidexterity namely, green exploitation and green exploration, both of which are measured using a word-count-based approach developed by [66]. Green exploitation is measured by counting the frequency of words that reflect a green exploitation orientation in sustainability reports, including the words choic, efficienc, execut, exploit, implement, production, refine, and select, along with their variations. Meanwhile, green exploration is measured by the frequency of words representing a green exploration orientation, namely search, variation, risk, experiment, play, flexib, discover, and innovat along with their variations. However, it is important to note that this approach to measuring the word count is only relevant in as far as it measures the narrative importance that is given to green exploitation and green exploration, and not the implementation of these activities by firms. Firms might choose to focus on certain terms that are related to greening because of various reasons, including communication, legitimacy, and impression management purposes. This means that the measure might be prone to greenwashing bias, whereby the word counts do not relate to the actual implementation of environmental actions by the firm. These two variables were obtained through content analysis of the entire text of the sample

companies' sustainability reports, resulting in ratio data that illustrates the intensity of the green exploitation and exploration orientations for each company.

3.3 Outcome Variable

In addition to the dependent and independent variables, this study also includes an outcome variable social reputation, which is used to examine the further implications of SDG disclosure on external perceptions of the company, based on the measurement method used by [37]. This variable is measured by assigning a score of 1 for each award received by a company in specific categories namely: environment, energy, human resources, products, safety innovation, community development and emissions, with a maximum possible score of 6. Data on these awards were collected from the sustainability reports of each company in the sample. Thus, the more award categories a company receives, the higher its social reputation score. Although awards provide an observable indicator of social reputation, this measure has limitations. Award information is often voluntarily disclosed, which may create self-selection bias, as firms with stronger reputational incentives may be more likely to report awards. Moreover, awards may not fully reflect the perceptions of all stakeholders. Therefore, awards are interpreted as an indicator of formal external recognition rather than a comprehensive measure of stakeholder-perceived social reputation. Firm characteristics and industry effects are controlled for to reduce potential confounding effects.

3.4 Control variables

3.4.1 Board Size

Board size is measured by summing the total number of members of the board of directors and the board of commissioners in a company [111]. This variable is included as a control because corporate governance structure particularly the number of board members is closely related to the capacity to oversee management performance [31]. Larger boards tend to have greater diversity in background, experience, and networks, enabling them to provide stricter oversight of strategic decisions, including those related to sustainability practices and reporting transparency [73].

In addition to its oversight function, a larger board can also increase pressure on management to meet the expectations of various stakeholders, as the greater the number of board members involved, the more diverse the interests that must be accommodated [16]. Therefore, board size must be controlled so that its influence on the level of SDG disclosure is not confounded with the influence of the main variables that are the focus of this study.

3.4.2 CEO Age

CEO Age is included as a control variable because the age of the chief executive officer may influence managerial decisions regarding sustainability and corporate disclosure [112]. Older CEOs generally possess more managerial experience and may adopt a more long-term perspective when responding to stakeholder expectations, whereas younger CEOs may be more willing to adopt innovative sustainability practices [113]. Because these differences in orientation could potentially influence companies' decisions regarding the disclosure of sustainability information, the CEO's age was included as a control variable to ensure that such effects would not obscure the relationship being tested [66].

3.4.3 Sustainability Committee

The existence of this committee reflects the company's structural commitment to managing environmental and social issues in a more focused manner, as the committee is typically tasked with formulating policies, monitoring the implementation of sustainability programs, and ensuring more comprehensive reporting to stakeholders [7]. Companies with sustainability committees generally have more robust governance mechanisms for addressing non-financial aspects, so their level of sustainability disclosure is potentially higher than that of companies without such committees [114]. Consequently, this variable is controlled to ensure that differences in disclosure levels caused by the presence of a committee are not confused with the effects of the green ambidexterity.

3.4.4 Leverage

Leverage indicates the capital structure of a company that can affect the sustainability reporting strategy of the company [115]. Highly leveraged companies will be under greater scrutiny by their creditors and shareholders [116]. Therefore, they will be encouraged to report more on sustainability to overcome the issue of information asymmetry. However, highly leveraged companies will not have enough financial means to engage in sustainability efforts [1].

3.4.5 Current Ratio

Current Ratio measures a company's ability to meet its short-term obligations using its current assets [21]. Companies with higher liquidity generally have greater financial capacity to support operational activities, including investments in sustainability initiatives and the preparation of sustainability reports [73]. Therefore, differences in liquidity may influence the extent of SDG disclosure independently of green ambidexterity.

3.4.6 Firm Value

Firm value (TobinQ) indicates market's evaluation of performance and potential of a firm, which is also indirectly associated with the reaction of the market towards the firm's sustainability activities [115]. Market capitalization of a firm implies increased attention on its part by the investor community and the public, adding another motive to keep up the good name via increased information disclosures including SDGs disclosures [68].

To ensure the integrity and reliability of our findings, we employed rigorous statistical techniques. Initially, we applied the winsorization method at the 1st and 99th percentiles to mitigate the influence of extreme values, thereby enhancing the accuracy of our data. This comprehensive approach ensures a thorough examination of the underlying factors that influence corporate behavior and performance. The variable definitions is presented in Table 2.

Table 2
Variable definitions

Variable Name	Measurement	Data Source
Independent Variable		
SDGs Disclosure (SDG)	77 Index Disclosure	Sustainability Report
Dependent Variable		
Green Exploitation (GEXPLOIT)	Sum of the words choic*, efficienc*, execut*, exploit*, implement*, production*, refine*, select*	Sustainability Report
Green Exploration (GEXPLORE)	Sum of the words search*, variation*, risk*, experiment*, play*, flexib*, discover*, innovat*	
Control Variable		
Board Size (BSIZE)	Total board of directors + total board of commissioners	Annual Report
CEO Age (CAGE)	Number of years since the CEO's birth	Annual Report
Sustainability Committee (SUSTCOM)	Dummy variable with 1 = the presence of a sustainability committee, 0 = absence	Annual Report
Leverage (LEV)	Total debt / total asset	Annual Report
Current Ratio (CR)	Current asset / current liability	Annual Report
Firm Value (FV)	TobinQ = market capitalization / total asset	Annual Report
Outcome Variable		
Social Reputation	1 score for each award received by the companies if it is included in the categories, namely environmental, energy, human resources, product, safety innovation, community development and emission. Maximum score is 6	Sustainability Report
Source : Created by author		

3.5 Model specification

To examine the relationship between Green Ambidexterity, SDG Disclosure, and Social Reputation. We constructed an empirical model, as shown in Eq. (1)-(3) below :

$$SDG_{it} = \beta_0 + \beta_1 GEXPLOIT_{it} + \beta_2 BSIZE_{it} + \beta_3 CAGE_{it} + \beta_4 SUSTCOM_{it} + \beta_5 LEV_{it} + \beta_6 CR_{it} + \beta_7 FV_{it} + YEAR_{FE} + SIC_{FE} + e_{it} \dots\dots\dots(1)$$

$$SDG_{it} = \beta_0 + \beta_1 GEXPLORE_{it} + \beta_2 BSIZE_{it} + \beta_3 CAGE_{it} + \beta_4 SUSTCOM_{it} + \beta_5 LEV_{it} + \beta_6 CR_{it} + \beta_7 FV_{it} + YEAR_{FE} + SIC_{FE} + e_{it} \dots\dots\dots(2)$$

$$SOCREPU_{it} = \beta_0 + \beta_1 SDG_{it} + \beta_2 BSIZE_{it} + \beta_3 CAGE_{it} + \beta_4 SUSTCOM_{it} + \beta_5 LEV_{it}$$

$$+ \beta_6 CR_{it} + \beta_7 FV_{it} + YEAR_{FE} + SIC_{FE} + e_{it} \dots\dots\dots (3)$$

Where:

- SDG_{it} = SDG disclosure, measured by a 77-item GRI disclosure index.
- $GEXPLOIT_{it}$ = green exploitation, measured by green exploitation-related word

frequency.

- $GEXPLORE_{it}$ = green exploration, measured by green exploration-related word

frequency.

- $SOCREPU_{it}$ = social reputation, measured by the number of awards received.
- $BSIZE_{it}$ = board size, total number of board members.
- $CAGE_{it}$ = the age of the CEO in years.
- $SUSTCOM_{it}$ = a dummy variable indicating the existence of a sustainability

committee.

- LEV_{it} = the leverage.
- CR_{it} = the current ratio.
- FV_{it} = the firm value, measured by TobinQ.
- $YEAR_{FE}$ = year fixed effects to control for year-specific factors.
- SIC_{FE} = fixed effects for industries as classified by SIC codes.
- e_{it} = error term.

4. Empirical results

4.1 Descriptive statistics

Table 3 shows that the average SDG disclosure score is 0.414, with a standard deviation of 0.210, a minimum value of 0.026, a median of 0.377, and a maximum value of 0.935. The green ambidexterity variable reveals an interesting pattern: the average green exploitation score (218.320) is higher than the average green exploration score (146.897), suggesting that the sample companies generally rely more on narratives related to the efficiency and optimization of existing processes than on narratives related to new green experimentation and innovation.

Table 3
Descriptive statistics

SDG	Mean	Median	Minimum	Maximum
	0.414	0.377	0.026	0.935
GEXPLOIT	218.320	189.000	0.000	976.000
GEXPLORE	146.897	121.000	0.000	738.000
BSIZE	9.268	9.000	4.000	30.000
CAGE	55.638	55.000	31.000	85.000
LEV	0.483	0.445	0.000	3.600
CR	3.277	1.603	0.025	308.790
FV	1.927	0.660	0.000	197.220
Frequency	0	1		
SUSTCOM	77.65%	22.35%		

Source : Created by author with stata application

4.2 Pearson correlation

Table 4 presents the pearson correlation matrix among the variables used in this study. Overall, most correlation coefficients are low to moderate, indicating that multicollinearity is unlikely to be a serious issue. SDG disclosure (SDG) is positively and significantly correlated with green exploitation (0.230), green exploration (0.234), board size (0.346), CEO age (0.083), and sustainability committee (0.204). These results suggest that firms with higher green innovation activities, larger boards, older CEOs, and sustainability committees tend to disclose more SDG-related information. In contrast, leverage, current ratio, and firm value are not significantly associated with SDG disclosure. Among the independent variables, green exploitation and green exploration show a strong positive correlation (0.814), indicating that firms with higher green exploitation activities are also likely to engage in green exploration.

Table 4
Pearson correlation

SDG	SDG	GEXPLOIT	GEXPLORE	BSIZE	CAGE	SUSTCOM	LEV	CR	FV
	1.000								
GEXPLOIT	0.230*** (0.000)	1.000							
GEXPLORE	0.234*** (0.000)	0.814*** (0.000)	1.000						
BSIZE	0.346*** (0.000)	0.120*** (0.000)	0.197*** (0.000)	1.000					
CAGE	0.082*** (0.010)	0.048 (0.132)	0.033 (0.303)	0.116*** (0.000)	1.000				
SUSTCOM	0.204*** (0.000)	0.157*** (0.000)	0.132*** (0.000)	0.159*** (0.000)	-0.038 (0.228)	1.000			
LEV	-0.036 (0.263)	0.121*** (0.000)	0.085*** (0.008)	-0.004 (0.888)	0.075** (0.018)	0.139*** (0.000)	1.000		
CR	-0.013 (0.683)	-0.133*** (0.000)	-0.112*** (0.000)	0.134*** (0.000)	-0.020 (0.526)	-0.080** (0.011)	0.394*** (0.000)	1.000	
FV	-0.039 (0.226)	-0.045 (0.161)	0.005 (0.882)	0.005 (0.884)	-0.008 (0.798)	-0.077** (0.015)	-0.034 (0.279)	0.020 (0.536)	1.000
<i>p</i> -values in parentheses									
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$									

Source : Created by author with stata application

4.3 Discussion

4.3.1 Examining the effect of green ambidexterity on the SDG Disclosure in Indonesian manufacturing companies

Table 5 presents the regression results testing the effects of green exploitation and green exploration on SDG disclosure. The results show that green exploitation has a positive and significant relationship with SDG at the 1% level, with a consistent coefficient of 0.000 in specifications (1), (2), and (3) and corresponding t-values of 3.29, 5.28, and 2.89, respectively. This indicates that companies that are more intensive in utilizing and optimizing their existing green resources tend to disclose a broader range of SDG information. The consistency of these results across different specifications indicates that the positive relationship between green exploitation and SDG disclosure is robust. Therefore, H1 is supported.

The link between the level of exploration and the degree of SDG disclosure can be justified through the stakeholder theory framework, where companies are expected to react to stakeholder pressure regarding increased disclosure in terms of their environmental and sustainability performance. Through the development and use of their existing environmental capabilities, the companies are able to prove their commitment to sustainability and disclose more environmental information in relation to SDG disclosure. The results obtained are aligned with those previously found by researchers showing that environmental innovation based on exploitation contributes significantly to corporate environmental performance and thus encourages companies to disclose information regarding sustainability [100].

Meanwhile, green exploration also showed a positive and significant relationship with the SDGs at the 1% level, with a coefficient of 0.000 in specifications (4), (5), and (6), and t-values of 2.59, 5.56, and 2.90, respectively. These results indicate that companies actively exploring new green innovations such as experimenting with and developing previously nonexistent environmentally friendly technologies also tend to be more transparent in disclosing their SDG achievements. The positive coefficients remain statistically significant after introducing all control variables and fixed effects, indicating that the results are stable and robust. Therefore, H2 is supported.

From the point of view of the stakeholder perspective, the stakeholders would like the firms to not only enhance the current environmental efforts but also create new innovations to solve the sustainability issues. Firms that are doing green exploration tend to do new environmental efforts and sustainable innovations, which will give rise to many new sustainability activities and information to be disclosed under SDG disclosure. This finding is consistent with previous research indicating that green exploration innovation positively influences environmental performance, thereby encouraging firms to communicate their sustainability practices more extensively [66].

In general, the findings of both hypotheses H1 and H2 suggest that green exploitation and green exploration positively motivate organizations to make wider SDG disclosure through creating and sharing information regarding their current and new environmental initiatives. SDG disclosure could impact how stakeholders perceive the organization by showcasing the organization's involvement in environmental and social sustainability [3][9]. Thus, higher SDG disclosure would increase trust and confidence among stakeholders, which would lead to improved social reputation of the organization [22][108]. Considering mentioned connection, further analysis explores if there is a positive link between SDG disclosure and social reputation.

Table 6 shows the regression output testing the relationship between SDG disclosure and corporate social reputation. The output indicates that SDG disclosure is positively and significantly related to social reputation at the 1% level across all three specifications, with a coefficient value of 1.356 ($t = 6.93$) in specification (1), 1.459 ($t = 7.79$) in specification (2), and 1.261 ($t = 6.41$) in specification (3). This finding suggests that companies providing more comprehensive SDG disclosure are more likely to build stronger social reputation. Therefore, H3 is supported.

The results confirm stakeholder theory, which implies that SDG disclosure may enhance the social reputation of a firm by offering stakeholders information regarding the environmental, social, and governance performance of the firm [117][118]. Through the provision of full SDG disclosure, firms may showcase their commitment to sustainability, minimize information asymmetry, and improve stakeholder trust and confidence [107]. The resultant positive perception of the stakeholder may motivate other parties to offer positive evaluation, recognition, and institutional support, which eventually helps to improve the social reputation of the firm [34][104]. This finding is consistent with prior research indicating a significant positive association between the quality of sustainability disclosure and firms' social reputation [37].

Table 5
The result of regression analysis – SDG Disclosure

	(1)	(2)	(3)	(4)	(5)	(6)
	SDG	SDG	SDG	SDG	SDG	SDG
GEXPLOIT	0.000***	0.000***	0.000***			
	(3.28)	(5.27)	(2.87)			
GEXPLORE				0.000**	0.000***	0.000***
				(2.58)	(5.57)	(2.90)
BSIZE	0.021***	0.020***	0.022***	0.021***	0.019***	0.022***
	(11.84)	(11.02)	(12.73)	(11.46)	(10.21)	(12.23)
CAGE	0.001	0.001**	0.001**	0.001*	0.001**	0.001**
	(1.52)	(2.13)	(2.15)	(1.65)	(2.28)	(2.24)
SUSTCOM	0.067***	0.059***	0.055***	0.070***	0.059***	0.055***
	(4.71)	(4.04)	(3.99)	(4.91)	(4.02)	(3.99)
LEV	-0.027	-0.016	0.001	-0.024	-0.011	0.004
	(-1.46)	(-0.80)	(0.05)	(-1.29)	(-0.54)	(0.19)
CR	0.002	0.003	0.003	0.002	0.003	0.003
	(1.08)	(1.40)	(1.34)	(0.98)	(1.46)	(1.37)
FV	-0.001	-0.002**	-0.002*	-0.001	-0.003***	-0.002**
	(-1.06)	(-2.03)	(-1.75)	(-1.34)	(-2.70)	(-2.10)
_cons	0.028	0.142***	0.043	0.037	0.150***	0.050
	(0.69)	(3.49)	(1.02)	(0.88)	(3.68)	(1.18)
Year FE	Yes	No	Yes	Yes	No	Yes
Industry FE	No	Yes	Yes	No	Yes	Yes
r2	0.239	0.232	0.295	0.235	0.234	0.294
r2_a	0.231	0.219	0.280	0.226	0.221	0.280
N	989	989	989	989	989	989
t statistics in parentheses						
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$						

Source : Created by author with stata application

Table 6
The result of regression analysis – Social Reputation

	(1)	(2)	(3)
	SOCREPU	SOCREPU	SOCREPU
SDG	1.358***	1.455***	1.255***
	(6.90)	(7.77)	(6.38)
BSIZE	0.095***	0.089***	0.096***
	(7.65)	(7.19)	(7.75)
CAGE	0.011***	0.013***	0.013***
	(3.17)	(3.59)	(3.62)
SUSTCOM	0.405***	0.360***	0.357***
	(4.06)	(3.61)	(3.61)
LEV	0.005	-0.102	-0.076
	(0.04)	(-0.78)	(-0.59)
CR	-0.032***	-0.024***	-0.023***
	(-4.69)	(-3.29)	(-3.32)
FV	-0.015	-0.012	-0.012
	(-1.63)	(-1.37)	(-1.34)
_cons	-0.587**	-0.051	-0.215
	(-2.33)	(-0.21)	(-0.81)
Year FE	Yes	No	Yes
Industry FE	No	Yes	Yes
r2	0.234	0.283	0.292
r2_a	0.226	0.271	0.277
N	989	989	989
t statistics in parentheses			
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$			

Source : Created by author with stata application

4.4 Robustness Analysis

4.4.1 Generalized least squares (GLS)

The GLS Table 7 presents the results of the GLS test, controlling for year fixed effects and industry fixed effects. The results show that green exploitation continues to have a positive and significant effect on SDG disclosure at the 1% level, with a coefficient of 0.000 and a t-value of 8.71. Similarly, green exploration shows a positive and significant effect on

SDG disclosure at the 1% level, with a coefficient of 0.000 and a t-value of 13.34. The consistency in the direction and significance of these two independent variables with the main regression results in Table 5 reinforces the belief that the relationship between green exploitation, green exploration, and SDG disclosure is robust and not affected by issues of heteroscedasticity or autocorrelation in the data.

Table 7
Generalized least squares

	(1)	(2)
	SDG	SDG
GEXPLOIT	0.000***	
	(8.82)	
GEXPLORE		0.000***
		(14.17)
BSIZE	0.021***	0.021***
	(31.38)	(31.78)
CAGE	0.001***	0.001***
	(4.02)	(4.48)
SUSTCOM	0.058***	0.058***
	(15.01)	(16.66)
LEV	-0.008	-0.005
	(-1.61)	(-1.24)
CR	0.002***	0.002**
	(7.77)	(2.55)
FV	-0.003***	-0.002***
	(-3.79)	(-3.81)
_cons	0.093***	0.098***
	(5.28)	(5.65)
Year FE	Yes	Yes
Industry FE	Yes	Yes
F		
p	.	.
r2_p		
r2_a		
N	943	943
t statistics in parentheses		
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$		

Source : Created by author with stata application

4.5 Additional Analysis

4.5.1 Leverage and Green Ambidexterity: Impact on SDG Disclosure

The further analysis splits the sample into firms with low leverage (specifications 1 and 3) and high leverage (specifications 2 and 4) to examine whether leverage influences the relationship between green ambidexterity and SDG disclosure. Table 9 shows that green exploitation has a positive and significant effect in specification 1 (coefficient = 0.000, $p < 0.01$), but its effect becomes insignificant in specification 2. Likewise, green exploration has a positive and significant effect in specification 3 (coefficient = 0.000, $p < 0.01$), whereas the relationship is insignificant in specification 4.

These results indicate that green ambidexterity is more effective in contributing to the success of SDG disclosure for companies with lower levels of leverage [119]. Low levels of debt result in financial flexibility, which enables companies to use more resources in sustainability and innovation endeavours. On the other hand, companies that have high levels of leverage focus on their debts rather than on the success of SDG disclosure [120].

Table 8
Additional analysis – Leverage

	(1)	(2)	(3)	(4)
	SDG	SDG	SDG	SDG
GEXPLOIT	0.000***	0.000		
	(2.697)	(1.320)		
GEXPLORE			0.000***	0.000
			(3.340)	(0.114)
BSIZE	0.027***	0.016***	0.026***	0.017***
	(12.044)	(5.860)	(11.481)	(5.993)
CAGE	0.001	0.002**	0.001	0.002**
	(1.132)	(2.426)	(1.154)	(2.448)
SUSTCOM	0.034*	0.052***	0.031	0.058***
	(1.714)	(2.693)	(1.558)	(2.974)
CR	0.004*	0.008	0.004*	0.008
	(1.857)	(1.201)	(1.926)	(1.224)
FV	0.001	-0.006***	0.000	-0.006***
	(0.642)	(-3.359)	(0.106)	(-3.562)
_cons	-0.027	0.082	-0.015	0.088
	(-0.484)	(1.391)	(-0.264)	(1.492)
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
r2	0.368	0.277	0.374	0.274
r2_a	0.345	0.244	0.351	0.241
N	547	442	547	442
t statistics in parentheses				
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$				

Source : Created by author with stata application

4.5.2 Current Ratio and Green Ambidexterity: Impact on SDG Disclosure

The further analysis splits the sample into firms with low current ratio (specifications 1 and 3) and high current ratio (specifications 2 and 4) in order to investigate how liquidity affects the impact of green ambidexterity on SDG disclosure. As can be seen from Table 10, the variable green exploitation has a positive and significant impact on SDG disclosure

(coefficient = 0.000, $p < 0.05$) in the case of specification 1, while this impact becomes insignificant in specification 2. Moreover, green exploration has a positive and significant impact on SDG (coefficient = 0.000, $p < 0.05$) in the case of specification 3, but this effect is insignificant in specification 4.

According to these results, the contribution of green ambidexterity to the performance of SDG in firms is much more effective in the case of low current ratio [121]. Apparently, the proper use of green knowledge and innovations plays a more important role in the support of sustainable development goals in firms with lower liquidity. In the case of high current ratio, the positive influence of green exploitation and green exploration becomes less evident [122].

In summary, from the results obtained, it is evident that liquidity affects the impact of green ambidexterity in the attainment of SDG disclosure. It is important to note that the impact of green ambidexterity on sustainability performance is seen where companies make full use of their available assets [120].

Table 9
Additional analysis – Current Ratio

	(1)	(2)	(3)	(4)
	SDG	SDG	SDG	SDG
GEXPLOIT	0.000**	0.000		
	(2.118)	(0.796)		
GEXPLORE			0.000**	0.000
			(2.362)	(0.534)
BSIZE	0.019***	0.032***	0.018***	0.032***
	(9.508)	(8.302)	(9.124)	(8.221)
CAGE	0.001**	0.001	0.001**	0.001
	(2.067)	(1.332)	(2.110)	(1.391)
SUSTCOM	0.041***	0.077**	0.041***	0.077**
	(2.698)	(2.249)	(2.635)	(2.234)
LEV	-0.026	-0.066	-0.023	-0.063
	(-1.201)	(-1.082)	(-1.112)	(-1.034)
FV	-0.003*	-0.001	-0.003**	-0.001
	(-1.910)	(-0.402)	(-2.140)	(-0.502)
_cons	0.101**	-0.086	0.108**	-0.082
	(2.131)	(-1.070)	(2.252)	(-1.009)
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
r2	0.294	0.385	0.295	0.383
r2_a	0.275	0.336	0.276	0.335
N	726	263	726	263
t statistics in parentheses				
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$				

Source : Created by author with stata application

4.5.3 Firm Value and Green Ambidexterity: Impact on SDG Disclosure

Further analysis splits the sample into firms with low firm value (specifications 1 and 3) and high firm value (specifications 2 and 4) in order to find out whether firm value plays a role in the interaction of green ambidexterity and SDG disclosure. According to Table 11, green exploitation has a significant positive impact on SDG disclosure in

specification 1 (coefficient = 0.000, $p < 0.01$), while in specification 2 the relation is insignificant. The same goes for green exploration, which has an insignificant impact in specification 4 while significant in specification 3.

These results show that green ambidexterity makes more effective contributions to SDG disclosure achievements within low valued companies [123]. Within companies that have a smaller market evaluation, the efficient use of green knowledge and innovations seems to be more essential for increasing the sustainability performance of the company. On the other hand, high valued firms do not need to use their green ambidexterity in order to reach their SDG disclosure achievements. Hence, firm value is an influential factor in the effectiveness of ambidexterity [124].

Table 10
Additional analysis – break BSIZE samples

	(1)	(2)	(3)	(4)
	SDG	SDG	SDG	SDG
GEXPLOIT	0.000***	-0.000		
	(3.437)	(-0.705)		
GEXPLORE			0.000***	-0.000
			(3.617)	(-1.322)
BSIZE	0.022***	0.024***	0.021***	0.024***
	(11.059)	(4.957)	(10.313)	(5.124)
CAGE	0.001	0.001	0.001	0.001
	(1.442)	(1.165)	(1.505)	(1.121)
SUSTCOM	0.045***	0.100**	0.044***	0.098**
	(2.974)	(2.454)	(2.898)	(2.426)
LEV	0.018	-0.082*	0.020	-0.082*
	(0.814)	(-1.951)	(0.902)	(-1.937)
CR	0.003	-0.002	0.003	-0.002
	(1.342)	(-0.399)	(1.353)	(-0.380)
_cons	0.058	0.009	0.070	0.009
	(1.238)	(0.099)	(1.479)	(0.100)
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
r2	0.278	0.464	0.279	0.465
r2_a	0.260	0.410	0.261	0.412
N	780	209	780	209
t statistics in parentheses				
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$				

5. Conclusion, Policy implication and scope for further studies

5.1 Conclusion

In this research, the empirical evidence provided suggests that green ambidexterity, made up of green exploitation and green exploration, has a positive effect on the SDG disclosure of the listed non-financial firms on the IDX. Based on the empirical analysis carried out on 989 observations of firm-year from 2020 to 2024, it has been shown that there is a significant positive relationship between green exploitation, green exploration, and SDG disclosure. This positive relationship can be attributed to the fact that green exploitation allows firms to refine and improve their existing environmental activities, resulting in tangible sustainability gains that can be highlighted through SDG disclosure, while green exploration encourages firms to develop new sustainability innovations. These findings are supported by the results from both OLS and GLS estimation methods. In addition, it is evident that SDG disclosure positively and significantly affects social reputation, which indicates the sequence of the path followed from green innovation to sustainability disclosure and stakeholder recognition.

5.2 Policy implication

There are some important implications drawn from the findings of this study for the business management profession. The firms should should integrate green exploration and green exploitation into a coherent sustainability strategy. Firms should align these activities with their financial conditions by balancing investment in green innovation with improvements in existing green practices. In emerging Southeast Asian markets, credible green actions supported by transparent SDG disclosure can strengthen stakeholder legitimacy, corporate social reputation, and long-term competitiveness.

5.3 Scope for further studies

There is a need for future research to investigate the impact that green ambidexterity has on the disclosures of SDGs and on the social reputation of firms. The extension of this study beyond the Indonesian context, by conducting comparative research in other emerging markets, may give us a more complete picture of this relationship. Another possibility is for future studies to consider the effect that the characteristics of CEOs have on the relationship, employ more reliable and externally valid measurements of green ambidexterity and social reputation, and employ mixed methods.

Declarations

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Data availability the data used in this study are obtained from publicly accessible sources, specifically the official website of the Indonesia Stock Exchange (IDX) at www.idx.co.id. As the data are publicly available, the authors do not hold the rights to redistribute them.

Code availability Not applicable.

References

1. K. Hummel and E. du Toit, "Sustainability in context: SDG disclosure across African stock exchanges," *J. Account. Organ. Chang.*, vol. 22, no. 7, pp. 1–30, 2026, doi: 10.1108/jaoc-12-2024-0392.
2. L. Gaspari, M. Guidi, and M. Giuliani, "Navigating hybridity through SDG reporting: a case study of a municipally owned enterprise (MOE) in Italy," *Qual. Res. Account. Manag.*, vol. 23, no. 2, pp. 1–29, 2025, doi: 10.1108/QRAM-09-2024-0188.
3. H. Khan, F. Khan, I. Gurrib, and A. Khaliq, "CEO integrity and firm SDGs disclosure: the mediation role of firm's reputation and the moderating role of country SDG performance," *Stud. Econ. Financ.*, no. November 2024, 2025, doi: 10.1108/SEF-11-2024-0760.
4. N. Subramaniam, S. Akbar, H. Situ, S. Ji, and N. Parikh, "Sustainable development goal reporting: Contrasting effects of institutional and organisational factors," *J. Clean. Prod.*, vol. 411, no. March, p. 137339, 2023, doi: 10.1016/j.jclepro.2023.137339.
5. M. Sahu, A. Mishra, W. M. Alahdal, and M. Sami, "ESG performance and audit committee expertise: advancing sustainable development goals in leading nations," *Int. Rev. Econ. Financ.*, vol. 103, no. April, p. 104445, 2025, doi: 10.1016/j.iref.2025.104445.
6. V. Kiefner, A. Mohr, and C. Schumacher, "Female executives and multinationals' support of the UN's sustainable development goals," *J. World Bus.*, vol. 57, no. 3, p. 101304, 2022, doi: 10.1016/j.jwb.2021.101304.
7. V. Palea, S. Gordano, and A. Migliavacca, "Do firms practise what they preach? Corporate performance-communication decoupling on environmental SDGs and the impact of sustainability-oriented governance mechanisms," *Sustain. Accounting, Manag. Policy J.*, vol. 16, no. 7, pp. 98–127, 2025, doi: 10.1108/SAMPJ-07-2024-0705.
8. W. Tan, Q. Dong, and X. H. Chen, "Smart supply chains and corporate climate reputation risk: insights from climate news in China," *J. Account. Lit.*, pp. 1–32, 2025, doi: 10.1108/JAL-02-2025-0063.
9. S. Bose, H. Z. Khan, and S. Bakshi, "Determinants and consequences of sustainable development goals disclosure: International evidence," *J. Clean. Prod.*, vol. 434, no. December 2023, p. 140021, 2024, doi: 10.1016/j.jclepro.2023.140021.
10. S. A. Rahmatulloh, N. Anridho, S. Ningsih, N. Fitriani, and S. P. Lee, "CEO career variety and ESG disclosure: evidence from Indonesia," *Pacific Account. Rev.*, vol. 37, no. 4, pp. 616–635, 2025, doi: 10.1108/PAR-06-2024-0120.
11. F. Alshahrani, B. Eulaiwi, L. Duong, and G. Taylor, "Climate change disclosure performance and audit fees: evidence from Australia," *Sustain. Accounting, Manag. Policy J.*, vol. 16, no. 5, pp. 1208–1242, 2025, doi: 10.1108/SAMPJ-07-2023-0509.
12. J. F. Prados-Castillo, E. R. Porras, S. Ribeiro-Navarrete, and J. M. Guaita Martínez, "Blockchain technology to boost corporate reputation in the context of environmental, social and governance standards," *J. Risk Financ.*, no. July 2025, pp. 1–24, 2026, doi: 10.1108/JRF-07-2025-0297.
13. D. Giordino, F. Jabeen, N. Nirino, and S. Bresciani, "Institutional investors ownership concentration and its effect on disclosure and transparency of United Nations sustainable development goals," *Technol. Forecast. Soc. Change*, vol. 200, no. June 2023, 2024, doi: 10.1016/j.techfore.2023.123132.

14. A. Helfaya and P. Bui, "Pursuing a corporate sustainable identity: Green governance strategy, hybrid vehicle development, knowledge and sustainability performance," *J. Innov. Knowl.*, vol. 10, no. 2, p. 100660, 2025, doi: 10.1016/j.jik.2025.100660.
15. S. Cahyono, A. Ardianto, and M. Nasih, "Breaking barriers: CEOs STEM educational background and corporate climate change disclosure," *Int. J. Account. Inf. Manag.*, vol. 32, no. 4, pp. 651–684, 2024, doi: 10.1108/IJAIM-10-2023-0268.
16. M. F. R. Octavio, D. Setiawan, Y. A. Aryani, and T. Arifin, "The relationship between corporate governance and sustainability performance: the moderating role of public attention," *Asian Rev. Account.*, no. November, 2025, doi: 10.1108/ARA-01-2025-0009.
17. M. M. M. Mazumder and D. M. Hossain, "Corporate commitment to the Sustainable Development Goals (SDGs) in an emerging economy: insights from annual report disclosures," *Pacific Account. Rev.*, vol. 38, no. 2, pp. 1–24, 2025, doi: 10.1108/PAR-11-2024-0316.
18. I. Itan, S. Sylvia, S. Septiany, and R. Chen, "The influence of environmental, social, and governance disclosure on market reaction: evidence from emerging markets," *Discov. Sustain.*, vol. 6, no. 1, 2025, doi: 10.1007/s43621-025-01085-0.
19. I. Harymawan, M. Nasih, Y. Permatasari, A. Minanurohman, and G. Taylor, "Behind closed doors: unveiling the effect of insider CEOs on corporate debt costs," *Account. Res. J.*, vol. 38, no. 3–4, pp. 343–363, 2025, doi: 10.1108/ARJ-06-2024-0233.
20. B. Chandra, Mardianto, T. Hardi, and Robin, "the Impact of Ceo Succession and Corporate Governance on Climate Change Disclosure," *Corp. Gov. Sustain. Rev.*, vol. 10, no. 1, pp. 145–159, 2026, doi: 10.22495/cgsrv10i1p13.
21. W. M. Al-ahdal, S. N. Muhmad, N. H. S. Farhan, F. A. Almaqtari, A. Mhawish, and H. A. Hashim, "Unveiling the impact of firm-characteristics on sustainable development goals disclosure: A cross-country study on non-financial companies in Asia," *Borsa Istanbul Rev.*, vol. 24, no. 5, pp. 916–933, 2024, doi: 10.1016/j.bir.2024.05.003.
22. Ivone, A. Amran, and I. Itan, "Are Family Firms Reporting Differently? Integrated Reporting Practices in Indonesia," *Corp. Soc. Responsib. Environ. Manag.*, pp. 1–23, 2026, doi: 10.1002/csr.70411.
23. F. Rosati and L. G. D. Faria, "Business contribution to the Sustainable Development Agenda: Organizational factors related to early adoption of SDG reporting," *Corp. Soc. Responsib. Environ. Manag.*, vol. 26, no. 3, pp. 588–597, 2019, doi: 10.1002/csr.1705.
24. S. Pizzi, A. Caputo, A. Corvino, and A. Venturelli, "Management research and the UN sustainable development goals (SDGs): A bibliometric investigation and systematic review," *J. Clean. Prod.*, vol. 276, 2020, doi: 10.1016/j.jclepro.2020.124033.
25. G. Zampone and M. Guidi, "Sustainability reporting and assurance practices contribution to SDG disclosure: evidence from communication on progress (CoP)," *Meditari Account. Res.*, vol. 32, no. 7, pp. 236–265, 2024, doi: 10.1108/MEDAR-09-2023-2165.
26. S. N. Aini, I. Harymawan, D. Setiawan, and D. Adhariani, "Sustainability Committee and ESG Performance: A Worldwide Evidence," *Bus. Strateg. Dev.*, vol. 8, no. 3, 2025, doi: 10.1002/bsd2.70173.
27. X. Jiang, L. Yuan, A. Alsabban, S. Fontana, and C. Nespoli, "Human, structural, and relational capital as drivers of sustainable hospitality performance: an intellectual capital perspective," *J. Intellect. Cap.*, vol. 27, no. 4, pp. 1–23, 2025, doi: 10.1108/JIC-12-2024-0415.
28. S. R. Sethi and D. A. Mahadik, "Forecasting financial distress for organizational sustainability: An empirical analysis," *Sustain. Futur.*, vol. 9, no. October 2024, p. 100429, 2025, doi: 10.1016/j.sftr.2024.100429.
29. Y. H. Ling, Y. H. Tham, and L. Jong, "Steering the helm of sustainability: the role of sustainability committees and female directors," *J. Account. Organ. Chang.*, vol. 22, no. 7, pp. 120–139, 2026, doi: 10.1108/JAOC-04-2025-0110.

30. O. Erin, A. Adebayo, B. Ackers, and T. Soobaroyen, *Sustainable development goal research in accounting: a systematic literature review and direction for future research*, no. September. 2025. doi: 10.1108/JFRA-05-2024-0243.
31. M. A. Alia, A. Dwekat, and A. J. Salameh, "Corporate governance and carbon emissions disclosure in Europe: the strategic moderating role of sustainability committees," *J. Financ. Report. Account.*, pp. 1–22, 2026, doi: 10.1108/JFRA-11-2025-0923.
32. V. Vigolo, G. Mion, and P. Moura e Sá, "Gaining legitimization during environmental crises: an inquiry into the relationship between corporate social responsibility, reputation, and blame attribution," *Soc. Responsib. J.*, vol. 21, no. 5, pp. 1009–1031, 2025, doi: 10.1108/SRJ-04-2024-0294.
33. A. Arianpoor, C. Sahin, and S. A. Borhani, "The impact of corporate reputation on credit rating quality in an Asian market: the moderating role of economic policy uncertainty," *J. Islam. Account. Bus. Res.*, 2025, doi: 10.1108/JIABR-04-2024-0154.
34. A. Li, D. Wu, and J. Wang, "Can narrative disclosure in annual reports preserve corporate reputation: evidence from letters to shareholders," *Asian Rev. Account.*, vol. 33, no. 5, pp. 927–955, 2025, doi: 10.1108/ARA-07-2024-0222.
35. C. Kuzey, A. Uyar, H. Al-Shaer, and A. S. Karaman, "Do firms with more powerful CEOs and greater visibility have better social reputation?," *Int. J. Account. Inf. Manag.*, vol. 33, no. 3, pp. 427–456, 2025, doi: 10.1108/IJAIM-06-2024-0214.
36. N. T. T. Nguyen, N. P. Nguyen, and T. Thanh Hoai, "Ethical leadership, corporate social responsibility, firm reputation, and firm performance: A serial mediation model," *Heliyon*, vol. 7, no. 4, p. e06809, 2021, doi: 10.1016/j.heliyon.2021.e06809.
37. A. Zarefar, D. Agustia, and N. Soewarno, "The role of foreign board and ownership on the quality of sustainability disclosure: the moderating effect of social reputation," *Corp. Gov.*, vol. 24, no. 4, pp. 900–918, 2024, doi: 10.1108/CG-05-2022-0236.
38. T. K. Vuong and H. M. Bui, "The role of corporate social responsibility activities in employees' perception of brand reputation and brand equity," *Case Stud. Chem. Environ. Eng.*, vol. 7, no. November 2022, p. 100313, 2023, doi: 10.1016/j.cscee.2023.100313.
39. J. L. Gunn, C. Li, L. Liao, J. Yang, and S. Zhou, "Audit firms' corporate social responsibility activities and auditor reputation," *Accounting, Organ. Soc.*, vol. 113, no. June, p. 101569, 2024, doi: 10.1016/j.aos.2024.101569.
40. Y. Ye, J. Ding, J. Li, and T. Liu, "Multiple directorships and corporate ESG performance: evidence from independent director attention allocation," *China Financ. Rev. Int.*, pp. 1–28, 2026, doi: 10.1108/CFRI-05-2025-0274.
41. B. V. Cannizzaro, A. Piazza, S. Ghinoi, and S. Vasudevan, "Institutional pressures and ESG disclosure similarity: an analysis of European shareholder letters," *Manag. Decis.*, vol. 64, no. 13, pp. 431–453, 2026, doi: 10.1108/MD-04-2025-0956.
42. M. A. Rahman and S. H. Shaon, "ESG disclosure, AI integration and organizational change for sustainability culture and climate resilience in Bangladesh: a moderated mediation model," *J. Account. Organ. Chang.*, pp. 1–34, 2026, doi: 10.1108/JAOC-05-2025-0164.
43. Y. Wang, C. Sumritsakun, A. Yodbutr, and T. Awirothananon, "The impact of ESG performance on firm performance: The moderating role of audit quality - evidence from china," *Asian J. Account. Res.*, pp. 1–14, 2026, doi: 10.1108/AJAR-07-2025-0343.
44. A. Kunaifi, V. Oktari, and N. Soewarno, "ESG disclosure and firm sustainable growth nexus in Indonesia's emerging markets: does working capital management matter?," *Asian Rev. Account.*, vol. 34, no. 2, pp. 438–453, 2026, doi: 10.1108/ARA-03-2025-0068.
45. D. R. Cambrea, F. Quarato, G. M. D'Allura, and F. Paolone, "Driving ESG performance: CEO succession impact in European listed firms," *Manag. Decis.*, vol. 63, no. 2, pp. 512–530, 2025, doi: 10.1108/MD-10-2023-2005.

46. A. Kazyte, R. Krusna, and A. Sapkauskiene, "From ESG disclosure to credit risk: evidence from European firms," *J. Financ. Report. Account.*, pp. 1–23, 2026, doi: 10.1108/JFRA-05-2025-0443.
47. P. S. G. B. V. and M. Samanta, "Does ESG disclosure reduce corporate risk taking? Evidence from Indian firms," *Manag. Financ.*, vol. 52, no. 5, pp. 852–871, 2025, doi: 10.1108/MF-06-2025-0421.
48. T. A. Tsalis, N. Trelopoulos, G. Avlogiaris, P. Kosmas, K. I. Vatalis, and I. E. Nikolaou, "What drives the quality of corporate ESG disclosures?," *J. Risk Financ.*, vol. 27, no. 3, pp. 514–538, May 2026, doi: 10.1108/JRF-04-2025-0199.
49. V. Beretta, M. C. Demartini, and S. Trucco, "From sustainability to financial performance: the role of SDG disclosure," *Meas. Bus. Excell.*, vol. 29, no. 2, pp. 237–255, 2025, doi: 10.1108/MBE-05-2024-0054.
50. L. Chen, M. U. Khurram, Y. Gao, M. Z. Abedin, and B. Lucey, "ESG disclosure and technological innovation capabilities of the Chinese listed companies," *Res. Int. Bus. Financ.*, vol. 65, no. April, p. 101974, 2023, doi: 10.1016/j.ribaf.2023.101974.
51. H. Zeng, H. A. A. Bin Hoque, M. Z. Abedin, and S. Ma, "From campus to boardroom: how alumni networks impact corporate greenwashing," *J. Account. Lit.*, pp. 1–27, Jun. 2026, doi: 10.1108/JAL-02-2026-0111.
52. E. Asiedu, E. Malcalm, and M. Majeed, "Green supply chain management and sustainable competitive advantage: exploring the role of green ambidexterity innovation," *Mod. Supply Chain Res. Appl.*, pp. 1–18, Mar. 2026, doi: 10.1108/MS CRA-02-2025-0006.
53. H. Lee, "Green exploitation and exploration innovation as responses to environmental performance shortfalls: integration of performance feedback, threat-rigidity and ambidexterity perspectives," *J. Bus. Ind. Mark.*, vol. 40, no. 2, pp. 448–462, 2025, doi: 10.1108/JBIM-12-2023-0764.
54. J. Martínez-Falcó, E. Sánchez-García, B. Marco-Lajara, and K. Lee, "Green intellectual capital and environmental performance: identifying the pivotal role of green ambidexterity innovation and top management environmental awareness," *J. Intellect. Cap.*, vol. 25, no. 2–3, pp. 380–401, 2024, doi: 10.1108/JIC-08-2023-0193.
55. M. A. Islam, W. M. Lim, M. S. Islam, and B. C. Y. L. Lim, "Green transformational leadership and employees' green ambidexterity: the role of green organizational support and market turbulence," *Empl. Relations Int. J.*, vol. 48, no. 9, pp. 101–120, 2026, doi: 10.1108/ER-09-2025-0745.
56. M. Shoaib, L. Švecová, H. Scholleová, I. Vozňáková, and A. Bargoni, "Unravelling green ambidexterity innovation with green strategic intent: exploring mediation and moderation effects," *J. Intellect. Cap.*, pp. 1–28, 2025, doi: 10.1108/JIC-12-2024-0402.
57. K. Asiaei, N. G. O'Connor, O. Barani, and M. Joshi, "Green intellectual capital and ambidextrous green innovation: The impact on environmental performance," *Bus. Strateg. Environ.*, vol. 32, no. 1, pp. 369–386, 2023, doi: 10.1002/bse.3136.
58. R. Jabeen, S. Mehmood, M. Ahmed, T. Ghani, Z. K. Javaid, and J. Popp, "The Role of Green HRM on Environmental Performance: Mediating Role of Green Ambidexterity and Green Behavior and Moderating Role of Responsible Leadership," *J. Chinese Hum. Resour. Manag.*, vol. 15, no. 2, pp. 70–90, 2024, doi: 10.47297/wspchrmWSP2040-800504.20241502.
59. C. T.-H. Dinh, L. T.-H. Van, and N. P. Tran, "Does green intellectual capital affect green innovation performance? Evidence from the Vietnamese automotive industry," *VINE J. Inf. Knowl. Manag. Syst.*, pp. 1–21, 2026, doi: 10.1108/vjikms-10-2024-0355.
60. S. Kumar, Vandana, V. Kumar, S. Chatterjee, M. Mariani, and A. De Massis, "The role of artificial intelligence capabilities in enhancing export performance: a study of ambidexterity and dynamic capabilities," *Int. Mark. Rev.*, vol. 42, no. 4, pp. 698–714, 2025, doi: 10.1108/IMR-10-2024-0426.
61. M. Farzaneh, R. Wilden, L. Afshari, and G. Mehralian, "Dynamic capabilities and innovation ambidexterity: The roles of intellectual capital and innovation orientation," *J. Bus. Res.*, vol. 148, no. April 2021, pp. 47–59, 2022, doi: 10.1016/j.jbusres.2022.04.030.

62. S. Raza, A. Khan, A. Hayat, and M. Marimuthu, "Innovative work practices and disruptive innovation : the roles of dynamic capabilities , innovation culture and transformational leadership," *J. Sci. Technol. Policy Manag.*, vol. 17, no. 11, pp. 74–99, 2026, doi: 10.1108/JSTPM-01-2025-0024.
63. Y. Zhang, J. Li, Y. Deng, and Y. Zheng, "Avoid or approach: How CEO power affects corporate environmental innovation," *J. Innov. Knowl.*, vol. 7, no. 4, p. 100250, 2022, doi: 10.1016/j.jik.2022.100250.
64. I. S. Wahyuni TD, Y. Fernando, and J. Krisnanmoorthy, "Green intellectual capital and accounting capability: the game-changer for sustainability reporting," *J. Intellect. Cap.*, pp. 1–29, May 2026, doi: 10.1108/JIC-09-2025-0387.
65. M. S. Hosain, "Corporate board characteristics and CSR budget of selected Bangladeshi banks: moderating role of corporate reputation," *Asian J. Econ. Bank.*, vol. 9, no. 1, pp. 126–143, 2025, doi: 10.1108/ajeb-08-2023-0083.
66. H. Lee, "Green ambidexterity and environmental performance: the role of CEO attention to stakeholders as a microfoundation of dynamic capabilities," *J. Bus. Ind. Mark.*, vol. 40, no. 12, pp. 1–20, 2025, doi: 10.1108/JBIM-01-2024-0018.
67. S. Chong, I. Ali, A. K. Narayan, and I. M. Khudir, "Beyond the greenwash: institutional forces driving university SDG reporting," *Account. Res. J.*, 2025, doi: 10.1108/ARJ-02-2025-0040.
68. L. K. David, J. Wang, M. Luo, and I. I. Cisse, "Green signaling or greenwashing? ESG disclosure, firm performance and capital allocation in BRICS equity markets," *J. Cap. Mark. Stud.*, vol. 9, no. 2, pp. 1–22, 2025, doi: 10.1108/JCMS-06-2025-0080.
69. Y. Xie, J. Wu, Y. Du, X. Wang, and Y. Xie, "Do knowledge management and green technology innovation matter in pursuit of environmental performance? A moderated mediation model from traditional manufacturing," *J. Knowl. Manag.*, pp. 1–22, 2026, doi: 10.1108/jkm-03-2026-0465.
70. B. S. Awwad, N. I. Jadallah, and U. C. Braendle, "Unpacking the link between ESG disclosure and firm performance in emerging economies," *J. Bus. Socio-economic Dev.*, pp. 1–17, 2026, doi: 10.1108/JBSED-11-2025-0556.
71. D. M. Hossain, R. Sobhan, M. S. Alam, and M. M. M. Mazumder, "Financial inclusion-related corporate communication of Bangladeshi banks: a moral legitimacy perspective," *J. Account. Emerg. Econ.*, pp. 1–21, 2026, doi: 10.1108/JAEE-04-2025-0202.
72. R. E. E. Freeman and J. McVea, "A Stakeholder Approach to Strategic Management," *SSRN Electron. J.*, 2005, doi: 10.2139/ssrn.263511.
73. T. T. B. Dao and M. C. Phan, "Stakeholder theory, risk-taking and firm performance," *Corp. Gov.*, vol. 23, no. 7, pp. 1623–1647, 2023, doi: 10.1108/CG-09-2022-0366.
74. J. Teng, S. F. Saidin, Y. W. Lau, and M. Li, "The effect of board diversity on ESG disclosure in China," *Pacific Account. Rev.*, vol. 38, no. 1, pp. 231–250, 2025, doi: 10.1108/PAR-09-2024-0208.
75. I. F. U. Rasool *et al.*, "Extraction of plant protein using the green procedures: Functional development toward Sustainable Development Goals (SDGs)," *Appl. Food Res.*, vol. 6, no. 1, 2026, doi: 10.1016/j.afres.2026.102131.
76. H. Nguyen-Van, A. H. Le, C. Van Nguyen, L. D. Ho, and Q. T. T. Nguyen, "Green ambidextrous innovation and sustainable performance in Vietnam's low-carbon transition: The role of green intellectual capital, green ambidextrous leadership, and green entrepreneurial orientation," *J. Open Innov. Technol. Mark. Complex.*, vol. 11, no. 4, p. 100655, 2025, doi: 10.1016/j.joitmc.2025.100655.
77. U. Nguyen, C. Gan, and Y. Zhang, "Corporate culture as a catalyst for ESG disclosure: empirical evidence from the United States," *J. Account. Organ. Chang.*, pp. 1–23, Jun. 2026, doi: 10.1108/JAOC-01-2026-0034.
78. A. S. Maftoon, K. Afzal, A. Razzaq, and W. A. Shaheen, "Green innovations and clean energy: a regional exploration of their dual impact on global ecological sustainability," *Energy Storage Sav.*, vol. 5, no. 2, p. 100139, 2026, doi: 10.1016/j.enss.2025.05.011.

79. K. Hosiosky, L. Myeza, and G. Marques, "How do state-owned enterprises (SOEs) prioritise and disclose the sustainable development goals (SDGs): evidence from South Africa," *J. Public Budgeting, Account. Financ. Manag.*, pp. 1–41, 2026, doi: 10.1108/JPBAFM-10-2024-0213.
80. M. Liu and S. Yang, "Digital-intelligent technologies, green ambidextrous innovation, and green transformation in manufacturing enterprises," *Int. Rev. Econ. Financ.*, vol. 109, no. January, p. 105336, 2026, doi: 10.1016/j.iref.2026.105336.
81. H. K. Duong and H. C. Nguyen, "How sustainability reporting shapes dividend policy: evidence from Vietnam's listed companies," *Asian J. Account. Res.*, 2025, doi: 10.1108/AJAR-01-2025-0017.
82. J. Liu, F. Long, L. Chen, L. Li, L. Zheng, and Z. Mi, "Exploratory or exploitative green innovation? The role of different green fiscal policies in motivating innovation," *Technovation*, vol. 143, no. July 2024, p. 103207, 2025, doi: 10.1016/j.technovation.2025.103207.
83. N. F. Crespo, A. A. Al-Deaja, and P. Sánchez-Sellero, "Configurations for green innovation: Assessing the impact of supply, demand, and institutional factors in domestic and exporting companies," *Int. Bus. Rev.*, vol. 35, no. 5, 2026, doi: 10.1016/j.ibusrev.2026.102614.
84. S. Afewerki, J. Deegan, A. Blomgren, B. Asheim, S. H. Reve, and U. Landazuri-Tveteraas, "Oil and gas incumbents' green diversification: Balancing short-term returns with long-term energy transition imperatives?," *Energy Res. Soc. Sci.*, vol. 134, no. July 2025, 2026, doi: 10.1016/j.erss.2026.104641.
85. A. P. Redaputri, A. Wibowo, C. B. Santoso, and R. Almahendra, "From identity to innovation: a multi-theoretical framework of green organizational identity, ambidextrous green innovation, and digital-enabled environmental collaboration," *World Dev. Sustain.*, vol. 8, no. August 2025, p. 100278, 2026, doi: 10.1016/j.wds.2026.100278.
86. F. Liu, Y. Xiao, S. Jia, and X. Wang, "From knowledge to cognition: Digital-intelligent dual transformation and the quantity-quality transformation of green innovation," *J. Innov. Knowl.*, vol. 18, no. July, p. 101109, 2026, doi: 10.1016/j.jik.2026.101109.
87. B. Awuah, H. Elbardan, and H. Yazdifar, "Chief executive officer narcissism, power and sustainable development goals reporting: An empirical analysis," *Bus. Strateg. Environ.*, vol. 33, no. 7, pp. 7630–7650, 2024, doi: 10.1002/bse.3889.
88. P. K. Gurugubelli and S. G. Deb, "Do institutional investors mediate the ESG performance and firm performance relationship in Islamic countries? Evidence from Malaysia, Indonesia and Turkey," *J. Islam. Mark.*, pp. 1–29, Jul. 2026, doi: 10.1108/JIMA-05-2025-0288.
89. M. Garrido-Ruso, B. Aibar-Guzmán, and Ó. Suárez-Fernández, "What kind of leaders can promote the disclosure of information on the sustainable development goals?," *Sustain. Dev.*, vol. 31, no. 4, pp. 2694–2710, 2023, doi: 10.1002/sd.2539.
90. C. Rodaro, A. Caputo, C. Sarfo, and M. Kargina, "Enterprising strategies for Sustainable Development Goals: a bibliometric and systematic literature review," *J. Enterprising Communities*, 2025, doi: 10.1108/JEC-02-2025-0042.
91. C. Tang, Y. Shi, J. Li, and Y. Li, "Fostering sustainable oriented innovation via green intellectual capital: the mediating role of exaptation," *J. Intellect. Cap.*, pp. 1–27, 2026, doi: 10.1108/jic-10-2025-0447.
92. J. Brodny and M. Tutak, "Towards a sixfold helix model for green smart cities? A conceptual exploration of stakeholder collaboration, interaction mechanisms, and role allocation," *J. Open Innov. Technol. Mark. Complex.*, vol. 11, no. 4, 2025, doi: 10.1016/j.joitmc.2025.100681.
93. P. Raffaelli, J. A. Correa-García, and C. S. Verón, "Non-financial determinants influencing Sustainable Development Goals disclosure in traditional banking institutions in Latin America," *J. Econ. Financ. Adm. Sci.*, 2025, doi: 10.1108/JEFAS-12-2024-0387.
94. S. Arvidsson, "CEO talk of sustainability in CEO letters: towards the inclusion of a sustainability embeddedness and value-creation perspective," *Sustain. Accounting, Manag. Policy J.*, vol. 14, no. 7, pp. 26–61, 2022, doi:

95. A. Kaur, D. Argento, U. Sharma, and T. Soobaroyen, "Everything, everywhere, all at once': the role of accounting and reporting in achieving sustainable development goals," *J. Public Budgeting, Account. Financ. Manag.*, vol. 37, no. 2, pp. 137–155, 2025, doi: 10.1108/JPBAFM-01-2025-0011.
96. H. Yadav, A. Kumar Kar, S. Kashiramka, and N. P. Rana, "How does change in CEOs' strategic orientations in their social media communication impact firm performance during crisis? A longitudinal study," *Technol. Forecast. Soc. Change*, vol. 208, no. August, p. 123649, 2024, doi: 10.1016/j.techfore.2024.123649.
97. A. Chen, L. Gerick, and Q. Tang, "Strategic timing of corporate social responsibility investments under reputational risk," *Risk Sci.*, vol. 1, no. June 2024, p. 100008, 2025, doi: 10.1016/j.risk.2024.100008.
98. M. Úbeda-García, B. Marco-Lajara, P. C. Zaragoza-Sáez, E. Manresa-Marhuenda, and E. Poveda-Pareja, "Green ambidexterity and environmental performance: The role of green human resources," *Corp. Soc. Responsib. Environ. Manag.*, vol. 29, no. 1, pp. 32–45, 2022, doi: 10.1002/csr.2171.
99. Y. Shi, C. Van Toorn, and M. McEwan, "Exploration–Exploitation: How business analytics powers organisational ambidexterity for environmental sustainability," *Inf. Syst. J.*, vol. 34, no. 3, pp. 894–930, 2024, doi: 10.1111/isj.12456.
100. X. Xing, J. Wang, and L. Tou, "The relationship between green organization identity and corporate environmental performance: The mediating role of sustainability exploration and exploitation innovation," *Int. J. Environ. Res. Public Health*, vol. 16, no. 6, 2019, doi: 10.3390/ijerph16060921.
101. Y. Bu, M. Tang, X. Du, and H. Li, "Artificial intelligence development and the coupled growth of green and inclusive finance: Evidence from China," *Econ. Anal. Policy*, vol. 92, no. May, pp. 51–79, 2026, doi: 10.1016/j.eap.2026.05.019.
102. A. Purwoaji, S. Cahyono, A. Ardianto, and K. A. Kamarudin, "The impact of insider CEOs on corporate carbon emissions performance: the moderating role of corporate governance," *Pacific Account. Rev.*, vol. 37, no. 4, pp. 551–591, 2025, doi: 10.1108/PAR-07-2024-0156.
103. S. U. Rehman and H. Hassan, *Top management team composition and SDG disclosure in Asian multinational enterprises: the moderating roles of home-country competitiveness and national SDG performance*. 2026. doi: 10.1108/SAMPJ-07-2025-1109.
104. K. Singh and M. Misra, "Linking Corporate Social Responsibility (CSR) and Organizational Performance: the moderating effect of corporate reputation," *Eur. Res. Manag. Bus. Econ.*, vol. 27, no. 1, p. 100139, 2021, doi: 10.1016/j.iedeen.2020.100139.
105. M. Ngoc Khuong and N. T. T. Nhan, "Strategic planning, innovation, and firm reputation in Vietnamese SMEs: Integrating social cognition, diffusion of innovation, and institutional theories," *Int. J. Innov. Stud.*, vol. 10, no. 3, p. 100184, 2026, doi: 10.1016/j.ijis.2026.100184.
106. C. Fombrun and M. Shanley, "What's in a Name? Reputation Building and Corporate Strategy," *Acad. Manag. J.*, vol. 33, pp. 233–258, Jun. 1990, doi: 10.2307/256324.
107. K. L. Handley, "Accountability and social impact evaluation in a small NPO: stakeholder ambiguity, networks and trust," *Accounting, Audit. Account. J.*, vol. 38, no. 9, pp. 239–264, 2025, doi: 10.1108/AAAJ-07-2023-6547.
108. J. Guerrero-Villegas, L. Pérez-Calero, J. M. Hurtado-González, and P. Giráldez-Puig, "Board attributes and corporate social responsibility disclosure: A meta-analysis," *Sustain.*, vol. 10, no. 12, pp. 1–22, 2018, doi: 10.3390/su10124808.
109. N. H. Al Hosani, H. Nobanee, and N. O. D. Ellili, "The impact of board gender diversity on financial performance of non-financial companies of the UAE: the moderating role of environmental, social, and governance (ESG) disclosure," *Corp. Gov.*, vol. 25, no. 8, pp. 176–194, 2025, doi: 10.1108/CG-06-2023-0228.
110. H. C. Nguyen and H. K. Duong, "The extent and determinants of SDG disclosures in Vietnamese listed firms," *Meditari Account. Res.*, vol. 33, no. 1, pp. 335–364, 2025, doi: 10.1108/MEDAR-08-2024-2605.

111. A. A. Ngelo, I. Harymawan, and M. Nasih, "Ex-auditor executives and investment efficiency: evidence from Indonesia," *Asian Rev. Account.*, vol. 30, no. 4, pp. 559–580, 2022, doi: 10.1108/ARA-01-2022-0015.
112. Q. Hu, M. B. U. Bhuiyan, and M. N. Houqe, "Chair–CEO age dissimilarity and investment efficiency: evidence from China," *Int. J. Account. Inf. Manag.*, vol. 34, no. 2, pp. 289–329, 2025, doi: 10.1108/IJAIM-11-2024-0432.
113. S. Yang, Y. Zhao, and C. Wu, "Does CEO celebrity affect IPO underpricing? Evidence from the strategic emerging industries in China," *Int. J. Emerg. Mark.*, vol. 20, no. 5, pp. 1995–2013, 2025, doi: 10.1108/IJOEM-12-2022-1815.
114. C. Kuzey, A. Hamrouni, A. Uyar, and A. S. Karaman, "Social reputation, loan contracting and governance mechanisms," *Int. J. Account. Inf. Manag.*, vol. 32, no. 3, pp. 502–531, 2024, doi: 10.1108/IJAIM-12-2023-0321.
115. N. Puspitasari, R. Hassan, S. E. Hidayat, A. Mufidah, and A. P. Korina, "Interaction of carbon emission disclosure and Shariah compliance on firm values: evidence in the banking sector worldwide," *J. Islam. Account. Bus. Res.*, pp. 1–21, 2025, doi: 10.1108/JIABR-03-2025-0142.
116. B. Dincer, A. İ. Keskin, and C. Dincer, "Nexus between Sustainability Reporting and Firm Performance: Considering Industry Groups, Accounting, and Market Measures," *Sustain.*, vol. 15, no. 7, 2023, doi: 10.3390/su15075849.
117. G. Nicolo, G. Zampone, S. De Iorio, and G. Sannino, "Does SDG disclosure reflect corporate underlying sustainability performance? Evidence from UN Global Compact participants," *J. Int. Financ. Manag. Account.*, vol. 35, no. 1, pp. 214–260, 2024, doi: 10.1111/jifm.12194.
118. G. Gabrielli, P. L. Marchini, and D. Baldini, "Do Sustainable Development Goal Disclosure Matter? Unpacking Value Relevance in the European Context," *Bus. Strateg. Environ.*, vol. 35, no. 2, pp. 1610–1626, 2026, doi: 10.1002/bse.70254.
119. I. Bouchmel, Z. Ftiti, W. Louhich, and A. Omri, "Financing sources, green investment, and environmental performance: Cross-country evidence," *J. Environ. Manage.*, vol. 353, 2024, doi: 10.1016/j.jenvman.2024.120230.
120. N. H. S. Farhan, F. A. Almaqtari, S. A. Hazaea, and W. M. Al-ahdal, "The moderating effect of liquidity on the relationship between sustainability and firms' specifics: Empirical evidence from indian manufacturing sector," *Heliyon*, vol. 9, no. 4, p. e15439, 2023, doi: 10.1016/j.heliyon.2023.e15439.
121. L. Ho and Y. Lu, "Corporate Sustainability Performance and Liquidity: International Evidence," *J. Int. Financ. Manag. Account.*, vol. 37, no. 2, pp. 377–410, 2026, doi: 10.1111/jifm.70003.
122. R. Taha, A. Al-Omush, and M. Al-Nimer, "Corporate sustainability performance and profitability: The moderating role of liquidity and stock price volatility - evidence from Jordan," *Cogent Bus. Manag.*, vol. 10, no. 1, 2023, doi: 10.1080/23311975.2022.2162685.
123. V. H. Nguyen, "Corporate social responsibility disclosure and firm value: a signaling theory perspective," *J. Econ. Dev.*, vol. 27, no. 2, pp. 114–128, 2025, doi: 10.1108/JED-02-2024-0067.
124. J. R. Faria, G. Tindall, and S. Terjesen, "The Green Tobin's q: theory and evidence," *Energy Econ.*, vol. 110, 2022, doi: 10.1016/j.eneco.2022.106033.