# Evolving Sustainability Disclosure Practices in India: Exploring Company Longevity's Impact: A Case Study

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Indian businesses increasingly recognize the growing significance of disclosing their sustainability efforts, which encompass environmental, social, and economic effects. However, different sectors and industries disclose differently, depending on their awareness, regulations, and standards. This study examines the disclosure practices of 25 Indian companies operating in various sectors, aiming to explore the relationship between the age of a company and its inclination towards disclosure. Primary data was collected through a a questionnaire on various aspects of sustainability, including environmental policies, legal compliance, management systems, product impact, waste/energy management, water usage, and packaging/transportation. Based on the responses, a Sustainability Disclosure Index (SDI) was calculated for each company. The study employed regression analysis to test the hypothesis that older companies have a stronger positive correlation with SDI. The results revealed SDI scores ranged from 55.35% to 98.21%, with an average of 82.67%. The pharmaceutical and steel industries showed the highest SDI scores, while the textile, port, and chemical sectors scored lower. The regression analysis confirmed a significant positive relationship between the age of a company and its SDI, indicating that older companies disclose sustainability information more comprehensively. This research underscores the dynamic nature of sustainability disclosure in India, emphasizing the need for stricter regulations and standardization to enhance the quality and comparability of disclosures. It highlights the notable connection between a company's age and its disclosure practices, suggesting that older companies with more experience, resources, and stakeholder expectations generally engage in more comprehensive sustainability reporting.

**Keywords:** Sustainability Disclosure, Sectoral Differences, Standardization and Regulation, Experience and Resources.

#### 1. Introduction

In response to increasing global concerns about climate change and environmental impact,

there has been a shift in focus among corporations towards incorporating sustainability into their financial performance (Kouloukoui et al., 2019). Companies, once seen as resource extractors, are now under pressure to act as responsible environmental stewards due to societal and regulatory demands. According to Egbunike et al.(2018), being a good corporate citizen means mitigating environmental harm and using resources responsibly. This shift is also reflected in contemporary accounting practices, which now go beyond providing information for investors and also address the social and ecological impacts of industrial activities, as argued by Mahmood & Uddin, (2021). environmental data are now considered or environmental information is now considered to inform stakeholder decisions and risk assessments.In India, the rapid economic growth and industrialization since the 1990s have heightened environmental concerns. Although sustainability disclosure is not mandatory, companies in India are increasingly including environmental information in their reports, as acknowledged by Joshi & Li, (2016). This study goes further by directly engaging with Indian corporations through standardized questionnaires to analyze how they disclose sustainability information. This includes not only environmental aspects but also broader social aspects, going beyond just financial reports. The aim of this investigation is to shed light on the evolving nature of sustainability disclosure practices in India and to explore the intricate relationship between corporate responsibility and environmental stewardship in this context (Laskar & Maji, 2016).

## 2. Objectives of the Study:

- The main objective of the study is to know Sustainability Disclosure practices of selected companies.
- To examine whether life of the companies really influence the Sustainability Disclosure practices or not.

### 3. Review of Literature

Numerous studies have explored the disclosure of sustainability practices, with a primary focus on affluent nations like the US, UK, and Australia(Egbunike et al., n.d., n.d.; Fernandez-Feijoo et al., 2014; Kouloukoui et al., 2019; Ningsih et al., 2023). However, there is a significant disparity in research efforts between developed and developing countries. Through a comprehensive review, we gained valuable insights into sustainability practices across various developing nations. For instance Laskar & Maji, (2016) conducted a study on safety and environmental management practices in India's petrochemical sector. They emphasized the crucial role of safety measures in accident prevention and highlighted the diverse benefits of environmental accounting disclosures. Similarly, examined van de Burgwal & Vieira, (2014) businesses. Their findings revealed discrepancies in reporting preferences, with a stronger emphasis management rather than environmental audits and training(Carmo & Miguéis, 2022).

3.1 Regional Perspectives: Varied Approaches to Environmental Accounting

Further insights from Shoeb et al., (2022) investigation through bibiliometric study revealed

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the absence of a standardized environmental disclosures, suggesting a critical need for government- driven standards. explored Australia, Singapore, South Korea, corporations' disclosure practices, uncovering a limited but emerging trend of environmental information provision, notably in green products but scarcely covering issues like spills. Diverse approaches were evident in Bangladesh pharmaceutical sector, as indicated by Biswas et al., (2019) study, showcasing higher environmental commitment and integration within financial statements.

## 3.2 Diverse Trends: Regional Dynamics in Disclosure Practices

Acknowledgment brought environmentalism to the business world. Organizations must consider their ecological and social impact. Bookkeeping developed to balance financial health with broader responsibilities. Corporate ecological reporting and bookkeeping is 20 years old. Surveys show more companies are reporting onlineBullard et al (2020.). Conversely, India's corporate landscape, as examined by Garg & Sharma,(2015.). Adedeji et al., (2017) displayed a nascent stage of environmental accounting practices with a lack of standardized regulations. The telecommunications and pharmaceutical industries in Bangladesh, outlined by Biswas et al., (2019), emerged as leaders in providing qualitative environmental data. Additionally, Ningsih et al., (2023) Study examines earnings management and sustainability reporting in Indonesia. The researchers analyze 408 firm-year observations of listed Indonesian companies from 2010 to 2021. They use fixed effect regression analyses to test their hypothesis. The impact of earnings management on sustainability reporting practices is evaluated through an examination of sustainability reports and financial statements.

# 3.3 Challenges and Opportunities: Insights into Disclosure Disparities

However, challenges persist, as highlighted in various studies from different regions. Bangladeshi enterprises, according to Berger, (2011) The final comments regarding disclosure regulation build on suggestions made in a review by Leuz and Wysocki (2008). It is commendable that they raise ambitious and thoughtful questions in their comprehensive, cross-disciplinary review. Three challenges are mentioned that researchers face when conducting research to inform disclosure regulation. Firstly, as a research community, there are few robust empirical findings about the impact of disclosure regulation or voluntary disclosure choices. Secondly, major changes in broad disclosure regulation are rare and specific to certain economic and societal circumstances. This raises the question of whether studies of past changes, like SOX or mandated IFRS adoption, can be applied to future policy revisions. Lastly, there is a question about the assumption made in some research that the regulatory framework can be proactive rather than reactive, especially in the face of increasingly complex business practices.

# 3.4 Cross-National Comparisons: A Glimpse into Disclosure Variances

Cross-national comparisons offered intriguing findings. Choubey & Pattanayak, (2014) The input text discusses the importance of incorporating social and environmental accounting into mainstream subjects in Indian management education. The study aims to gather the perceptions of various stakeholders, including students, academicians, finance managers, accountants, and regulatory bodies, regarding the inclusion of environmental accounting as a subject.

## 4. Methodology

The study according to the Guang-Wen & Siddik, (2022) exclusively relied on primary data collection, utilizing a simple sampling method that targeted environmentally conscious companies capable of completing the questionnaire. A total of 25 companies across various industries—14 drugstores, 3 electrical power plants, 2 textiles, 1 port, and 1 steel manufacturing facility—were selected as the sample group. These companies participated by completing a structured questionnaire comprising 8 sections encompassing 28 questions, covering aspects such as environmental policy, legislation & compliance, EMS, product details, waste management, and packaging & transportation. A scoring system was implemented where companies received a score of 0 for no disclosed information, 1 for minimal disclosure, and 2 for substantial disclosure, resulting in an Environmental Disclosure Adherence Index (EADI). Moreover, a regression analysis was conducted to explore the potential influence of a company's lifespan, calculated from its incorporation, on its environmental disclosure practices. (Fernandez-Feijoo et al., 2014; Ningsih et al., 2023; Wang, 2017) The study also culminated in determining each company's Sustainability Disclosure Index (SDI) using a formula: EADI = (total score obtained by the company / maximum possible score obtainable by the company) x 100. This comprehensive methodology allowed for a nuanced assessment of environmental disclosure practices and their correlation with a company's longevity (Egbunike et al., 2018).

EADI = Total score obtained by the company X 100 Maximum possible score scorable by company.

# 4.1 Development of hypothesis

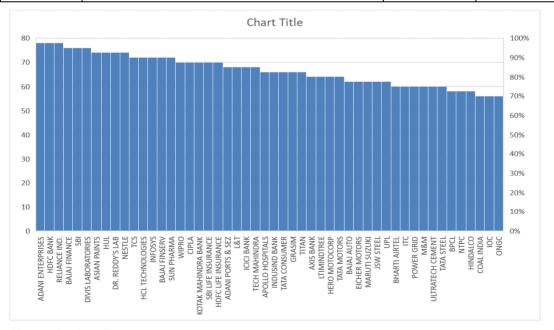
H1: Sustainability Disclosure practices are positively associated with the life of the companies.

## 4.1.1 Analysis & Discussion.

Table -1: shows that environmental accounting disclosure score and index based on ranking

S.No	Company Name	Score	EADI
1	ADANI ENTERPRISES	66	87.47
2	ADANI PORTS & SEZ	65	85.17
3	APOLLO HOSPITALS	70	88.89
4	ASIAN PAINTS	77	84.02
5	AXIS BANK	74	82.15
6	BAJAJ AUTO	68	91.61
7	BAJAJ FINANCE	70	88.32
8	BAJAJ FINSERV	72	80.46
9	BHARTI AIRTEL	78	78.61
10	BPCL	69	85.89
11	CIPLA	74	76.75
12	COAL INDIA	74	91.61
13	DIVIS LABORATORIES	65	88.89
14	DR. REDDY'S LAB	65	82.15
15	EICHER MOTORS	78	85.17
16	GRASIM	71	88.32
17	HCL TECHNOLOGIES	73	90.43
18	HDFC BANK	65	85.89
19	HDFC LIFE INSURANCE	76	84.02

20	HERO MOTOCORP	74	78.61
21	HINDALCO	76	88.89
22	HUL	70	87.47
23	ICICI BANK	70	85.17
24	INDUSIND BANK	67	88.32
25	INFOSYS	78	76.75
26	IOC	67	80.46
27	ITC	74	82.15
28	JSW STEEL	67	85.89
29	KOTAK MAHINDRA BANK	77	87.47
30	L&T	72	84.02
31	LTIMINDTREE	72	80.46
32	M&M	79	82.15
33	MARUTI SUZUKI	74	88.89
34	NESTLE	67	78.61
35	NTPC	75	76.75
36	ONGC	69	80.46
37	POWER GRID	66	90.43
38	RELIANCE IND.	71	91.61
39	SBI	67	85.89
40	SBI LIFE INSURANCE	70	88.32
41	SUN PHARMA	72	85.17
42	TATA CONSUMER	75	84.02
43	TATA MOTORS	74	80.46
44	TATA STEEL	74	88.32
45	TCS	77	87.47
46	TECH MAHINDRA	73	85.17
47	TITAN	77	80.46
48	ULTRATECH CEMENT	75	82.15
49	UPL	69	85.89
50	WIPRO	71	87.14



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From the above table 1 we can observe that top five companies which were disclosed maximum environmental information those are Adani Enterprises, Reliance IND, HDFC Bank, SBI and Bajaj Finance and the least five companies which were disclosed environmental information. The companies which were disclosed maximum environmental information those are related to NIFTY 50 Companies. the below figure 1 shows environmental disclosure in graphical presentation.

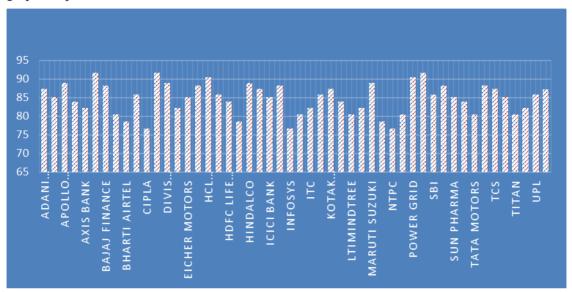


Table -2: showing ranking of the sample companies based on environmental total disclosure information category wise.

S.no	Company Name	Envt	Legi&	Е	Pro	Waste	Energy	Water	Packing &	To
		Policy	Comp	M S	duct	Mgmt	Mgmt	Mgmt	Transport	tal
1	ADANI ENTERPRISES	9	8	6	7	8	9	9	6	62
2	ADANI PORTS & SEZ	8	8	6	7	7	7	9	9	61
3	APOLLO HOSPITALS	6	6	8	7	9	7	8	7	58
4	ASIAN PAINTS	6	7	9	9	8	9	9	9	66
5	AXIS BANK	8	9	7	6	9	9	9	6	63
6	BAJAJ AUTO	9	8	8	9	6	6	8	7	61
7	BAJAJ FINANCE	6	9	8	9	7	8	9	8	64
8	BAJAJ FINSERV	6	7	9	6	6	6	7	7	54
9	BHARTI AIRTEL	9	9	8	6	9	9	9	6	65
10	BPCL	9	6	7	9	7	9	8	8	63
11	CIPLA	8	7	9	9	6	8	7	8	62
12	COAL INDIA	6	9	6	6	7	8	7	9	58

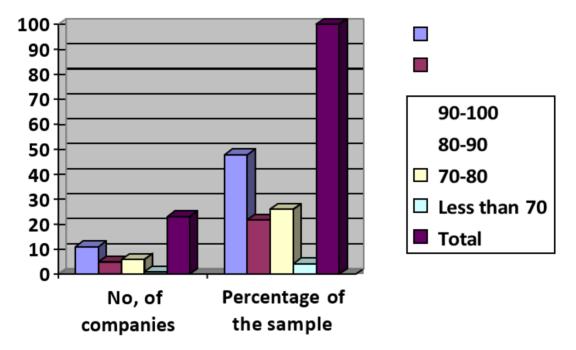
13	DIVIS LABORATORIES	9	6	7	9	7	8	8	9	63
14	DR. REDDY'S LAB	6	6	7	6	6	7	8	6	52
15	EICHER MOTORS	9	8	6	9	7	9	9	7	64
16	GRASIM	9	6	7	8	9	9	9	6	63
17	HCL TECHNOLOGIES	7	7	8	7	7	6	9	7	58
18	HDFC BANK	8	6	7	9	6	8	8	6	58
19	HDFC LIFE INSURANCE	6	9	9	9	7	6	6	6	58
20	HERO MOTOCORP	7	9	6	8	7	8	9	9	63
21	HINDALCO	6	9	9	8	6	6	7	6	57
22	HUL	8	8	6	6	6	9	6	6	55
23	ICICI BANK	6	8	9	9	7	6	6	8	59
24	INDUSIND BANK	9	9	8	9	7	7	9	6	64
25	INFOSYS	9	6	8	9	8	8	6	7	61
26	IOC	7	8	7	7	8	8	8	8	61
27	ITC	7	7	6	9	8	9	7	6	59
28	JSW STEEL	7	7	9	7	8	8	6	7	59
29	KOTAK MAHINDRA BANK	9	6	9	8	8	7	7	8	62
30	L&T	9	8	9	6	8	6	9	6	61
31	LTIMINDTREE	7	9	7	6	6	8	6	7	56
32	M&M	9	8	8	9	8	8	9	7	66
33	MARUTI SUZUKI	7	6	7	9	9	7	6	7	58
34	NESTLE	8	7	8	9	7	7	9	8	63
35	NTPC	8	7	6	6	9	9	7	8	60
36	ONGC	9	7	6	9	8	9	8	8	64
37	POWER GRID	9	8	8	9	7	8	6	8	63
38	RELIANCE IND.	9	8	9	9	8	9	7	6	65
39	SBI	6	8	8	7	6	7	7	7	56
40	SBI LIFE INSURANCE	6	6	7	7	6	6	8	8	54
41	SUN PHARMA	8	6	8	9	7	8	7	7	60
42	TATA CONSUMER	6	9	6	9	6	8	7	6	57
43	TATA MOTORS	9	7	6	7	7	6	8	9	59
44	TATA STEEL	8	7	9	7	7	9	6	6	59
45	TCS	6	9	7	8	7	7	9	9	62

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46	TECH MAHINDRA	6	7	8	9	7	9	7	6	59
47	TITAN	7	9	8	9	8	6	8	9	64
48	ULTRATECH CEMENT	8	8	6	9	8	9	8	6	62
49	UPL	6	7	9	7	6	7	8	6	56
50	WIPRO	7	7	7	9	8	6	6	8	58

From the above table we can observe that environmental disclosure based on section wise, maximum companies were disclosed on legislation &compliance followed by environmental policy, energy management, water management, waste management, and the low information disclosed on Environmental management system, product, packaging & transportation

Table 3: showing the percentage range of environmental accounting disclosure



The above shows that the percentage range of sustainability disclosure 47.82% of the sample companies (11) are disclosing between 90-100% and 21. 73% of sample companies (5) are disclosing 80-90%, 26.08% of the sample companies (6) are disclosing between 70-80%, 4.34% companies (1) are disclosing below 70%. It clearly shows that hardly 50% of the companies are disclosing some extent but remaining companies are not disclosing expected level still the companies need to disclose more, there is a huge gap between expected level and actual sustainability disclosure practices this gap has to be filled by companies. The below figure 2 shows percentage range of sustainability disclosure practices.

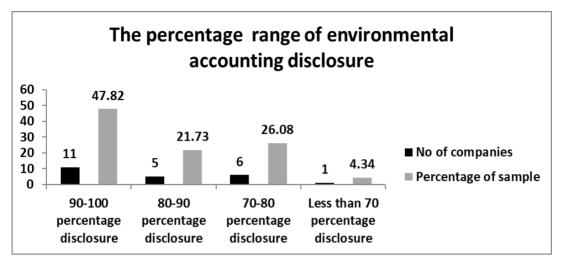


Table 4: Summary output

Regression Statistics	
Multiple R	0.498119135
R Square	0.248122672
Adjusted R Square	0.21231899
Standard Error	9.918981602
Observations	25

Table 4 shows the summary output of regression analysis . the  $R^2$  is obtained as 0.24 ,which indicates that the model is capable of explaining 24% of viability of sustainability disclosure practices in the sample of Indian companies in the study .the adjusted  $R^2$  indicates that 2r4% of variations in the dependent variable in the model used here are explained by the variations in the independent variable.

Table 5: ANOVA

	df	SS	MS	F	Significance
					F
				6.93008809	
Regression	2	681.8250053	681.8250053	1	0.015565108
Residual	22	2066.110116	98.38619602		
Total	24	2747.935122			

The model is a fit for predicting EADI with F(1,21) = 6.93 and also significant at 95% confidence with  $p \le 0.01$ .

Table 6: Regression Coefficients

	Coefficients	Standard Error	t Stat	P-value
Intercept	78.32155928	3.752297107	20.87296316	1.5934915
X Variable 1	0.243030944	0.092319235	2.632506048	0.015565108

The coefficient values of the regression equation reveal that there is a positive relationship between sustainability disclosure practices and life of the companies. So life of the companies positively influenced the sustainability disclosure practices.

#### 5. Conclusion:

Sustainability disclosure practices in India are still in their early stages. With the growing presence of global companies in the country, Indian companies are starting to prioritize sustainability disclosure. They have recognized its importance, but currently, there is no mandatory requirement for companies to report on sustainability. Additionally, there is no standardized framework for reporting, which limits the extent of companies' reporting. It is crucial for accounting bodies to establish standards for companies to follow in order to encourage and enhance sustainability disclosure practices.

These standards provide a framework for companies to effectively report their environmental, social, and governance (ESG) performance, ensuring transparency and accountability. By implementing standardized practices, accounting bodies can set clear guidelines on what information companies need to disclose, how it should be measured, and how it should be reported. This consistency enables stakeholders, such as investors, regulators, and the public, to compare and evaluate companies' sustainability efforts accurately. Moreover, these standards create a level playing field for companies, regardless of their size or industry. Enterprises often face challenges in disclosing sustainability information because of limited resources and expertise. By establishing clear standards, accounting bodies can simplify the reporting process, making it more accessible and manageable for all companies. Furthermore, these standards contribute to the overall improvement of sustainability practices. As companies strive to meet the established criteria, they are encouraged to implement robust ESG strategies, measure their impact, and identify areas for improvement. This, in turn, drives innovation and fosters a culture of continuous sustainability improvement within organizations.Lastly, standardized sustainability disclosure practices benefit society as a whole. They enable stakeholders to make informed decisions and allocate resources based on companies' sustainability performance. This promotes responsible investment, encourages sustainable business practices, and ultimately contributes to the achievement of global sustainability goals. In conclusion, establishing standards for companies to follow is crucial for accounting bodies to encourage and enhance sustainability disclosure practices. These standards provide a consistent framework for companies to report their ESG performance, promote transparency, and drive continuous improvement in sustainability practices.

## References

- 1. Adedeji, B. S., Popoola, O. M. J., & Ong, T. S. (2017). National Culture and Sustainability Disclosure Practices: A Literature Review. Indian-Pacific Journal of Accounting and Finance, 1(1), 26–50. https://doi.org/10.52962/ipjaf.2017.1.1.6
- 2. Berger, P. G. (2011). Challenges and opportunities in disclosure research—A discussion of 'the financial reporting environment: Review of the recent literature.' Journal of Accounting and Economics, 51(1–2), 204–218. https://doi.org/10.1016/j.jacceco.2011.01.001
- 3. Biswas, P., Rahman, T., & Sudha, A. (2019). Environmental Accounting Disclosure Practices in Bangladesh and Its Impact on Investor Decisions. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3941040
- 4. Bullard, S. K. (n.d.). A STUDY OF ENVIRONMENTAL ACCOUNTING IN INDIA WITH SPECIAL REFERENCE TO BPCL AND ONGC.

- 5. Carmo, C., & Miguéis, M. (2022). Voluntary Sustainability Disclosures in Non-Listed Companies: An Exploratory Study on Motives and Practices. Sustainability, 14(12), 7365. https://doi.org/10.3390/su14127365
- 6. Choubey, B., & Pattanayak, J. K. (2014). Designing a Course Curriculum on Environmental Accounting: Viewpoint of Indian Stakeholders. 3.
- 7. Egbunike, F. C., Emudainohwo, O. B., Gunardi, A., Kurniasari, F., & Prihanto, J. J. N. (n.d.). Sustainability Accounting Practices and Disclosure by Multinational Corporations in Nigeria.
- 8. Fernandez-Feijoo, B., Romero, S., & Ruiz, S. (2014). Commitment to Corporate social responsibility measured through global reporting initiative reporting: Factors affecting the behavior of companies. Journal of Cleaner Production, 81, 244–254. https://doi.org/10.1016/j.jclepro.2014.06.034
- 9. Garg, S., & Sharma, V. (n.d.). Forest Resource Accounting: An Overview and Indian Perspective.
- 10. Guang-Wen, Z., & Siddik, A. B. (2022). Do Corporate Social Responsibility Practices and Green Finance Dimensions Determine Environmental Performance? An Empirical Study on Bangladeshi Banking Institutions. Frontiers in Environmental Science, 10, 890096. https://doi.org/10.3389/fenvs.2022.890096
- 11. Joshi, S., & Li, Y. (2016). What Is Corporate Sustainability and How Do Firms Practice It? A Management Accounting Research Perspective. Journal of Management Accounting Research, 28(2), 1–11. https://doi.org/10.2308/jmar-10496
- 12. Kouloukoui, D., Sant'Anna, Â. M. O., Da Silva Gomes, S. M., De Oliveira Marinho, M. M., De Jong, P., Kiperstok, A., & Torres, E. A. (2019). Factors influencing the level of environmental disclosures in sustainability reports: Case of climate risk disclosure by
- 13. Brazilian companies. Corporate Social Responsibility and Environmental Management, 26(4), 791–804. https://doi.org/10.1002/csr.1721
- 14. Laskar, N., & Maji, S. G. (2016). Corporate sustainability reporting practices in India: Myth or reality? Social Responsibility Journal, 12(4), 625–641. https://doi.org/10.1108/SRJ-05-2015-0065
- 15. Mahmood, Z., & Uddin, S. (2021). Institutional logics and practice variations in sustainability reporting: Evidence from an emerging field. Accounting, Auditing & Accountability Journal, 34(5), 1163–1189. https://doi.org/10.1108/AAAJ-07-2019-4086
- 16. Ningsih, S., Prasetyo, K., Puspitasari, N., Cahyono, S., & Kamarudin, K. A. (2023). Earnings Management and Sustainability Reporting Disclosure: Some Insights from Indonesia. Risks, 11(7), 137. https://doi.org/10.3390/risks11070137
- 17. Shoeb, M., Aslam, A., & Aslam, A. (2022). Environmental Accounting Disclosure Practices: A Bibliometric and Systematic Review. International Journal of Energy Economics and Policy, 12(4), 226–239. https://doi.org/10.32479/ijeep.13085
- 18. van de Burgwal, D., & Vieira, R. J. O. (2014). Environmental Disclosure Determinants in Dutch Listed Companies. São Paulo, 25(64).
- 19. Wang, M.-C. (2017). The Relationship between Firm Characteristics and the Disclosure of Sustainability Reporting. Sustainability, 9(4), 624. https://doi.org/10.3390/su9040624