

Analysis of Sustainability Reporting Practices: A Comparative Case Study of Developed and Developing Countries

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Abstract

This research is motivated by differences in sustainability reporting practices between developed and developing countries, particularly regarding the depth of disclosure, standards used, and reporting orientation. The objective of this study is to analyze and compare sustainability reporting practices in companies in developed and developing countries, using legitimacy and stakeholder theories as a foundation. The research method used is a literature review with a descriptive analysis approach, analyzing the 2023–2024 sustainability reports of four companies: Newmont Corporation (United States), Sumitomo Metal Mining (Japan), Hindustan Petroleum Corporation Limited (India), and PT Aneka Tambang Tbk (Indonesia). The results show that companies in developed countries have made sustainability reporting an integral part of strategic and transparent corporate governance, while companies in developing countries still focus on regulatory compliance and social responsibility. These findings confirm that social legitimacy and stakeholder pressure play a significant role in shaping the quality of sustainability reporting. The implications of this research are the need for harmonization of global standards and increased capacity and awareness of companies in developing countries to bring sustainability reporting practices more in line with international standards.

Keywords: Developed Countries, Developing Countries, ESG, Literature Study, Sustainability Reporting

INTRODUCTION

Sustainability issues have become one of the main topics in the global business and accounting world, especially since the introduction of the Sustainable Development Goals (SDGs) by the United Nations (UN) in 2015. The SDGs serve as a global framework for governments and the private sector to address social, economic, and environmental challenges in a balanced manner until 2030. In the context of modern business, sustainability is no longer viewed merely as corporate social responsibility (CSR), but as a long-term corporate strategy that enhances firm value, reputation, and stakeholder trust.

One of the key tools in applying sustainability principles is sustainability reporting. Through such reports, companies can disclose their performance and operational impacts on economic, social, and environmental aspects transparently. At the global level, the Global Reporting Initiative (GRI) has been

recognized as the most comprehensive and widely used standard for sustainability reporting. GRI provides guidance for organizations to report material issues, identify key impacts, and ensure consistency and comparability between reports (Adams et al., 2022).

However, the implementation of GRI shows significant variation between developed and developing countries. According to the KPMG Survey of Sustainability Reporting 2024, sustainability reporting has now become part of “business as usual” for almost all major corporations worldwide. 96% of the world’s largest 250 companies (G250) have adopted sustainability reporting, while 79% of 5,800 companies across 58 countries (N100) also publish such reports. Regionally, the highest reporting rates are found in North America (97%), followed by Asia Pacific (92%), Europe (82%), and Africa (70%). These figures reflect that sustainability reporting is becoming a global norm across industries and regions.

Table 1. Global and Regional Sustainability Reporting Rates

Category	Percentage of Companies Reporting on Sustainability (2024)	Additional Notes
G250 (the largest 250 global companies)	96%	ESG reporting has become part of standard business practice.
N100 (5,800 companies across 58 countries)	79%	Increased compared to the previous survey; consistent global growth.
Asia Pacific	92%	Steady growth since 2011; includes many top- performing countries.
Europe	82%	Stable; influenced by preparation for CSRD regulations.
North America	97%	Highest globally, largely driven by regulatory and investor expectations.
Africa	70%	Rising adoption, particularly in the financial and mining sectors.
Middle East	57%	Significant increase supported by local stock exchange ESG guidance.

Source: KPMG, 2024

At the country level, the difference between developed and developing economies becomes more evident. Developed countries such as Japan and the United States have achieved 100% sustainability reporting, while several developing countries, notably Malaysia, Thailand, and South Africa, have also reached full adoption due to strong regulatory support

and market incentives. This shows that sustainability reporting has evolved into a global standard, though the driving factors differ: developed nations are guided primarily by regulation and transparency mandates, while developing nations are often motivated by investor pressure and reputational goals.

Table 2. Countries with 100% Sustainability Reporting

Country	Economic Status	2024 Percentage	Key Notes
Japan	Developed	100%	All companies also integrate ESG data in annual reports.
United States	Developed	100%	Strong implementation of the SASB and TCFD frameworks.
Malaysia	Developing	100%	Driven by the mandatory requirements of Bursa Malaysia.
Thailand	Developing	100%	Supported by national sustainability policies and investor demand.
South Africa	Developing	100%	Comprehensive GRI adoption, serving as Africa's benchmark.

Source: KPMG, 2024

A deeper comparison between developed and developing countries reveals differences in approach and disclosure quality. In the United States and Japan, the GRI framework is often complemented by SASB and TCFD standards to enhance report credibility and

investor confidence. Meanwhile, in countries such as India and Indonesia, sustainability reporting remains largely voluntary, though adoption has risen rapidly since 2020 due to growing capital market and regulatory expectations.

Table 3. Comparison of Selected Countries Based on Sustainability Reporting

Country	Economic Status	% of Companies Reporting (2024)	Use of GRI	Key Observations
United States	Developed	100%	70%	Also widely use the SASB and ISSB Standards for integration
Japan	Developed	100%	94%	GRI dominant; ESG data integrated into annual reports.
India	Developing	88%	27%	89% follow the Indian BRSR (Business Responsibility and Sustainability Report) framework
Indonesia	Developing	89%	~90% (Asia Pacific average)	High adoption trend, but still voluntary in most sectors.

Source: KPMG, 2024

According to Adams et al. (2022), the voluntary nature of GRI reporting in developing countries allows for selective disclosure, where companies disclose only information that benefits their public image. This may lead to greenwashing, the appearance of environmental responsibility without substantial action. Conversely, in developed countries, the use of GRI and related frameworks aims to strengthen accountability, credibility, and long-term stakeholder trust.

Based on this context, the present study aims to analyze and compare sustainability reporting practices between developed countries (the United States and Japan) and developing countries (Indonesia and India) based on the GRI framework. The analysis focuses on 2024 sustainability reports to identify differences in disclosure levels, reporting structures, and the degree of sustainability commitment reflected in each country's corporate reporting practices.

THEORETICAL REVIEW

Global Reporting Initiative (GRI)

GRI (Global Reporting Initiative) is the independent, international organisation that provides reporting standards for businesses and other organisations to help them be transparent and take responsibility for their impacts (GRI, 2021). With a vision to build a sustainable future, GRI's Global Sustainability Standards Board (GSSB) follows an independent, multi-stakeholder process to create a global common language for impact reporting. This enables informed dialogue and decision-making around organizational impacts. The GRI Standards have become the world's most widely used and comprehensive standards for sustainability reporting (Adams et al., 2022).

Legitimacy Theory

Legitimacy Theory is an important theory in social and environmental accounting literature. In a company, it is a management system oriented towards society and is also a form of reporting carried out voluntarily by the company. Legitimacy is a condition or status given by society to an organization, which indicates that the organization acts in a "socially acceptable" manner. Companies can undertake several strategies to maintain their legitimacy, such as: 1. Increasing transparency through sustainability reports; 2. Changing public perception; 3. Diverting public attention (Chairunnisa et al., 2025).

Stakeholder Theory

Stakeholder theory is a conceptual approach that states that a company's success and sustainability depend heavily on its ability to manage relationships with all parties who have an interest in or are impacted by the company's activities, not just shareholders (Freeman, 2010). In the context of sustainability and ESG reporting, stakeholder theory serves as a normative and strategic foundation for companies to respond to increasingly complex public expectations. Valentinov & Chia (2022) explain that the relationship between companies and stakeholders cannot be understood statically, but rather as a dynamic interaction that continues to evolve with social and economic changes. Disclosure of sustainability information through ESG disclosure practices is considered a form of corporate responsibility in fulfilling the right to information needed by stakeholders (Chelsya, 2025).

METHODS

This research uses literature review and analysis of sustainability report documents as the primary methods. The research stages are:

1. Case selection: four large companies whose sustainability reports are publicly available and representative of developed countries (USA, Japan) and developing countries (India, Indonesia): Newmont, Sumitomo, HPCL, and ANTAM. Reports were selected from the 2023–2024 period.
2. Data collection using literature review: obtaining official company sustainability reports and recent scientific literature (the last 5–10 years) discussing

sustainability reporting practices, international standards, and comparisons between developed and developing countries.

3. Analysis was conducted by examining how frequently and comprehensively the indicators were disclosed in each country's sustainability report using a simple rating scale:
 - 0 = not disclosed
 - 1 = only narrative/qualitative
 - 2 = presented quantitatively with data or graphs
4. Report dimension classification: reports were analyzed based on three main aspects: economic, environmental, and social.

Table 4. Sustainability Report Indicators

Aspect	Indicator	Source
Economy	1. Total Revenue	UNCTAD (2019) Economic Indicator 1; GRI 201-1
	2. Green Investment/ Environmental Expenditure	UNCTAD (2019) Economic Indicator 3; GRI 201-2
Environment	3. Total GHG Emissions	UNCTAD (2019) Environmental Indicator 2; GRI 305-1 & 305-2
	4. Energy Consumption	UNCTAD (2019) Environmental Indicator 1; GRI 302-1
	5. Water Use and Discharge	GRI 303-3; GRI 11; Mining Sector 2021
	6. Land Rehabilitation	GRI 304-3; GRI 11; Mining Sector 2021; ICMM (2019)
Social	7. Employee Training Hours	UNCTAD (2019) Social Indicator 3; GRI 404-1
	8. Injury Rate	UNCTAD (2019) Social Indicator 4; GRI 403-9
	9. Community Engagement	GRI 413-1; GRI 11; Mining Sector (2021)

RESULTS AND DISCUSSION

This research uses a literature review approach and document analysis of the 2023–2024 sustainability reports of four companies in the mining and energy sector. The analysis was conducted on nine key indicators grouped into three dimensions of sustainability: economic, environmental, and social. Each indicator is assessed based on the level of

information disclosure in each company's report using a simple rating scale.

Table 5. Measurement Indicators

Score	Category
0	not disclosed
1	expressed narratively/qualitatively
2	expressed quantitatively with data, tables, or graphs

Analysis Results of Developed Country Companies

1. Newmont Corporation (United States)

Table 6. Indicator Disclosure Scores – Newmont (2024)

Aspect	Indicator	Score	Aspect
Economy	1. Total Revenue	2	Global revenue of USD16 Billion, broken down by operating region
	2. Green Investment/ Environmental Expenditure	2	USD 400 million environmental investment for decarbonization and water.
Environment	3. Total GHG Emissions	2	Emissions 7.2 MtCO2e, 32% reduction Target (2030).

	4. Energy Consumption	2	Fossil fuel and electricity consumption are reported in detail per mine.
	5. Water Use and Discharge	2	77% of water is recycled, reported per operating site.
	6. Land Rehabilitation	2	2,400 ha rehabilitated; annual progress is presented graphically.
Social	7. Employee Training Hours	2	1.2 million hours of OHS and diversity training.
	8. Injury Rate	2	TRIFR 0.46; LTFR 0.12.
	9. Community Engagement	2	Community partnership programs in 8 operating countries, social impact reports.
	Average score	2,0	

Newmont demonstrates the highest level of disclosure among all companies. Nearly all indicators are disclosed quantitatively and verified by an independent party (PwC). This report also adheres to

GRI, SASB, ICMM, and TCFD. ESG integration is integrated into the company's strategic policies and governance.

2. Sumitomo Metal Mining (Japan)

Table 7. Indicator Disclosure Score – Sumimoto Metal Mining (2024)

Aspect	Indicator	Score	Information
Economy	1. Total Revenue	2	Revenue ¥1,445.4 billion (FY2024)
	2. Green Investment/ Environmental Expenditure	2	Funds for clean energy research and Li-ion battery recycling.
Environment	3. Total GHG Emissions	2	38% decrease from the 2015 baseline; presented graphically.
	4. Energy Consumption	2	Energy breakdown by source (LNG, electricity, renewable).
	5. Water Use and Discharge	2	Water consumption and treatment volume per plant.
	6. Land Rehabilitation	1	A narrative on post-mining land reclamation.
Social	7. Employee Training Hours	2	Average 45 hours of training per employee/year.
	8. Injury Rate	2	Zero accident target; graph of accidents per year.
	9. Community Engagement	1	A narrative on local social programs and employee volunteerism.
	Average score	1,78	

Sumitomo also demonstrates a high level of disclosure, particularly in the environmental and economic dimensions. The company's primary focus is the energy transition and circular economy, particularly

through its battery recycling program. However, disclosures on social activities and land rehabilitation are more narrative than quantitative.

Analysis Results of the Developing Country Companies

1. Hindustan Petroleum Corporation Limited (India)

Table 8. Indicator Disclosure Scores – HPCL (2024)

Aspect	Indicator	Score	Information
Economy	1. Total Revenue	2	Revenue ₹4.61 trillion; annual growth reported.
	2. Green Investment/Environmental Expenditure	1	Biofuel and solar plant projects are described in a narrative.
Environment	3. Total GHG Emissions	1	CO ₂ emissions are reported per kiloliter of product, without aggregate totals.
	4. Energy Consumption	2	Energy intensity per kiloliter of product is presented in a table.
	5. Water Use and Discharge	1	Water conservation programs are mentioned in a narrative, without volume.
Social	6. Land Rehabilitation	1	Reforestation programs are mentioned in a general manner, without area data.
	7. Employee Training Hours	1	Training is mentioned in a narrative, without total hours.
	8. Injury Rate	1	OH&S data is reported per facility, without aggregate totals.
	9. Community Engagement	2	>1,000 CSR programs; 32 million beneficiaries
	Average score	1,33	

HPCL discloses financial data well, but environmental and social indicators are still dominated by qualitative narratives. The primary focus is on national-scale CSR programs and the energy transition

towards Net Zero by 2040. The reporting structure adheres to the Business Responsibility and Sustainability Report (BRSR) as per SEBI India guidelines.

2. PT Aneka Tambang Tbk (Indonesia)

Table 9. Indicator Disclosure Score – ANTAM (2024)

Aspect	Indicator	Score	Information
Economy	1. Total Revenue	2	Revenue of IDR 69.19 trillion; contribution to the state of IDR 20 trillion in taxes.
	2. Green Investment/Environmental Expenditure	1	Narrative regarding reclamation and environmental management costs.
Environment	3. Total GHG Emissions	1	Mentions emission reductions, without numerical data.
	4. Energy Consumption	1	Energy usage is explained narratively per business unit.
	5. Water Use and Discharge	1	Mentions water conservation and recycling, without volume
Social	6. Land Rehabilitation	2	Data on the reclamation area of 2,000 ha; forestry certification
	7. Employee Training Hours	1	Training is stated as general, without hourly data.
	8. Injury Rate	1	Narrative: only fatality rate without work ratio
	9. Community Engagement	2	Community Development & Empowerment Program (PPM) > IDR 100 billion.
	Average score	1,33	

ANTAM has strong economic and social reporting, but environmental disclosure remains narrative in nature. Flagship programs such as community empowerment around the mine, waste

management, and land reclamation receive significant coverage, but quantitative data remains limited. The report adheres to the 2021 GRI Standards and OJK Circular Letter No. 16/2021.

Comparison of Sustainability Reporting Practices in Developed and Developing Countries

Table 10. Comparison of Sustainability Reporting Practices

Dimensions	Developed Countries (Newmont & Sumimoto)	Developing Countries (HPCL & ANTAM)
Economy	Transparent and measurable; link sustainability to profitability	Focus on the national economic contribution and Environmental CSR
Environment	Complete quantitative data (GHG, energy, water, reclamation)	Mostly narrative; limited quantitative data
Social	Focus on occupational safety and employee training	Focus on community development and empowerment
Governance	There is an independent assurance and sustainability committee	Referring to national regulations, there is no external assurance yet

Companies in developed countries exhibit more standardized and measurable reporting, while those in developing countries exhibit socially oriented reporting and national compliance. Across the nine indicators, the average overall scores are:

1. Developed countries: 1.89
2. Developing countries: 1.33

These results reinforce the findings of Stanislavská et al. (2023) that companies in developed countries emphasize global environmental issues more, while companies in developing countries emphasize social aspects and public legitimacy.

The research results show that sustainability reporting practices between developed and developing countries still show significant differences, although both are converging toward more transparent and accountable global standards. Companies from developed countries, such as Newmont Corporation (United States) and Sumitomo Metal Mining (Japan), have integrated sustainability reporting as part of their strategic corporate governance. Their reports are prepared in accordance with international standards such as the Global Reporting Initiative (GRI), the International Sustainability Standards Board (ISSB), and the European Sustainability Reporting Standards (ESRS). Both companies also present measurable quantitative data, for example, greenhouse gas emissions, energy consumption, and environmental investments, accompanied by independent verification. This demonstrates that in developed countries, sustainability is no longer merely a social responsibility

but has become part of the corporate decision-making system, oriented toward the long-term sustainability of corporate value.

Statistically, measurements of nine key reporting indicators (economic, environmental, and social) show that the average disclosure score for companies in developed countries is around 1.78 on a scale of 0–2, while companies in developing countries are around 1.24. This means that companies in developed countries more often present quantitative and measurable information, while in developing countries, most information remains narrative or descriptive. The most striking differences are found in environmental indicators, particularly greenhouse gas emissions (GRI 305) and renewable energy (GRI 302), where companies in developed countries consistently present annual data with comparative charts, while companies in developing countries only list general policies and initiatives. However, in social aspects such as employee training (GRI 404) and community engagement (GRI 413), differences between countries are not significant, as both groups demonstrate relatively similar commitments to implementing social programs.

Meanwhile, companies in developing countries such as Hindustan Petroleum Corporation Limited (India) and PT Aneka Tambang Tbk (Indonesia) demonstrate reporting characteristics that are more oriented towards compliance with national regulations and remain oriented towards social activities and economic contributions. HPCL emphasizes

community-based social responsibility programs, such as education and local economic empowerment, while ANTAM emphasizes environmental conservation and post-mining land reclamation. Although most disclosures remain narrative in nature, a trend of improvement is evident with the increasing integration of GRI and SDG indicators into reports. These findings suggest that companies in developing countries are still in a transitional phase, where sustainability reporting is used more as a means of building reputation and gaining social legitimacy than as a strategic tool to attract global investment.

These results align with Legitimacy Theory, which views companies as community-oriented systems that seek to maintain their social standing through voluntary reporting. Legitimacy strategies can be implemented by increasing transparency, changing public perceptions, and diverting public attention. This is reflected in the practices of companies in developed countries that strengthen legitimacy through adherence to international standards and independent audits, while companies in developing countries gain legitimacy through direct social contributions to surrounding communities. Thus, legitimacy in the context of sustainability reporting is contextual, depending on public expectations and the level of institutional maturity of each country (Chairunnisa et al., 2025).

Furthermore, the research findings are closely related to Stakeholder Theory. As explained by Freeman (2010), a company's success and sustainability depend on its ability to manage relationships with all stakeholders, not just shareholders. Valentinov & Chia (2022) add that the relationship between companies and stakeholders is dynamic and evolves with social and economic changes, while Chelsya (2025) emphasizes that ESG disclosure is a form of corporate responsibility in fulfilling stakeholders' right to information. In the context of this research, companies in developed countries are more attuned to the needs of investors, regulators, and the global community, which demand high transparency, while companies in developing countries focus more on government and local communities. This suggests that sustainability reporting serves a dual function: as a form of accountability and as a communication strategy that strengthens long-term relationships between companies and their stakeholders.

The research findings are consistent with four previous studies. Farisyi et al. (2022) emphasize that the main determinants of reporting in developing countries are company size, ownership structure, and corporate governance something also reflected in ANTAM and HPCL, which emphasize compliance over strategy. Makarenko et al. (2023) found that higher disclosure standards in developed countries positively impacted financial market confidence, as seen in Newmont and Sumitomo, whose market capitalizations increased with increased transparency. An editorial by Goerzen et al. (2025) highlighted the global shift toward mandatory ISSB- and ESRS-based reporting, strengthening the position of developed country companies in the standardized global reporting system. Meanwhile, Stanislavská et al. (2023) demonstrated that companies in developing countries place greater emphasis on social and educational issues in their sustainability reports, which aligns with the focus of HPCL and ANTAM. Thus, the results of this study confirm that institutional factors, social pressure, and regulatory readiness are the main differentiators in the quality of sustainability reporting between countries.

CONCLUSION

Based on the research findings, the authors conclude that the main differences between sustainability reporting in developed and developing countries lie in the depth, orientation, and purpose of disclosure. Developed countries display more comprehensive, measurable, and independently audited reporting, while developing countries still focus on social and economic contributions as a form of legitimacy and moral responsibility to society. Based on Legitimacy and Stakeholder Theory, sustainability reporting practices serve a dual function: as a means of gaining social acceptance and as a strategic communication tool with stakeholders. These findings are supported by four previous studies showing that the harmonization of global standards such as GRI, ISSB, and ESRS plays a significant role in improving the quality, credibility, and competitiveness of sustainability reports across countries.

This study is limited by the sample size and analytical approach used. Therefore, future research is recommended to increase the sample size of companies from various industrial sectors and countries to more fully represent differences in sustainability reporting

practices globally. Future research could also employ quantitative or mixed methods, such as content analysis scoring, panel data regression, or comparative statistical modeling, to more objectively measure the relationship between sustainability reporting quality and financial performance, corporate reputation, and market value.

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