

DOI: 10.55643/fcaptp.5.64.2025.4885

Kostiantyn Bezverkhyi

D.Sc. in Economics, Associate
Professor of the Department of
Financial Analysis and Audit, State
University of Trade and Economics,
Kyiv, Ukraine;
e-mail: k.bezverkhyi@knute.edu.ua
ORCID: [0000-0001-8785-1147](https://orcid.org/0000-0001-8785-1147)
(Corresponding author)

Iryna Parasii-Verhunencko

D.Sc. in Economics, Professor of the
Department of Financial Analysis and
Audit, State University of Trade and
Economics, Kyiv, Ukraine;
ORCID: [0000-0001-6506-6965](https://orcid.org/0000-0001-6506-6965)

Oleksander Yurchenko

Candidate of Economic Sciences,
Associate Professor of the Department
of International Economy, Borys
Grinchenko Kyiv Metropolitan
University, Kyiv, Ukraine;
ORCID: [0000-0002-8447-6510](https://orcid.org/0000-0002-8447-6510)

Olena Hryhorevska

Candidate of Economic Sciences,
Associate Professor of the Department
of Finance and Business Consulting,
Kyiv National University of
Technologies and Design, Kyiv,
Ukraine;
ORCID: [0000-0001-8279-3523](https://orcid.org/0000-0001-8279-3523)

Yevhen Nesenjuk

PhD in Economics, Department of
Entrepreneurship and Business, Kyiv
National University of Technologies and
Design, Kyiv, Ukraine;
ORCID: [0000-0002-7061-6092](https://orcid.org/0000-0002-7061-6092)

Viktoria Nehodenko

Candidate of Economic Sciences,
Associate Professor of the Department
of Financial Analysis and Audit, State
University of Trade and Economics,
Kyiv, Ukraine;
ORCID: [0000-0001-6873-2011](https://orcid.org/0000-0001-6873-2011)

Received: 26/06/2025

Accepted: 07/10/2025

Published: 31/10/2025

© Copyright
2025 by the author(s)



This is an Open Access article
distributed under the terms of the
[Creative Commons CC-BY 4.0](https://creativecommons.org/licenses/by/4.0/)

DETERMINANTS OF SUSTAINABILITY REPORTING AUDIT: AN EMPIRICAL ANALYSIS OF PRACTICES IN ASIA

ABSTRACT

In today's globalised world, where economic processes are becoming increasingly inter-connected and environmental, social and governance (ESG) factors are exerting a growing influence on management decisions, the importance of sustainability reporting is growing rapidly. Auditing is a key issue, as external confirmation of the reliability of non-financial indicators builds trust among investors, regulators and other stakeholders. However, in most Asian countries, mechanisms for auditing sustainability reporting are still in the process of development or institutionalisation.

This study aims to identify and systematise the key factors influencing the development and implementation of sustainability reporting audits in Asian countries. It also seeks to empirically evaluate auditing practices for non-financial reporting from 2019 to 2023, taking into account regulatory, institutional, corporate and market factors.

Analysing non-financial reporting and sustainability reporting audit practices in companies in Asian countries — particularly Australia, China, India, Indonesia, Japan, Singapore, and South Korea — from 2019 to 2023 revealed key trends and challenges in this area.

The scientific novelty of the study lies in its further development of the theoretical foundations of sustainability reporting auditing in Asian countries. This involves synthesising auditing practices focused on the Asian region while taking into account various criteria, such as audit format, applicable auditing standards, regulatory factors and corporate governance attributes. This provides a practical understanding of how Asian countries align with global sustainability reporting auditing trends, which can be utilised by regulators, auditors and standard setters to harmonise quality assurance practices and enhance the reliability of sustainability reporting audits.

The study found that the dynamics of sustainability reporting types reflect a shift from separate non-financial reporting to more consolidated formats, such as annual or integrated reports, in countries like Australia, India, Japan, and Singapore.

Global experience demonstrates the increasing importance of sustainability reporting audits as a means of enhancing transparency, fostering stakeholder trust, and improving strategic risk management. The application of specialised standards, adaptation to climate challenges and improvement of verification procedures are becoming key factors in the successful implementation of sustainability policies in Asian companies.

Keywords: audit, reporting, audit consulting, international audit, Asian countries, sustainable development, non-financial reporting, integrated reporting, management reporting, corporate governance, auditing standards, corporate social responsibility

JEL Classification: M14, M40, M41, Q56

INTRODUCTION

In today's globalised economic environment, where environmental, social and governance (ESG) factors are increasingly influencing management decision-making, the importance of sustainability reporting is growing rapidly. Particular attention is drawn to the issue of auditing such reports, since external confirmation of the reliability of non-financial indicators builds trust among investors, regulators and other stakeholders. At

the same time, most Asian countries are only in the process of forming or institutionalising mechanisms for auditing sustainability reporting.

Between 2019 and 2023, countries such as China, India, Indonesia, Japan, South Korea and Singapore underwent significant changes to the structure of non-financial reporting and the way it is audited. Analysis showed that, despite the general trend towards increased integrated reporting and use of international standards (ISAE 3000, ISAE 3410, AA1000 and ISO 14064), audit practices are uneven, the share of full assurance is decreasing, and standards are being chosen inconsistently.

In addition, Asian countries face challenges in adapting their regulatory, institutional and professional environments to the new requirements of auditing sustainability reporting in the context of growing pressure from global initiatives such as GRI, TCFD, ISSB, and the desire to achieve the Sustainable Development Goals (SDGs). Particular attention should be paid to determinants such as the level of regulation, enterprise ownership type, internal control mechanisms, and audit firms' readiness to implement ESG audits.

Therefore, an empirical study of sustainability reporting audit practices in Asian countries is highly relevant, as it enables the identification of key influencing factors, the assessment of the level of development of audit mechanisms in the non-financial sector, and the provision of evidence-based recommendations for the harmonisation of audit practices in accordance with international standards. This is particularly important given the integration of national economies into global financial markets, where ESG reporting and its audit are seen as critical elements of transparency and investment attractiveness.

LITERATURE REVIEW

The academic discourse on sustainability reporting audits in Asia encompasses several complementary approaches that explain the determinants of audit practices, particularly in the context of increasing regulatory, institutional and corporate pressures. These approaches can be broadly classified into the following categories: institutional-regulatory, organisational-governance; standardisation-procedural; human resources; and theoretical-methodological.

1. Institutional-regulatory approach. This approach focuses on the role of national regulations, institutional frameworks and state initiatives in shaping the adoption and auditing of sustainability reporting. In Indonesia, for instance, institutional mechanisms introduced through sustainable finance strategies have significantly influenced the transition to mandatory sustainability reporting and external assurance (Adejumo et al., 2025). Similarly, in Vietnam, government-supported awards for reporting quality incentivise companies to engage external auditors, thereby reinforcing audit practices (Buerty et al., 2025). Gotoh R. (Gotoh, 2025) finds that, in the Japanese context, national decarbonisation strategies serve as policy drivers that deepen the content and application of environmental audits and specific audit standards.

2. Organisational-governance approach. This perspective emphasises the significance of corporate governance structures in determining the quality and scope of sustainability audits. Meutia, I., Yaacob, Z., Kartasari, S.F. (Meutia et al., 2023) identify a direct relationship between the effectiveness of audit committees in Indonesian banks and the quality of sustainability reporting. This demonstrates how internal oversight mechanisms can influence external assurance. Furthermore, attributes of governance such as board independence, the presence of sustainability committees and gender diversity are positively associated with external auditor engagement (Brogi, Lagasio, 2025; Kateb, Youssef, 2025).

3. Standardisation-procedural approach. Standardisation and the application of international auditing frameworks are key to improving the comparability and credibility of audits across regions. Adamo, S., De Matteis, C., Fasiello, R., & Imperiale, F. (Adamo et al., 2025) emphasise the importance of global assurance standards, such as ISAE 3000 and ISAE 3410, in improving the reliability of sustainability reports. Bezverkhyi K.V. (Bezverkhyi, 2024) and Makarenko I., Kravchenko O., Ovcharova N., Zemliak N. and Makarenko S. (Makarenko et al., 2020), meanwhile, contend that standardising audit procedures is crucial for ensuring consistency in the auditing of sustainability information, particularly when making cross-country comparisons within Asia.

4. Human-resource (auditor-related) approach. The human factor in auditing, including auditors' workloads and status, is another important determinant of audit quality. According to Elaigwu, M., Che-Ahmad, A. and Abdulmalik, S.O. (Elaigwu et al., 2023), auditors with a strong market position and a manageable workload are more likely to conduct thorough and reliable audits of sustainability reports. This emphasises the impact of professional capacity and resource availability on assurance outcomes.

5. Theoretical-methodological approach. A number of scholars advocate theoretical frameworks that take into account the cultural, legal and economic diversity of Asian countries. Hassanein A. and Elmaghrabi M. (Nasreen et al., 2025) and Cepêda C., Monteiro A.P. and Aibar-Guzmán B. (Cepêda et al., 2025), for example, emphasise the importance of developing localised empirical methodologies that reflect regional specifics rather than applying generic global models. They argue that sustainability assurance practices should be contextualised to increase their relevance and practical applicability.

Overall, the determinants of sustainability reporting audits in Asian countries are complex and multifaceted. They cover the interaction of regulatory initiatives, corporate governance characteristics, market incentives, institutional maturity, and environmental priorities. This creates a unique environment for implementing external audit practices for non-financial reporting.

AIMS AND OBJECTIVES

The study aims to identify and systematise the key determinants influencing the development and implementation of sustainability reporting audits in Asian countries. It also seeks to empirically evaluate audit practices supporting non-financial reporting between 2019 and 2023, considering regulatory, institutional, corporate, and market factors. Based on this, the following tasks are proposed:

1. Assess the distribution and forms of non-financial reporting in the corporate sectors of leading Asian countries (China, India, Indonesia, Japan, South Korea and Singapore) between 2019 and 2023.
2. Analyse the proportion and types of audit support for sustainability reporting, particularly the provision of limited or reasonable assurance.
3. Study the application of international standards for auditing non-financial reporting (ISAE 3000, ISAE 3410, AA1000 and ISO 14064) in Asian countries.
4. Formulate proposals to improve sustainability reporting audits based on the identified determinants and the practical experience of Asian countries.

The study's hypothesis is that the level of development and nature of sustainability reporting audits in Asian countries depend on a set of interrelated determinants. The most important of these are regulatory requirements for sustainability reporting and its audit, the institutional capacity of enterprises and audit organisations, the characteristics of the corporate governance system, investor motivation and market factors (in particular, ESG financing).

METHODS

A set of general scientific and specialised methods was applied throughout the study to investigate the determinants of sustainability reporting audits in Asian countries, taking into account their interconnectedness, dynamics and systemic nature. Methods of analysis and synthesis were employed to evaluate the extent and types of non-financial reporting within the corporate sector of major Asian countries, enabling the identification of structural shifts in sustainability reporting methodologies. Induction and deduction were also employed to analyse the extent and types of audit support for sustainability reporting, particularly in terms of providing limited or reasonable assurance. This approach ensured the logical construction of conclusions regarding the depth of the audit. Simultaneously, generalisation was employed to examine the implementation dynamics of international standards for auditing non-financial reporting (ISAE 3000, ISAE 3410, AA1000 and ISO 14064), enabling the systematisation of approaches to confirming the reliability of sustainability reporting. Thus, specification and analogy were employed to formulate practical proposals for enhancing the audit of sustainability reporting, based on the identified determinants and the experience of Asian countries. The hypothetical method was also employed when formulating a research hypothesis on the dependence of sustainability reporting audit practices on a set of regulatory, institutional, and corporate factors. At the same time, a bibliographic and bibliometric analysis of scientific publications on the research topic was conducted to provide a critical understanding of existing approaches and identify scientific gaps. Graphical and tabular methods were employed to visualise the research results in the form of figures, diagrams, and tables, facilitating a clearer perception of dynamic changes and comparative analyses. At the final stage of the study, methods of systematisation and generalisation were employed to formulate conclusions that integrated the results of theoretical analysis and empirical observations.

This study focuses on Australia, China, India, Indonesia, Japan, Singapore and South Korea. These countries were selected based on a combination of relevance, regional diversity and the availability of reliable empirical data on sustainability

reporting and audit practices. Together, these countries represent both emerging and developed economies in the Asia-Pacific region, enabling a comparative analysis of audit systems operating within different regulatory, institutional and cultural frameworks.

Australia, Japan and Singapore were included because of their advanced regulatory environments, well-established sustainability reporting standards and high level of audit assurance maturity. These countries have demonstrated consistent leadership in adopting integrated reporting and sustainability reporting in alignment with international frameworks. Australia, for instance, has long applied integrated reporting principles, while Japan has a unique model of embedding non-financial reporting within corporate governance systems.

India and South Korea were selected due to their dynamic regulatory reforms and growing alignment with global environmental, social and governance (ESG) standards, making them representative of nations actively transitioning towards international audit practices. Both are members of global and regional sustainability initiatives, providing a rich empirical context.

Indonesia and China were included as examples of large emerging markets where sustainability reporting is gaining momentum due to governmental and financial market pressures. Their inclusion enables the study to consider the institutional challenges and regulatory gaps affecting audit quality and coverage in less harmonised environments.

The selected timeframe (2019–2023) encompasses a pivotal period of transformation in sustainability reporting and auditing practices worldwide, particularly in Asia. This five-year period reflects:

1. The period following the adoption of the UN Sustainable Development Goals (SDGs) into national policy agendas.
2. A global shift from voluntary to regulated sustainability reporting, with countries such as India and Singapore introducing or strengthening mandatory disclosures.
3. The impact of the COVID-19 pandemic, which triggered reassessments of corporate resilience, risk and transparency, thereby accelerating ESG reporting and assurance practices.
4. A rise in climate-related audit standards, particularly the transition from general assurance standards (e.g. ISAE 3000) to more specific ones (e.g. ISAE 3410 and ISO 14064), as enterprises increasingly report on greenhouse gas emissions and environmental risks.

RESULTS

In the 21st century, the concept of sustainable development has become strategically important for businesses, governments and society as a whole. Sustainability reporting, which covers the environmental, social, and governance (ESG) aspects of companies' activities, has become an important accountability tool and an essential element of reputation management, investment attractiveness, and strategic planning. Australia, as a developed country with a high level of economic openness and an active environmental policy, plays a key role in developing and implementing sustainable corporate reporting practices.

Australian companies are increasingly publishing reports that comply with international standards such as the Global Reporting Initiative (GRI), the Task Force on Climate-related Financial Disclosures (TCFD) and the Sustainability Accounting Standards Board (SASB). Regulatory bodies such as the Australian Securities and Investments Commission (ASIC) and the Energy and Climate Agency promote ESG accountability by introducing guidelines, requirements, and monitoring mechanisms.

At the same time, challenges remain in unifying reporting approaches and ensuring the reliability of information and the audit of non-financial reports. In light of the globalisation of financial markets and the growing expectation among investors for transparency regarding ESG data, the quality and effectiveness of sustainability reporting in Australia are a particularly relevant issue.

Below is the share of Australian companies that disclose sustainability information in various types of reporting (Figure 1).

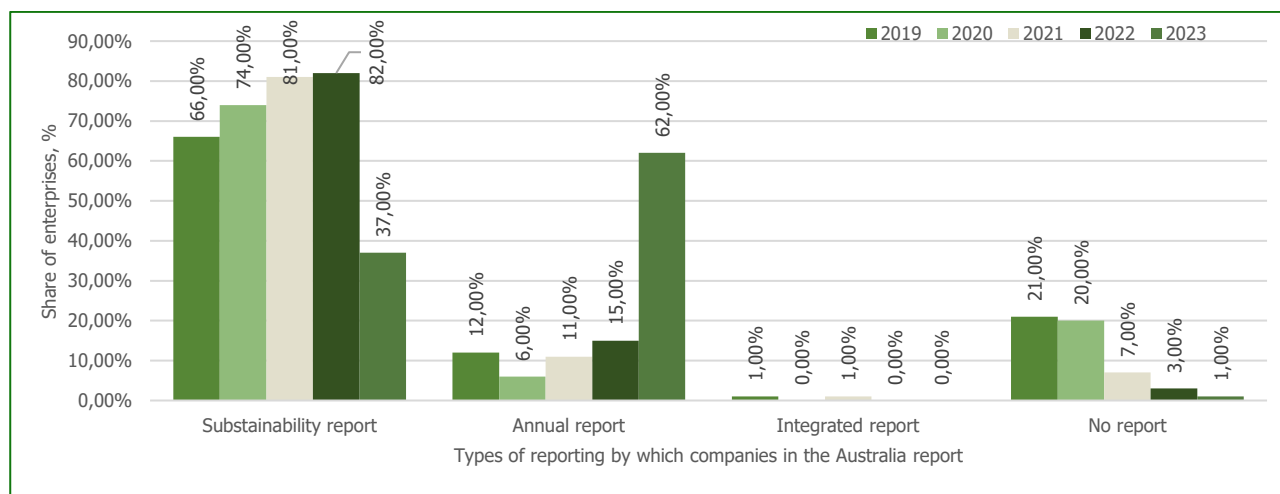


Figure 1. Share of Australian companies disclosing sustainability information by type of reporting, %. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

According to the statistics presented in Figure 1, there were significant changes to the structure of corporate sustainability reporting in Australia between 2019 and 2023. In 2019, 72.0% of companies published separate sustainability reports, 14.0% prepared annual financial statements and 14.0% prepared integrated reports. No companies published any form of reporting, indicating a high overall reporting culture.

Between 2020 and 2021, the proportion of companies publishing separate sustainability reports decreased gradually to 64.0%, possibly due to enterprises transitioning to unified or integrated formats. Notably, 16.0% of companies used integrated reporting and 20.0% used annual reporting in 2020. This trend continued in 2021 (12.0% and 22.0%, respectively), with only 2.0% of companies not reporting.

The transformation was particularly pronounced in 2022, with only 3.0% of companies publishing separate sustainability reports and 91.0% focusing on annual reporting. This may indicate the integration of non-financial indicators into financial statements, or a response to new regulatory requirements. In 2023, the situation stabilised somewhat: the proportion of companies reporting separately on sustainable development increased to 8.0%, while 72.0% prepared annual reports and 20.0% integrated reports. There were still no non-reporting companies.

Compared to 2019, the proportion of companies reporting separately on sustainable development decreased by 64 percentage points (from 72% to 8%), while the proportion of companies preparing annual reports increased by 58 percentage points (from 14% to 72%), and the proportion of companies producing integrated reports increased by 6 percentage points (from 14% to 20%). These changes reflect a shift in Australian companies' approach to ESG disclosure, including a move towards more consolidated reporting formats that consider non-financial aspects as part of the broader management and financial discourse.

Having studied the proportion of Australian enterprises that disclose information on sustainable development by type of reporting, it is advisable to consider the proportion of such enterprises that audit sustainable development reporting (Table 1).

Table 1. Sustainability reporting audits for Australian companies. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

№	Indicator name	Years				
		2019	2020	2021	2022	2023
1	Assurance on sustainability reporting, %.	100.00	100.00	94.00	89.00	89.00
2	Limited assurance on sustainability reporting, %.	100.00	97.00	91.00	95.00	94.00
3	Time to provide assurance on sustainability reporting, days	-	15	26	21	12

Having reviewed the structure of non-financial reporting disclosure by Australian enterprises, it is advisable to analyse the level of audit support for such reporting, as shown in Table 1. The data indicate a fairly high level of audit practice for sustainability reporting in the country.

Notably, in 2019 and 2020, 100% of companies that prepared sustainability reports included an audit opinion. This figure then decreased slightly in the following years: to 94.0% in 2021 and to 89.0% in 2022–2023. Nevertheless, the level of audit coverage remains fairly stable and high, indicating an established culture of external review of non-financial reporting in Australia.

As for the form of audit support, limited assurance prevailed during the review period. It was used in 100.0% of cases in 2019, 97.0% in 2020, 91.0% in 2021, 95.0% in 2022 and 94.0% in 2023. This indicates that companies are steadily focusing on a less intensive, yet fast and affordable form of audit that nevertheless ensures a basic level of reporting reliability.

One interesting indicator is the assurance lag, which is the number of days between the publication of the report and the issuance of the audit opinion. While this figure was 15 days in 2020, it increased to 26 days in 2021 and decreased to 21 days in 2022. In 2023, it fell further to 12 days. These fluctuations suggest an improvement in the efficiency and effectiveness of audit processes, as well as the integration of audit functions into enterprises' internal reporting management systems.

Overall, the Australian experience demonstrates a high level of audit support for sustainability reporting, with an emphasis on limited assurance and a tendency to reduce the time taken to issue audit opinions. This may be the result of a combination of regulatory pressure, companies' voluntary initiatives and mature market practice in the field of non-financial auditing.

Next, it is advisable to present the auditing standards used by Australian firms to confirm the accuracy and reliability of reports, particularly sustainability reports (Figure 2).

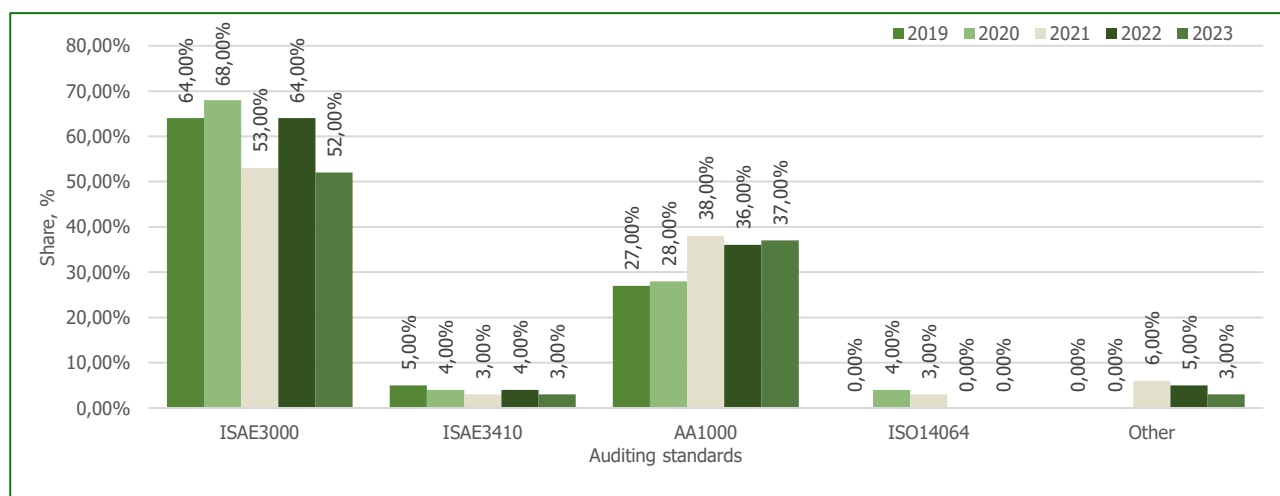


Figure 2. These are the audit standards for sustainability reporting used by Australian audit firms. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

Analysing the data presented in Figure 2, it can be concluded that approaches to auditing sustainability reports in Australia are gradually shifting towards more specialised standards that focus on environmental aspects, while the popularity of universal and socially oriented approaches is declining.

ISAE 3000 (Assurance Engagements Other Than Audits or Reviews of Historical Financial Information) (International Auditing and Assurance Standards Board, 2021), which is widely accepted in the field of non-financial reporting and used for assurance engagements that are not audits of historical financial information, remained the primary standard throughout the period. However, its application decreased from 100.0% in 2019 to 94.0% in 2023, potentially indicating a diversification of standards or increased attention to specialised environmental requirements.

This is evidenced by the growing use of ISAE 3410, «Greenhouse Gas Reporting Assurance Engagements» (International Auditing and Assurance Standards Board, 2021), which addresses assurance engagements on greenhouse gas reports. Its share increased by 10 percentage points, rising from 43.0% in 2019 to 53.0% in 2023. This indicates that Australian

companies are becoming more interested in verifying data related to carbon emissions and climate responsibility, in line with global ESG trends.

Conversely, the use of the AA1000 standard (AA1000 AccountAbility Principles Standard, 2018), which focuses on stakeholder engagement and corporate social responsibility, decreased from 6.0% in 2019 to 0.0% in 2023. This may suggest a decline in interest in non-financial social indicators, or a shift towards more formalised ESG information assessment systems.

As for the ISO 14064 Greenhouse Gases standard (ISO 14064 «Greenhouse gases», 2018), which deals with greenhouse gases, its application during the study period remained at zero, which distinguishes Australia from other countries with more active climate policies. This may be due to the absence of a regulatory requirement to apply this standard or its replacement by other control mechanisms.

Interestingly, the share of other auditing standards not separately classified was 6% in 2021, but decreased to 3% in 2023, indicating a trend towards standardisation of practices and a decrease in the use of alternative or industry-specific standards.

In general, the Australian sustainability reporting audit practice demonstrates maturity and adaptability: the focus is gradually shifting from universal standards to more substantive environmental ones, while social aspects are giving way to climate responsibility issues. This may indicate the impact of global climate initiatives and regulatory expectations for transparency in carbon reporting.

Next, it would be helpful to illustrate the proportion of Chinese enterprises that disclose information on sustainable development across different types of reporting (Figure 3).

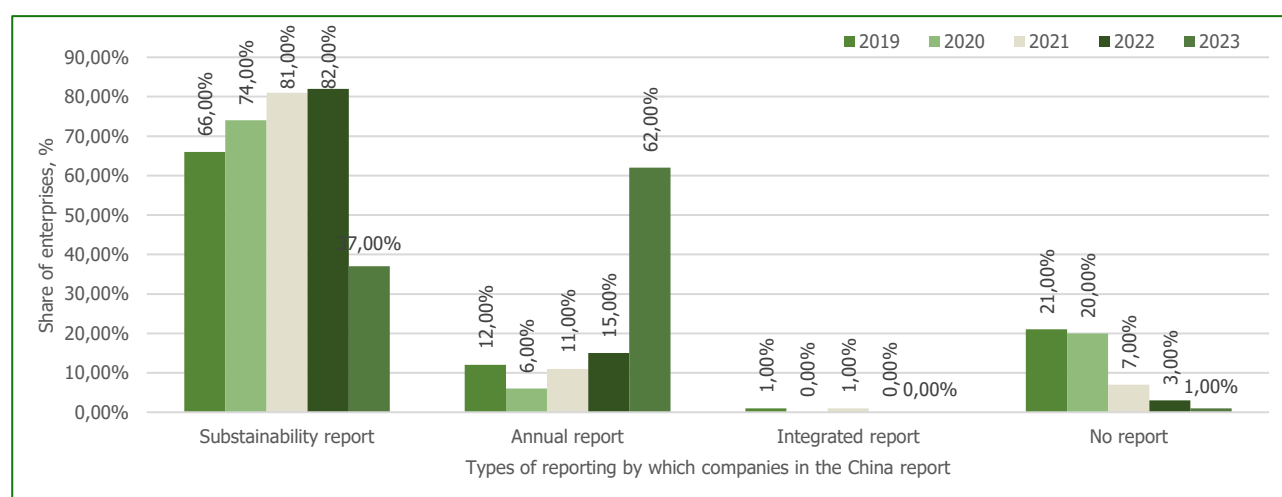


Figure 3. Percentage share of Chinese companies disclosing sustainability information by type of reporting. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

As shown in Figure 3, significant changes occurred in the structure of sustainability reporting by Chinese enterprises between 2019 and 2023.

Notably, 66.00% of companies submitted sustainability reports in 2019, compared to 12.00% who submitted annual reports and 1.00% who submitted integrated reports. Meanwhile, 21.00% of companies did not report at all. By 2020, the proportion of companies submitting sustainability reports had increased to 74%, with only 6% submitting annual reports and none submitting integrated reports.

This trend continued in 2021: 81% of companies submitted sustainability reports, 11% submitted annual reports, and 1% submitted integrated reports. The proportion of non-reporters decreased to 7%. The following year, the number of companies reporting on sustainability increased to 82%, with 15% submitting annual reports and only 3% reporting.

However, in 2023, the proportion of companies reporting on sustainability declined significantly to 37%, while 62% submitted annual reports. No integrated reports were submitted, and the proportion of non-reporting companies decreased to a minimum of 1%.

These results suggest a change in the reporting priorities of Chinese companies. While there was a gradual increase in sustainability reporting between 2019 and 2022, in 2023, preference was given to traditional annual reporting. Concurrently, the significant decrease in the proportion of companies not reporting at all indicates an increase in business transparency and responsibility.

Having studied the proportion of Chinese enterprises that disclose information on sustainable development by type of reporting, it is advisable to consider the proportion of such enterprises that audit sustainable development reporting (Table 2).

Table 2. Chinese enterprises that undergo sustainability reporting audits. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

№	Indicator name	Years				
		2019	2020	2021	2022	2023
1	Assurance on sustainability reporting, %.	59.00	52.00	50.00	56.00	37.00
2	Limited assurance on sustainability reporting, %.	73.00	76.00	50.00	64.00	50.00
3	Time to provide assurance on sustainability reporting, days	-	59	17	1	8

The proportion of companies receiving full assurance on sustainability reporting decreased from 59.00% in 2019 to 37.00% in 2023, suggesting a decline in the prevalence of this practice. This may suggest a general trend of companies no longer needing or wanting to engage independent auditors to provide assurance on their sustainability reports, possibly due to simplified procedures or changes in regulations.

Similarly, the proportion of companies receiving limited assurance on sustainability reporting fell from 73.00% in 2019 to 50.00% in 2023. This could be due to the increased use of alternative control and audit methods, or changes in regulatory requirements for limited assurance. Nevertheless, a significant proportion of companies still opt for this option, suggesting a desire to maintain a certain level of confidence in their reporting despite limited resources.

The time for providing assurance on sustainability reporting has changed over the years. For example, in 2021, this indicator was only 1 day, and in 2023 it increased to 8 days. The decrease in 2021 could be due to an accelerated verification process, which was probably part of the adaptation to new conditions or requirements. In 2023, the time returned to normal, which may indicate a more reasonable approach to inspections.

Thus, the analysis of Table 2 indicates trends that reflect changes in the approaches to the audit of sustainability reporting by Chinese enterprises. There is a decrease in the overall level of assurance and an increase in the time spent on the audit, which indicates changes in approaches to ensuring the reliability of reporting, including through new regulations and practices that may result from global changes in the field of sustainable development.

Next, it is advisable to present the standards for auditing reports, including sustainability reports, used by Chinese audit firms to confirm their accuracy and reliability (Figure 4).

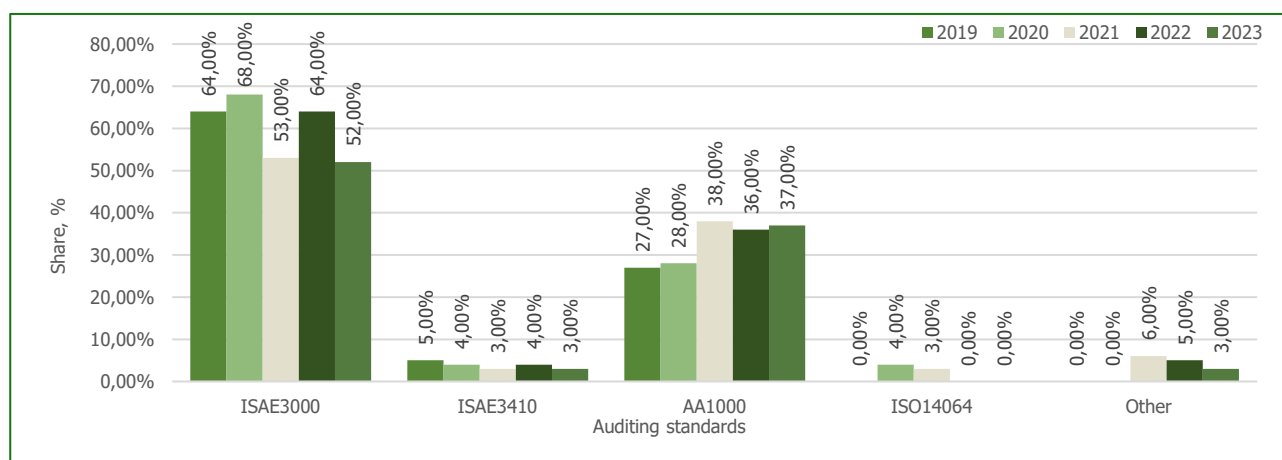


Figure 4. These are the sustainability reporting audit standards used by Chinese audit firms. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

When analysing the sustainability reporting audit standards used by Chinese audit firms (Figure 4), it should be noted that the proportion of ISAE 3000 «Assurance Engagements Other Than Audits or Reviews of Historical Financial Information» (International Auditing and Assurance Standards Board, 2021) applications decreased by 12.00% between 2019 and 2023 (falling from 64.00% to 52.00%). This may indicate a general downward trend in the use of ISAE 3000 «Assurance Engagements Other Than Audits or Reviews of Historical Financial Information» among Chinese audit firms. This decline may be due to the wider adoption of alternative standards, such as AA1000 (AA1000 AccountAbility Principles Standard, 2018), or shifting methodologies for evaluating sustainability reporting. As ISAE 3000 covers broader aspects of assurance beyond environmental issues, it may be less relevant for specialised assurance engagements.

At the same time, the use of ISAE 3410 (Assurance Engagements on Greenhouse Gas Reports) (International Auditing and Assurance Standards Board, 2021) by Chinese audit firms decreased from 5.00% in 2019 to 3.00% in 2023 — a fall of 2.00%. This may indicate a decline in interest in greenhouse gas audits, despite ongoing global efforts to reduce emissions. This may be due not only to a changing level of attention to this issue, but also to a possible reallocation of audit firms' resources to more general or comprehensive audits, particularly those covering a wider range of sustainability aspects.

Conversely, there has been an increase in the use of the AA1000 standard (AA1000 AccountAbility Principles Standard, 2018), which increased from 27.00% in 2019 to 37.00% in 2023 — an increase of 10.00%. This increase may indicate that Chinese companies are focusing more on the AA1000 standard (AA1000 AccountAbility Principles Standard, 2018), which emphasises stakeholders and processes related to sustainable development. The AA1000 standard allows companies to be more transparent in their reporting and meet stakeholder trust requirements, which may be important for companies in the context of global sustainability initiatives.

The use of ISO 14064 Greenhouse Gases (ISO 14064 «Greenhouse gases», 2018) remained unchanged at 0.00% in both 2019 and 2023. The zero percentage of use of ISO 14064 Greenhouse Gases (ISO 14064 «Greenhouse gases», 2018) may indicate that this standard, despite its importance for regulating greenhouse gas emissions, is not popular among Chinese audit firms for auditing sustainability reports. This is likely due to the fact that enterprises pay more attention to general sustainability practices, including environmental aspects, through more comprehensive standards such as AA1000 (AA1000 AccountAbility Principles Standard, 2018).

As for other standards for the audit of sustainability reporting, their share increased from 0.00% in 2019 to 3.00% in 2023, i.e., there is an increase of 3.00% in the use of alternative standards for the audit of sustainability reporting. This increase of 3.00% may indicate an increase in the use of new, lesser-known, or more specialised standards in Chinese audit practice. This may be the result of the introduction of new environmental and social standards or changes in national and international legislation. It may also be an indication that companies are increasingly turning to innovative or alternative standards to more accurately reflect sustainability in their reporting.

Next, it would be helpful to illustrate the proportion of Indian companies that disclose information on sustainable development across different types of reporting (Figure 5).

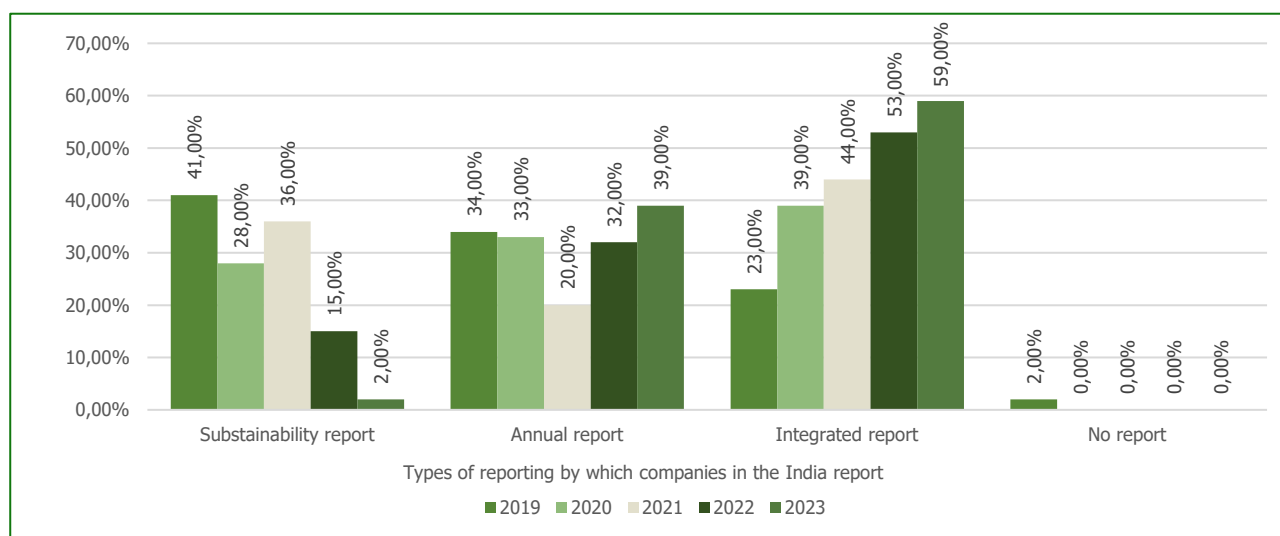


Figure 5. Percentage share of Indian companies disclosing sustainability information by type of reporting. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

As can be seen from Figure 5, there has been a clear evolution in the reporting approaches of Indian companies between 2019 and 2023. The main trend is a gradual shift towards integrated reporting, which covers both financial and non-financial performance indicators, rather than separate sustainability and annual reports.

In 2019, for example, sustainability reporting was the most common form (41.00% of companies), while only 23.00% submitted integrated reports. Meanwhile, 34.00% of companies limited themselves to annual reporting, and 2.00% did not report at all.

In 2020, the proportion of companies submitting integrated reports increased significantly, reaching 39%, indicating the beginning of a trend towards integrated reporting. Meanwhile, the proportion of companies submitting sustainability reports fell to 28%, while annual reports remained relatively stable at 33%. Notably, the 'do not report' category has disappeared completely this year, indicating that requirements for business activity transparency have become more stringent.

In 2021, the proportion of integrated reports continued to grow (44.00 %), while annual reports decreased to 20% and sustainability reports increased slightly to 36%. This suggests that some companies were in the process of transitioning to integrated reporting, while still using traditional reporting forms.

By 2022, integrated reporting had become the dominant form, covering more than half of enterprises (53.00%), marking a significant shift compared to previous years. Meanwhile, sustainability reporting decreased rapidly to 15.00%, confirming the trend towards its gradual merger with integrated reporting. Annual reporting remained stable at 32%.

By 2023, integrated reporting had become the dominant form, with 59% of companies using it. The proportion of companies using annual reporting remained significant at 39%, while the proportion using sustainability reporting decreased to 2%. For the fourth year in a row, there has been a complete absence of companies that do not submit any form of reporting.

Thus, the overall dynamics indicate a consistent transition of Indian companies to integrated reporting, which is in line with current international trends in transparency, responsibility and sustainable development. This evolution is a positive signal of improving the quality of corporate governance and increasing attention to ESG factors.

After studying the share of Indian companies that disclose information on sustainable development by type of reporting, it is advisable to consider the share of such companies that audit their sustainability reports (Table 3).

Table 3. Indian companies that undergo sustainability reporting audits. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

№	Indicator name	Years				
		2019	2020	2021	2022	2023
1	Assurance on sustainability reporting, %.	63.00	44.00	47.00	57.00	57.00
2	Limited assurance on sustainability reporting, %.	84.00	67.00	75.00	73.00	80.00
3	Time to provide assurance on sustainability reporting, days	-	109	95	86	55

In 2019, 63.00% of companies received full assurance. However, this figure decreased significantly to 44.00% in 2020, likely due to the transition period during the pandemic, which affected many aspects of corporate control and reporting. In subsequent years, the indicator recovered somewhat, reaching 47.00% in 2021, 57.00% in both 2022 and 2023. This suggests a stabilisation and gradual restoration of confidence in audit procedures for sustainable development.

The level of limited assurance, which is less rigorous than a full audit, demonstrates relatively higher values in all years. This indicator was 84.00% in 2019, decreased to 67.00% in 2020, and then gradually increased to 75.00% in 2021, 73.00% in 2022, and 80.00% in 2023. This may suggest a widespread tendency to partially confirm reporting as a compromise between transparency and saving resources.

The time taken to issue an assurance has reduced from 109 days in 2020 to 55 days in 2023. This may be due to improvements in internal processes for collecting and analysing non-financial information, as well as the automation of reporting processes. Reducing audit time may also indicate the growing maturity of companies' reporting systems.

Overall, the analysis of sustainability reporting audit indicators suggests that external assurance of non-financial information is becoming increasingly important in India. While the level of full assurance has not yet returned to pre-pandemic levels, the steady growth of limited assurance and the reduction in audit procedure duration indicate a positive trend in

the development of non-financial audit institutions. This is in line with global trends, where improving the quality and reliability of sustainability reporting is an important element of investment attractiveness and corporate responsibility.

Next, the standards used by Indian audit firms to confirm the accuracy and reliability of reports, including sustainability reports, should be presented (Figure 6).

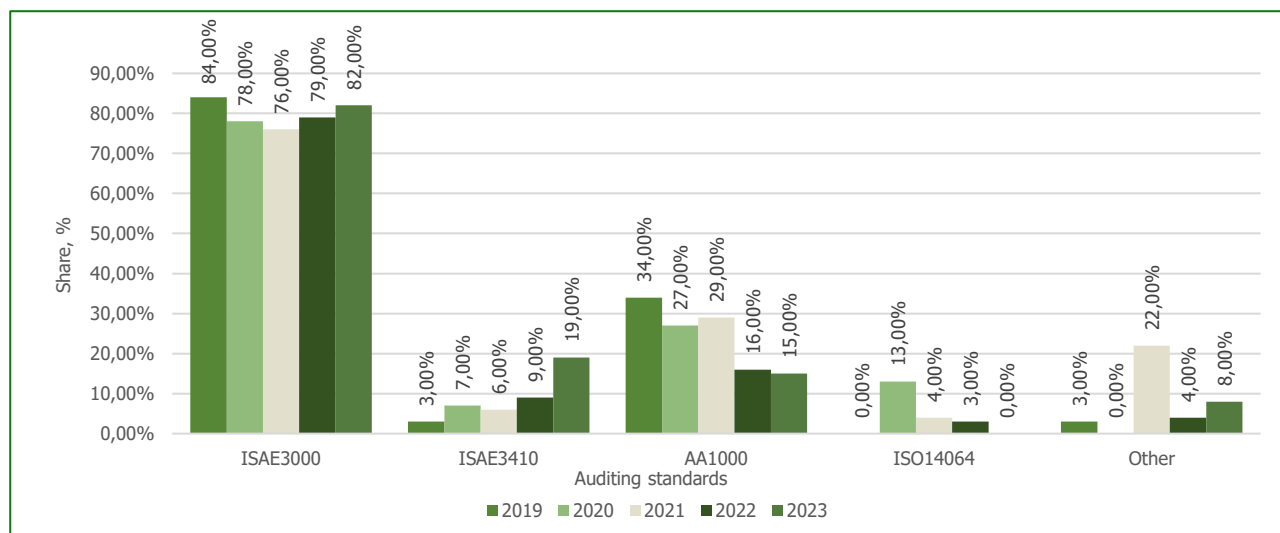


Figure 6. Sustainability reporting audit standards used by audit firms in India. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

The proportion of ISAE 3000 assurance engagements other than audits or reviews of historical financial information (International Auditing and Assurance Standards Board, 2021) decreased by 2.00% between 2019 and 2023, falling from 84.00% to 82.00%. This suggests a slight decline in the adoption of this standard compared to previous years, potentially due to changes in reporting requirements or the emergence of more specific standards addressing the needs of sustainable development.

Conversely, the proportion of ISAE 3410 assurance engagements on greenhouse gas reports increased significantly (International Auditing and Assurance Standards Board, 2021), rising by 16.00% from 3.00% in 2019 to 19.00% in 2023. This increase suggests a growing focus on climate change and reducing greenhouse gas emissions, which are important parts of companies' sustainable development strategies. Consequently, auditors are paying more attention to environmental reporting and experiencing an increased need to verify this data.

The share of the AA1000 standard (AA1000 AccountAbility Principles Standard, 2018) (which focuses on the principles of social responsibility and transparency in reporting) has decreased significantly. In 2023, its share fell to 13.00%, down from 34.00% in 2019. This decline may indicate a shift in the emphasis placed on auditing sustainability reports in India, possibly due to a growing interest in more specific standards such as ISAE 3410 (International Auditing and Assurance Standards Board, 2021), which focus on environmental issues.

Use of the ISO 14064 standard (Greenhouse Gases) (ISO 14064 «Greenhouse gases», 2018) increased from 0.00% in 2019 to 3.00% in 2023. This suggests an initial, albeit modest, rise in the adoption of standards directly linked to greenhouse gas emissions and climate change. Although this standard currently has a small market share, its growth suggests a trend towards the further development of environmental auditing in India.

The share of other standards used for auditing sustainability reports increased from 3.00% in 2019 to 8.00% in 2023. This suggests that Indian audit firms are increasingly adopting a variety of specialised standards to ensure more comprehensive and accurate audits of sustainability reports. This trend suggests a need to adapt to evolving industry requirements and heightened attention to emerging standards that could more effectively address contemporary sustainability challenges. Overall, it can be concluded that, from 2019 to 2023, there has been a shift in the use of sustainability reporting audit standards in India. A key factor is the growing interest in environmental issues, such as greenhouse gas emissions, as reflected by the significant increase in the share of ISAE 3410. At the same time, the decline in the use of the AA1000 standard (AA1000 AccountAbility Principles Standard, 2018) indicates that Indian audit firms are focusing more on specific environmental and social indicators that are becoming important for corporate reporting. These changes reflect general

global trends aimed at improving transparency and efficiency in the management of sustainable development of enterprises.

Below is the share of Indonesian companies that disclose information on sustainable development in various types of reporting (Figure 7).

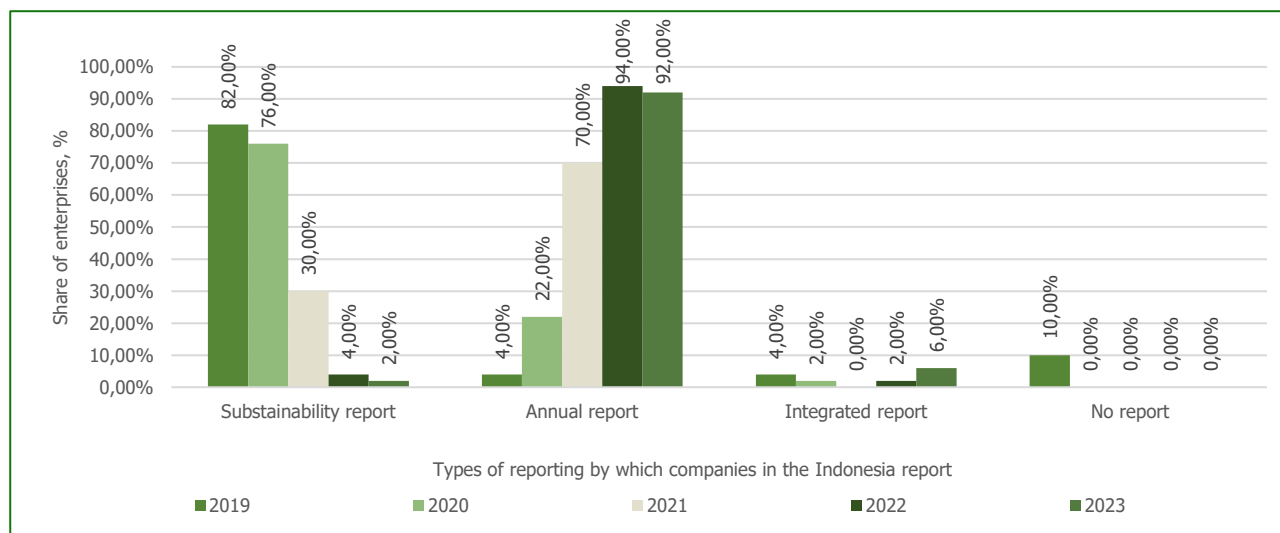


Figure 7. Percentage share of Indonesian companies disclosing sustainability information by type of reporting. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

The statistics on sustainability reporting by Indonesian enterprises, presented in Figure 7, show significant changes to the reporting structure between 2019 and 2023. These changes reflect the evolution of corporate strategies to meet modern sustainability requirements.

In 2019, 82.00% of Indonesian companies submitted sustainability reports, indicating a high level of corporate social responsibility in the country. However, this figure decreased over time: by 2023, only 2.00% of companies submitted reports. This suggests that sustainability reporting is becoming less popular, possibly due to reduced requirements or changes in strategic approaches to corporate reporting.

In 2019, only 4.00% of Indonesian companies submitted annual reports. However, this figure increased significantly to 22.00% in 2020, and by 2021, it had risen to 70.00%. This suggests that Indonesian companies have become more focused on annual reporting over time, possibly due to growing demands for transparency and short-term reporting. The proportion of companies submitting annual reports remained high in 2022 and 2023, at 94.00% and 92.00% respectively.

As for integrated reporting, 4.00% of Indonesian companies submitted this type of report in 2019. This figure dropped to 2.00% in 2020 and remained low in subsequent years: 0.00% in 2021, 2.00% in 2022 and 6.00% in 2023. Despite being more comprehensive, integrated reporting did not gain much popularity among Indonesian companies from 2019 to 2023, possibly due to low regulatory requirements or the need for simpler reporting forms.

In 2019, a significant proportion of companies (10%) did not submit any sustainability reports. However, this figure dropped to 0.00% in 2020, with no non-reporting companies recorded in subsequent years. This suggests a high level of corporate responsibility and compliance with reporting requirements in Indonesia, possibly due to strengthened regulations.

Between 2019 and 2023, Indonesian enterprises changed their approach to sustainability reporting. While the majority of companies initially reported on sustainability, there has since been a significant decline in this number. Conversely, there has been an increase in the proportion of annual reports, reflecting a shift in focus towards short-term financial and operational performance.

The decline in integrated reporting is likely due to a lack of interest in reports combining financial and non-financial indicators compared to traditional annual reports, which are simpler to prepare and evaluate.

Therefore, it can be argued that, from 2019 to 2023, Indonesia has shown a general trend towards simplification and a focus on annual reporting, with a significant decrease in the importance of sustainability and integrated reports.

Having studied the proportion of Indonesian enterprises that disclose information on sustainable development by type of reporting, it is advisable to consider the proportion of such enterprises that audit sustainable development reporting (Table 4).

Table 4. Companies in Indonesia that are audited for sustainability reporting. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

№	Indicator name	Years				
		2019	2020	2021	2022	2023
1	Assurance on sustainability reporting, %.	33.00	23.00	50.00	45.00	41.00
2	Limited assurance on sustainability reporting, %.	56.00	46.00	56.00	55.00	48.00
3	Time to provide assurance on sustainability reporting, days	-	53	42	34	33

In 2019, 33% of companies that disclosed sustainability information underwent full assurance audits. This figure dropped to 23% in 2020, possibly due to the economic difficulties caused by the pandemic. However, in 2021, there was a significant increase to 50%, which may indicate a renewed focus on the quality and reliability of reporting.

The following years saw a moderate decline in this proportion: 45% in 2022 and 41% in 2023. This could suggest a stabilisation of audit approaches or a transition to alternative formats, such as limited assurance.

In 2019, 56.00% of companies received limited assurance from audit firms. This figure dropped to 46.00% in 2020, coinciding with a decrease in full assurance during the same period. The share returned to the 2019 level of 56.00% in 2021, before gradually decreasing again to 55.00% in 2022 and 48.00% in 2023.

The general trend indicates that most companies still opt for a limited assurance audit, as this is a more cost-effective and less complex option than a full assurance audit.

Since 2020, Table 4 has also shown the average time taken to provide assurance on sustainability reporting. This figure was 53 days in 2020, 42 days in 2021, 34 days in 2022, and 33 days in 2023. The gradual reduction in audit duration may be due to improved audit processes, the introduction of information technology, and the growing experience of companies and audit firms in verifying sustainability reports.

Next, it would be useful to present the auditing standards used by Indonesian audit firms to confirm the accuracy and reliability of reports, including sustainability reports (Figure 8).

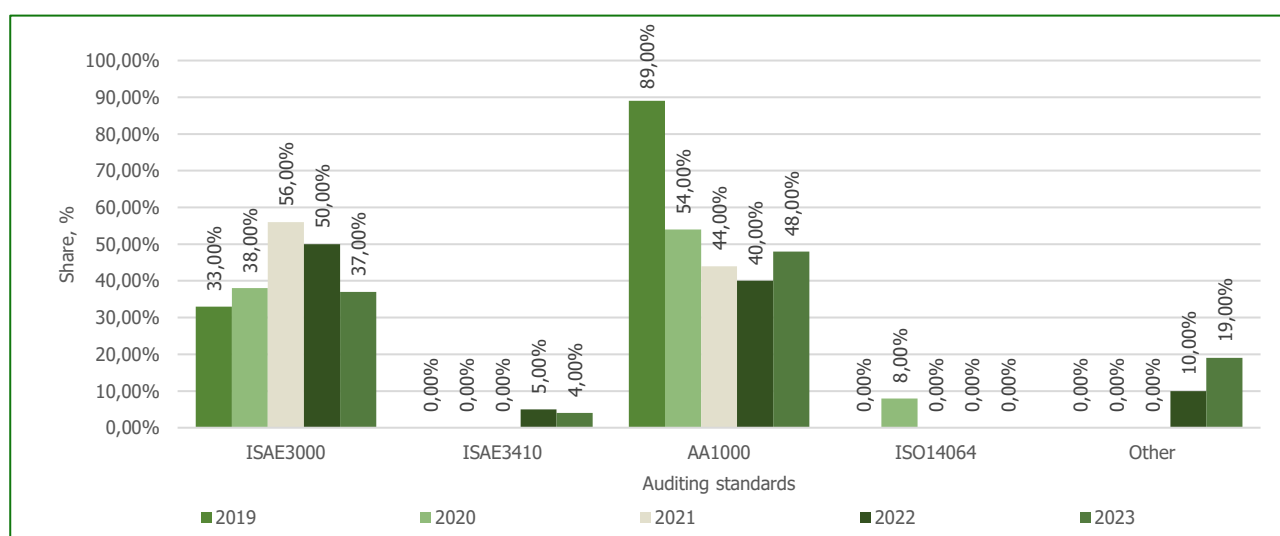


Figure 8. Sustainability reporting audit standards used by Indonesian audit firms. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

The dynamics of the application of sustainability reporting audit standards by Indonesian audit firms between 2019 and 2023 (Figure 8) indicate a shift in priorities and an adaptation to global challenges in the field of non-financial reporting. Let us now consider the key trends in the use of international and alternative standards.

In 2019, ISAE 3000 «Assurance Engagements Other Than Audits or Reviews of Historical Financial Information» (International Auditing and Assurance Standards Board, 2021) was used by 33.00% of Indonesian audit firms. By 2023, this figure had increased to 37.00%, demonstrating the gradual growth in popularity of this universal standard, which provides assurance on non-financial reporting, particularly sustainable development reporting.

This 4.00% increase indicates a growing awareness of the importance of auditing non-financial reporting and a desire among audit firms to apply internationally recognised standards, despite the dominance of alternative or national approaches in previous years.

The use of ISAE 3410 (Assurance Engagements on Greenhouse Gas Reports) (International Auditing and Assurance Standards Board, 2021) was not recorded at all in 2019, but by 2023, 4% of Indonesian audit firms were using it. This indicates a gradual increase in interest in the verification of environmental indicators, particularly reporting on greenhouse gas emissions.

Despite its modest adoption rate, the emergence of this standard in Indonesian auditing practice indicates an expansion of the thematic aspects of sustainable development within the audit scope. This is consistent with global climate challenges and the corporate need to report on environmental impact.

The AA1000 standard (AA1000 AccountAbility Principles Standard, 2018), which focuses on auditing social, ethical, and governance aspects of sustainable development, was extremely popular in 2019, with 89% of audit firms using it. However, this share dropped to 48.00% in 2023, almost half the 2019 figure.

This sharp 41% decline may indicate a shift towards more universal or formally regulated international standards, such as ISAE 3000 «Assurance Engagements that are not an Audit or Review of Historical Financial Information» (International Auditing and Assurance Standards Board, 2021), or a decrease in client demand for social reporting audits in this format. Conversely, it is possible that companies have started to opt for more environmentally focused or integrated auditing approaches.

Throughout the entire analysed period, Indonesian audit firms did not apply ISO 14064 Greenhouse Gases (ISO 14064 «Greenhouse gases», 2018). This may indicate a low level of integration of this standard into national audit practice, as well as a lack of significant demand from companies for its application.

Of interest is the emergence of the 'other standards' category, which increased from 0.00% in 2019 to 19.00% in 2023. This suggests a diversification of approaches to auditing sustainability reports and an attempt to adapt to industry, international or even internal standards that are not regulated by the main international documents.

Next, it would be useful to present the proportion of Japanese enterprises disclosing information on sustainable development in different types of reporting (Figure 9).

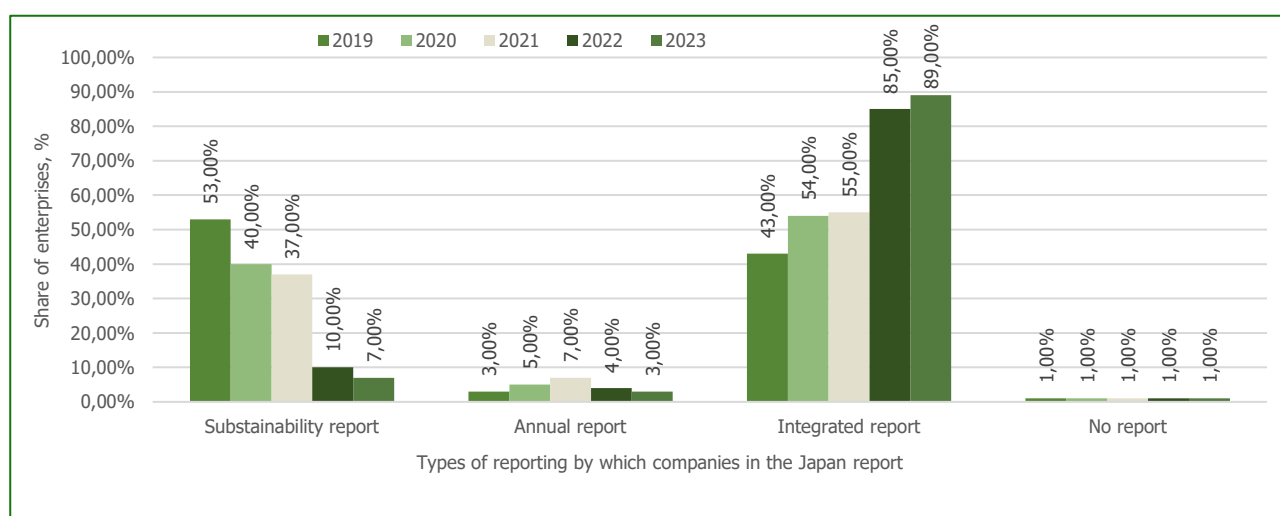


Figure 9. Share of Japanese companies disclosing sustainability information by type of reporting, %. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

As can be seen from the statistics presented in Figure 9, there has been a noticeable transformation in the way Japanese companies approach sustainability disclosures. Between 2019 and 2023, significant changes occurred in the structure and priorities of reporting.

In 2019, 53.00% of Japanese companies submitted separate sustainability reports. However, this figure decreased rapidly every year: to 40.00% in 2020, 37.00% in 2021, 10.00% in 2022 and 7.00% in 2023. The overall decline for this period was 46%. This indicates that companies are shifting towards integrated reporting, combining financial and non-financial information.

The proportion of companies that only prepared annual reports remained consistently low throughout the period. It amounted to 3.00% in 2019, with slight fluctuations in the following years (5.00% in 2020, 7.00% in 2021 and 4.00% in 2022), before returning to 3.00% in 2023. This suggests that separate annual reports are not considered important in the context of sustainability disclosure in Japan.

The most noticeable trend is the increase in the proportion of companies that produce integrated reports. While this figure stood at 43.00% in 2019, by 2023 it had risen to 89.00%, indicating an increase of 46.00%. Since 2020, integrated reporting has been the dominant type of reporting, clearly demonstrating Japanese businesses' shift towards an approach that considers both financial results and sustainability factors. This approach is more effective in terms of transparency and strategic management.

Meanwhile, the proportion of companies not reporting at all has remained at 1.00% over the past five years. This highlights the high level of responsibility of Japanese companies with regard to corporate reporting practices.

Thus, Japan is demonstrating one of the most progressive models of sustainability reporting evolution, with an emphasis on integrating non-financial and financial indicators to provide a holistic view of companies' efficiency and sustainability.

Having studied the proportion of Japanese enterprises disclosing information on sustainable development by type of reporting, it is advisable to consider the proportion of such enterprises that audit sustainable development reporting (Table 5).

Table 5. Japanese companies that undergo sustainability reporting audits. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

№	Indicator name	Years				
		2019	2020	2021	2022	2023
1	Assurance on sustainability reporting, %.	63.00	61.00	47.00	43.00	41.00
2	Limited assurance on sustainability reporting, %.	90.00	93.00	96.00	94.00	93.00
3	Time to provide assurance on sustainability reporting, days	-	102	75	80	83

The proportion of companies receiving full assurance on their financial statements fell from 63.00% in 2019 to 41.00% in 2023. This may indicate a shift towards a less costly verification process, such as a limited audit.

Conversely, the proportion of companies receiving limited assurance remained high and stable, increasing from 90.00% in 2019 to 93.00% in 2023. This emphasises the priority of this format for most companies.

The duration of the audit process decreased from 102 days in 2020 to 83 days in 2023, indicating the optimisation of procedures and probably the introduction of digital tools.

Next, the standards used by Japanese audit firms to confirm the accuracy and reliability of auditing reports, including sustainability reports, should be presented (Figure 10).

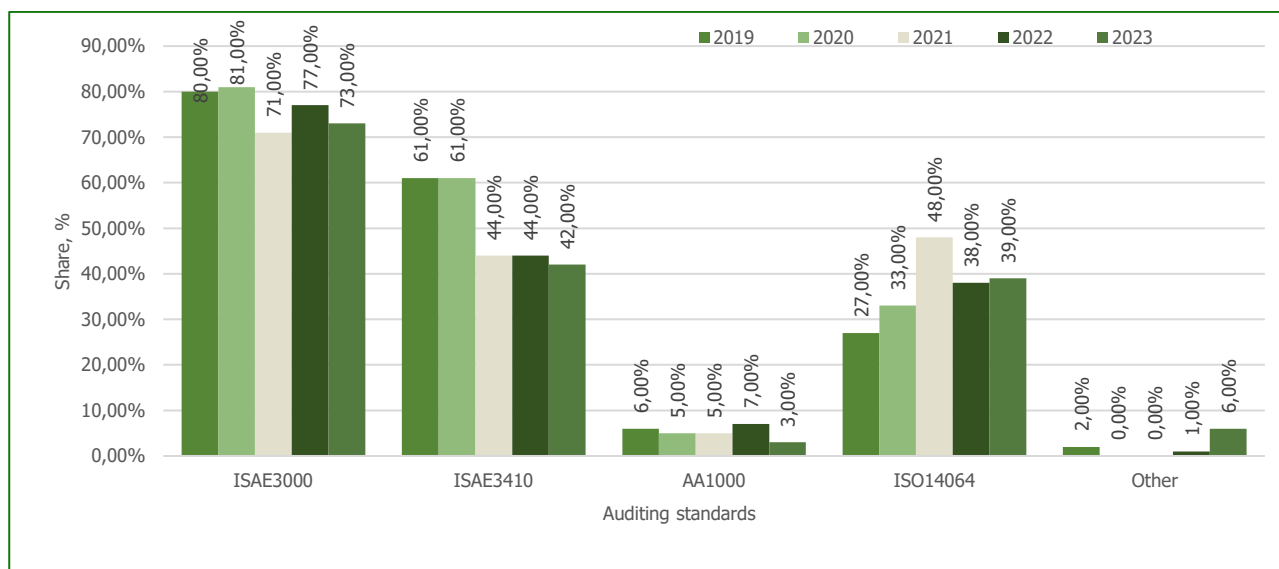


Figure 10. Sustainability reporting audit standards used by Japanese audit firms. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

From 2019 to 2023, Japan (Figure 10) underwent a transformation in its approach to auditing sustainability reports, reflecting shifts in corporate governance priorities and the adoption of global sustainability trends. The ISAE 3000 Standard on Assurance Engagements Other Than Audits or Reviews of Historical Financial Information (International Auditing and Assurance Standards Board, 2021), which provides a universal framework for ensuring the reliability of non-financial information, remains the most widely used standard in Japan. However, its market share has decreased from 80.00% in 2019 to 73.00% in 2023 (-7.00%). This indicates stable recognition of the international standard, as well as a gradual diversification of audit practices and use of alternative approaches.

The application of ISAE 3410 (International Auditing and Assurance Standards Board, 2021), which is aimed at verifying information on greenhouse gases, decreased by 19.00%, falling from 61.00% in 2019 to 42.00% in 2023. This may be due to a redistribution of interest towards other environmental standards, as well as the integration of relevant information into broader reporting formats.

The AA1000 standard (AA1000 Account Ability Principles Standard, 2018), which focuses on stakeholder engagement and ethical reporting principles, is used to a limited extent, with usage decreasing from 6.00% in 2019 to 3.00% in 2023. This may indicate low demand for the assessment of non-financial reporting in terms of responsibility and engagement, or a shift towards more technically oriented standards.

In contrast, ISO 14064 Greenhouse Gases (ISO 14064 «Greenhouse gases», 2018), which focuses on greenhouse gas assessment, has increased in popularity by 12.00%, rising from 27.00% in 2019 to 39.00% in 2023. This suggests that Japanese businesses are paying more attention to climate aspects of sustainable development and focusing on international environmental requirements and ESG compliance standards.

The share of other auditing standards increased from 2.00% in 2019 to 6.00% in 2023, demonstrating growing interest in industry-specific or domestic sustainability assurance methodologies.

Next, it would be helpful to illustrate the proportion of Singaporean enterprises that disclose information on sustainable development across different types of reporting (Figure 11).

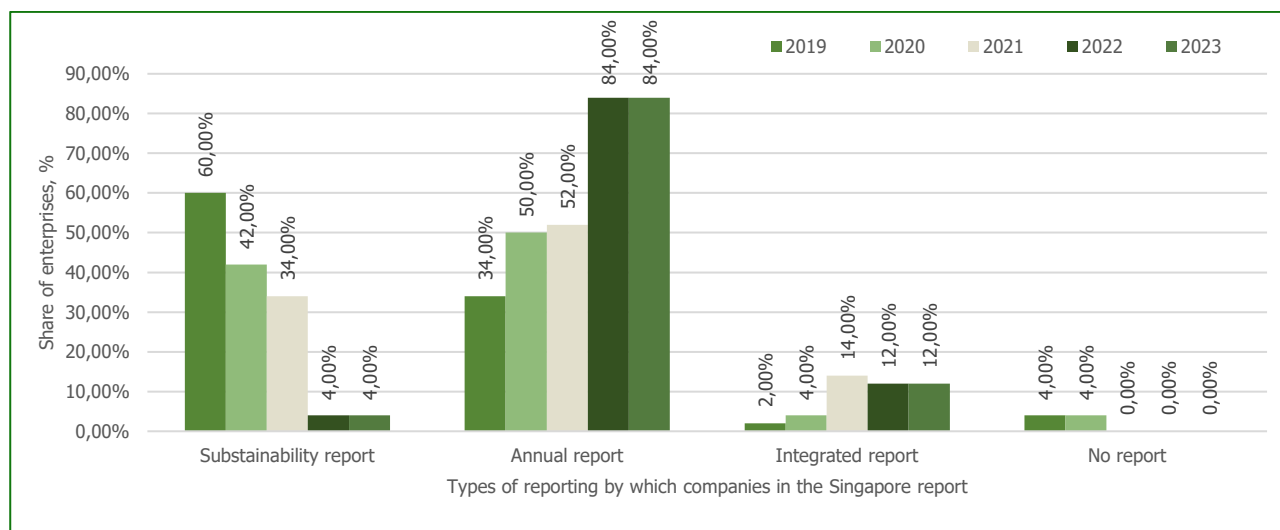


Figure 11. Percentage share of Singapore companies disclosing sustainability information by type of reporting. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

Figure 11 shows that there were significant structural changes in the way Singaporean companies disclosed sustainability information between 2019 and 2023. While 60.00% of Singaporean companies published sustainability reports in 2019, this figure dropped to just 4.00% in 2023. This sharp 56.00% decrease indicates a shift in either reporting formats — such as annual or integrated reporting — or regulatory policy and corporate practice.

Conversely, the proportion of annual reports has steadily increased from 34.00% in 2019 to 84.00% in 2022–23. This suggests a trend towards unifying corporate reporting within a single document that focuses on financial and operational indicators. Growth amounted to 50 percentage points over five years.

The proportion of companies using integrated reporting, which combines financial and non-financial information, increased from 2.00% in 2019 to 12.00% in 2023. This indicates a gradual transition towards more modern reporting methods that align with international standards, particularly the <IR> Framework.

Another positive development is that the proportion of non-reporting companies has completely disappeared. While there were 4.00% in 2019–2020, since 2021, no company has remained outside the reporting field. This suggests that corporate reporting in Singapore is becoming more mandatory.

Having studied the proportion of Singaporean companies disclosing information on sustainable development by type of reporting, it is advisable to consider the proportion of such companies that audit their sustainability reports (Table 6).

Table 6. Sustainability reporting for Singapore companies. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

№	Indicator name	Years				
		2019	2020	2021	2022	2023
1	Assurance on sustainability reporting, %.	54.00	50.00	57.00	59.00	65.00
2	Limited assurance on sustainability reporting, %.	92.00	75.00	83.00	76.00	87.00
3	Time to provide assurance on sustainability reporting, days	-	33	34	51	23

As shown in Table 6, the proportion of companies receiving assurance on sustainability reporting increased from 54.00% in 2019 to 65.00% in 2023, representing a five-year increase of 11.00%. This indicates the growing importance of sustainability audits among Singaporean companies, potentially due to regulatory changes and increased transparency and responsibility requirements regarding sustainable development.

Meanwhile, the proportion of companies receiving limited assurance remained high in 2019 (92%), but decreased to 87% in 2023. This suggests that companies are conducting deeper, more comprehensive audits, confirming the increased confidence in the results of sustainability reporting audits.

Meanwhile, the average time taken to provide assurance fell from 33 days in 2020 to 23 days in 2023 — a reduction of 10 days over five years. This suggests that audit processes have become more efficient and that auditors can respond more quickly to sustainability requirements. This confirms that audit firms are improving their auditing report methods and looking for ways to optimise resources and time.

Overall, companies in Singapore are demonstrating positive trends in their sustainability audit practices. However, it is still important to focus on improving the quality and detail of sustainability reporting assurance, for example, by optimising review processes and expanding audit approaches. These changes may also be in response to growing demands from regulators and consumers for transparency and accountability on sustainability issues, which are becoming prerequisites for successful business in today's environment.

Next, the standards used by Singaporean audit firms to audit reports, including sustainability reports, should be presented to confirm their accuracy and reliability (Figure 12).

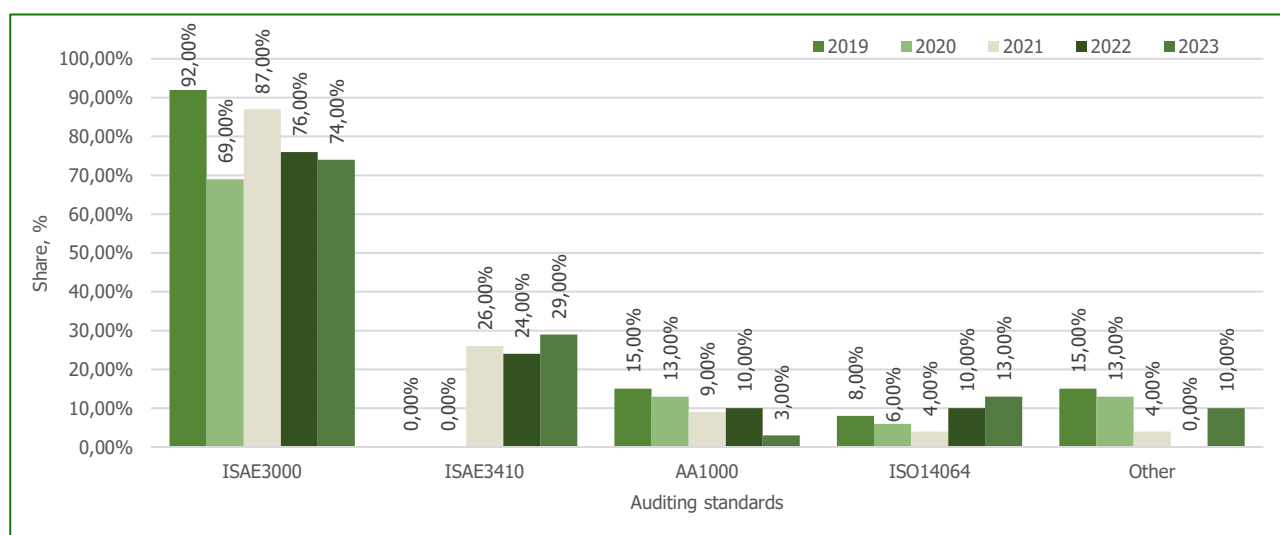


Figure 12. Sustainability Reporting Audit Standards Used by Singaporean Audit Firms. (Source: constructed by the authors based on *(The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025)*)

Figure 12 shows that Singapore has seen significant changes in the application of international and industry-specific sustainability auditing standards over the past five years (2019–2023). These changes reflect evolving priorities, responses to environmental challenges, and changing stakeholder expectations.

For example, in 2019, 92.00% of audit firms used the ISAE 3000 standard “Assurance Engagements Other Than Audits or Reviews of Historical Financial Information” (International Auditing and Assurance Standards Board, 2021), but by 2023 this figure had decreased to 74.00%. This may indicate that audit firms are orienting themselves towards specialised standards that are more relevant to sustainable development (e.g., ISAE 3410, ‘Assurance Engagements on Greenhouse Gas Reports’ (International Auditing and Assurance Standards Board, 2021)), or that there is a reduced need for a general assurance model that is not related to financial information.

The most striking trend concerns the application of ISAE 3410, “Assurance Engagements on Greenhouse Gas Reports” (International Auditing and Assurance Standards Board, 2021), which is a standard for auditing greenhouse gas reports. While it was not used by any firm in 2019 (0.00%), this figure increased to 29.00% in 2023. This indicates a strengthening of the climate agenda in the corporate sector, confirming that Singaporean auditors are adapting to the ESG requirements of international investors and regulators.

Use of the AA1000 standard (AA1000 AccountAbility Principles Standard, 2018), which focuses on stakeholder and responsibility principles, decreased from 15.00% in 2019 to 3.00% in 2023. This may indicate that audit firms prefer formalised international standards with greater legitimacy for reporting in accordance with regulatory requirements.

The ISO 14064 Greenhouse Gases standard (ISO 14064 «Greenhouse gases», 2018), which focuses on accounting for and verifying greenhouse gases, also demonstrated positive growth, increasing from 8.00% in 2019 to 13.00% in 2023. This confirms the technical specialisation of audits in the area of climate risks, particularly the carbon footprint of companies.

The proportion of audits using other standards (national or internal methodologies) fell from 15.00% to 10.00%. This indicates a tendency to unify auditing methods for sustainability reporting, focusing on internationally recognised standards, particularly those included in the International Sustainability Standards Board (ISSB) and IFAC lists.

Thus, Singapore is gradually moving towards specialised, technically sound auditing standards, indicating the professionalisation of approaches to auditing sustainability reports.

Next, it would be helpful to illustrate the proportion of South Korean enterprises that disclose information on sustainable development across different types of reporting (Figure 13).

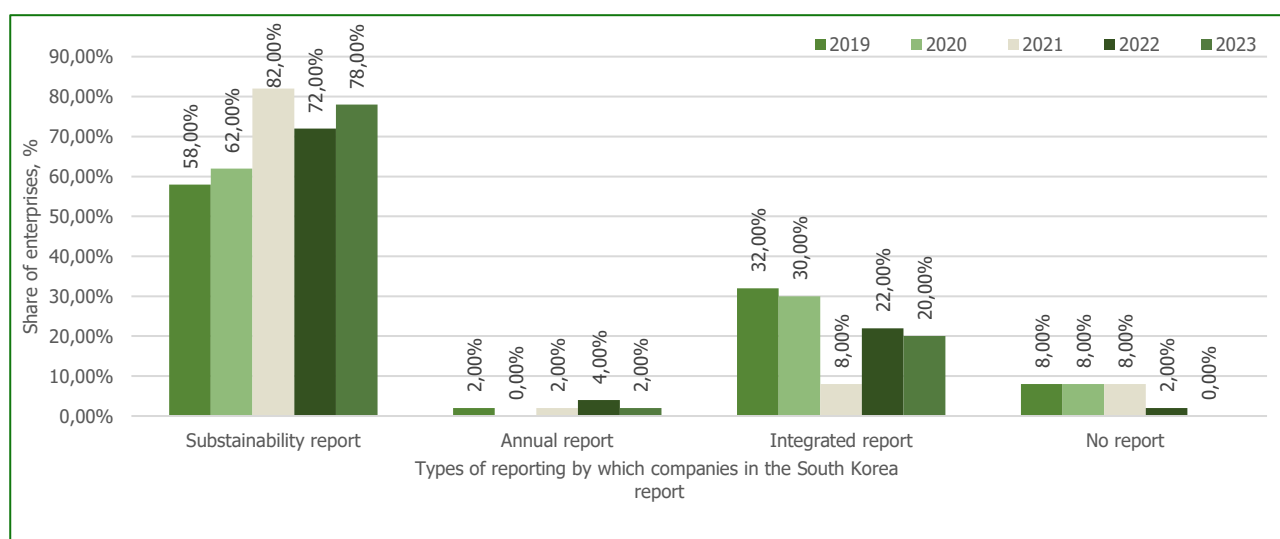


Figure 13. Percentage share of South Korean companies disclosing information on sustainable development by type of reporting.

(Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

Between 2019 and 2023 (Figure 13), South Korea experienced positive trends in enterprise transparency regarding sustainable development activities. The proportion of companies reporting on sustainable development increased from 58.00% in 2019 to 78.00% in 2023, indicating a growing emphasis on non-financial reporting and business accountability to stakeholders.

The increase was 20.00 percentage points, rising from 58.00% in 2019 to 78.00% in 2023. These dynamics indicate the systematic implementation of ESG practices, as well as businesses' response to requirements in domestic and foreign markets.

During the study period, the proportion of companies submitting only annual reports remained virtually unchanged at 2.00%, suggesting a gradual decline in the relevance of financial reporting alone, without considering non-financial indicators.

In 2019, 32.00% of enterprises submitted reports, but this figure fell to 20.00% in 2023, representing a decrease of 12.00 percentage points. This may be due to enterprises shifting their focus to separate non-financial reporting, or it may be the result of reports being unified in the sustainability format without the integration of financial indicators.

While 8.00% of companies did not submit reports at all in 2019, none remained by 2023. This suggests that almost 100% coverage of non-financial information disclosure has been achieved, representing significant progress in the context of global sustainable development goals.

South Korea's consistent integration of non-financial reporting into corporate practices indicates the maturity of its ESG environment.

There is a preference for separate sustainability reporting over integrated formats, possibly due to regulatory requirements or methodological availability.

The complete absence of non-reporting companies in 2023 indicates the high level of transparency and responsibility of businesses in South Korea.

Having studied the proportion of South Korean enterprises disclosing information on sustainable development by reporting type, it is advisable to consider the proportion of enterprises that audit sustainable development reporting (Table 7).

Table 7. South Korean companies that undergo sustainability reporting audits. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

№	Indicator name	Years				
		2019	2020	2021	2022	2023
1	Assurance on sustainability reporting, %.	5	12	8	5	6
2	Limited assurance on sustainability reporting, %.	21	20	33	53	48
3	Time to provide assurance on sustainability reporting, days	-	97	87	89	87

The share of companies receiving assurance on sustainability reporting increased slightly from 5.00% in 2019 to 6.00% in 2023. The increase in enterprises receiving assurance in 2020 (up to 12.00%) was a one-time peak, after which the figure stabilised at 5.00–6.00%. This may indicate a lack of activity in this area, likely due to the absence of mandatory requirements or support from the state or regulatory authorities.

Conversely, there has been a significant increase in the proportion of enterprises receiving limited assurance, rising from 21.00% in 2019 to 48.00% in 2023. Since 2021, this figure has grown by 10–15% annually. This increase may indicate an increase in reporting requirements, as well as improved audit practices in South Korea.

The time taken to provide assurance ranges from 87 to 97 days, with little change in dynamics over the past five years. These small fluctuations may indicate stability in the inspection and audit processes, as well as audit firms' efficiency in providing results within a shorter timeframe.

Overall, the trend indicates an increase in limited assurance in South Korea, particularly in recent years, suggesting a greater focus on improving the quality of sustainability reporting.

Next, the standards used by Singaporean audit firms to confirm the accuracy and reliability of auditing reports, including sustainability reports, should be presented (Figure 14).

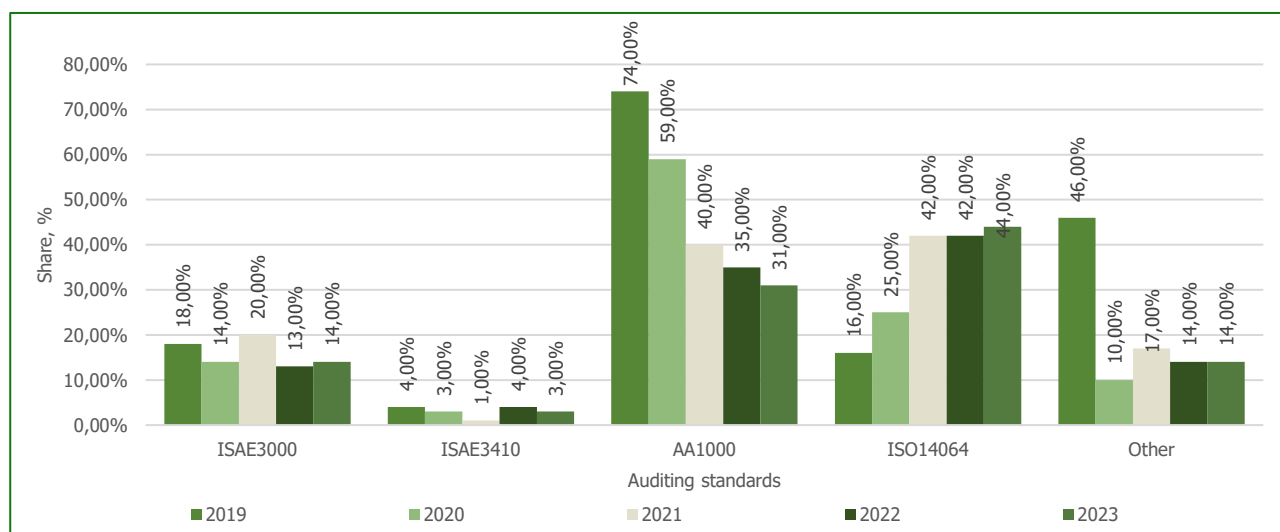


Figure 14. Sustainability Reporting Audit Standards Used by South Korean Audit Firms. (Source: constructed by the authors based on (The state of play: sustainability disclosure & assurance 2019-2022, 2024; The state of play: sustainability disclosure & assurance 2019-2023, 2025))

When analysing the sustainability reporting audit standards used by South Korean audit firms (Figure 14), it should be noted that the proportion of ISAE 3000 Assurance Engagements Other Than Audits or Reviews of Historical Financial Information (International Auditing and Assurance Standards Board, 2021) applications decreased by 4.00% between

2019 and 2023, falling from 18.00% to 14.00%. This decrease in usage may be the result of a fall in demand for the audit of non-financial statements. This may also reflect the development of alternative approaches to providing assurance on sustainability, such as standards for environmental indicators or greenhouse gases. At the same time, the proportion of firms applying ISAE 3410 (Assurance Engagements on Greenhouse Gas Reports, International Auditing and Assurance Standards Board, 2021) decreased by 1.00% between 2019 and 2023, falling from 4.00% to 3.00%. This slight decrease may indicate a decline in the relevance of this standard among South Korean audit firms, potentially due to the availability of alternative standards or approaches to greenhouse gas reporting. Meanwhile, the adoption of the AA1000 standard (AA1000 AccountAbility Principles Standard, 2018) by South Korean audit firms fell from 74.00% in 2019 to 31.00% in 2023. This significant decrease indicates a loss of interest in the standard among audit firms. A loss of interest in standards focused on the social responsibility of businesses (such as the AA1000) may reflect a change in audit practice priorities, with a greater emphasis placed on environmental aspects and emission reduction. Conversely, the application of ISO 14064 Greenhouse gases (2018) increased from 16.00% in 2019 to 44.00% in 2023. This significant growth reflects increased attention to the environmental aspects of sustainable development, particularly reducing greenhouse gas emissions. The increase in the use of ISO 14064 may be due to global initiatives to combat climate change and increasing reporting requirements in this area. The share of other standards used for auditing sustainability reporting decreased from 46.00% in 2019 to 14.00% in 2023, indicating a decline of 32.00%. A significant decrease in the use of other standards could suggest a shift towards major international standards, such as ISO 14064 (Greenhouse gases, 2018) and ISAE (International Auditing and Assurance Standards Board, 2021). This could also indicate a reduction in the variety of approaches to auditing sustainability reporting.

DISCUSSION

The results of the study confirm the multifactorial nature of the determinants of sustainability reporting audits in Asian countries. They enable us to systematise the impact of regulatory, institutional, corporate, and market factors on the level and form of audit support for non-financial reporting.

Firstly, in line with the findings of Ardiana et al. (2025), it was found that regulatory initiatives, particularly the integration of sustainable finance requirements in Indonesia, are a powerful impetus for increasing the transparency of non-financial information. This, in turn, increases the demand for audits. Indonesia's experience demonstrates that the mandatory implementation of sustainability reporting, without appropriate external control, risks remaining a mere formality.

A comprehensive understanding of the determinants of sustainability reporting audits in Asian countries requires consideration of not only external regulatory or institutional factors, but also internal factors related to the organisation of companies' accounting systems. In this context, the provisions set out by Bezverhyi (2013) remain relevant since the classification of accounts and accounting registers directly affects the quality, structure and analytical value of the information forming the basis of sustainability reporting and its audit.

Secondly, corporate governance is a significant internal factor influencing audit quality. This is consistent with the studies of Meutia, Yaacob and Kartasari (Meutia et al., 2023) and Kateb and Youssef (Kateb and Youssef, 2025), which show that better reporting and its audit are contributed to by the presence of specialised CSR committees, a high level of board independence and professional competence. In Asia, these factors are particularly important due to the dominance of family and state capital.

Thirdly, market motivation is an increasingly strong factor. A study by Buerthey, S., Ramsawak, R., and Nguyen, B. H. (Buerthey et al., 2025) indicates that Vietnamese investors positively react to companies that receive awards for quality sustainability reporting. This suggests that external auditing can be seen as a signal of trust to the market, thereby strengthening enterprises' intangible assets.

However, comparisons with other regions (e.g., Bezverkhyy's 2024 study on the Americas) reveal that Asia still has low standardisation of audit procedures for sustainability reporting. This creates barriers to comparability and trust. Given this, harmonisation with European standards (ESRS, ISAE 3000) is becoming increasingly important (Bezverkhyy, 2024; Makarenko et al., 2020).

Considerable attention should be paid to the specifics of sustainability reporting in Asian countries. For instance, a study by Gotoh (2025) in Japan reveals that decarbonisation has emerged as a key audit topic, resulting in an increased reliance on ISAE 3410 (Assurance Engagements on Greenhouse Gas Reports, International Auditing and Assurance Standards Board, 2021). This indicates a shift in audit focus from general coverage to specific environmental goals.

Equally important is the interaction between external audits and internal management practices. As Fernández Chulián, M., García-Torre, N., Larrinaga, C. and Bebbington, J. (2025) note, in Japan, sustainability reporting is viewed as a means of demonstrating external accountability and as a mechanism for organisational stability that enhances the integration of audits into strategic management.

However, there are also challenges. The team of authors Cepêda, Monteiro and Aibar-Guzmán (2025) warn of the risks of “decoupling” — the gap between formal reporting and real actions — which complicates the auditor’s role as guarantor of reliability. This is particularly pertinent in countries with underdeveloped institutional systems.

To provide a balanced perspective and stimulate further scholarly inquiry, it is important to acknowledge the limitations of this study.

Firstly, the geographical scope of the study is limited to a selection of Asian countries. While these countries are diverse, they do not represent the full spectrum of sustainability reporting audit practices across the entire continent. Countries such as Malaysia, Thailand and the Philippines were excluded due to a lack of publicly available data, which may limit the generalisability of the findings.

Secondly, the analysis is based primarily on secondary sources and publicly available reports, which may not fully capture internal audit processes, informal assurance mechanisms or the true motivations of enterprises undertaking sustainability audits. The absence of fieldwork or interviews with practitioners means that some contextual or behavioural factors may remain unexplored.

Thirdly, while the time frame (2019–2023) is relevant, it captures a relatively short period of observation. Some structural shifts in audit practice, such as those related to climate reporting standards or AI-driven audit tools, require a longer-term perspective to assess their implications fully.

Fourthly, while the study explores institutional, regulatory and organisational determinants, it does not provide a quantitative econometric analysis to measure the strength of causal relationships. This restricts the ability to generalise findings beyond qualitative trends.

CONCLUSIONS

An analysis of non-financial and sustainability reporting audit practices at enterprises in Asian countries, particularly Australia, China, India, Indonesia, Japan, Singapore and South Korea, from 2019 to 2023, revealed key trends and issues in this area.

It has been established that the evolution of sustainability reporting types reflects the shift towards more consolidated formats, such as annual or integrated reporting, from separate non-financial reporting. This transformation is most evident in Australia, India, Japan and Singapore. Conversely, some countries (e.g., South Korea) continue to favour separate sustainability reports.

The level of audit coverage of non-financial reporting has been found to remain relatively high in most Asian countries, particularly Australia, Japan, and Singapore. The main form of audit is the provision of limited assurance, combining the reliability of information with economical procedures.

A reduction in audit duration has been observed in most Asian countries, indicating an increase in audit process efficiency and the integration of audit functions into enterprises’ internal management systems.

The transformation of audit standards shows a decline in the use of the general standard ISAE 3000 Assurance Engagements Other Than Audits or Reviews of Historical Financial Information, in favour of more specific standards such as ISAE 3410 Assurance Engagements Involving Greenhouse Gas Reports (International Auditing and Assurance Standards Board, 2021) and ISO 14064 Greenhouse Gases (ISO, 2018). This suggests a strengthening of the climate agenda in reporting and auditing, while the importance of social and ethical standards, such as the AA1000 AccountAbility Principles Standard (AA1000, 2018), is gradually declining.

Australia demonstrates the highest maturity and stability of sustainability audit practices in Asia. Conversely, China and Indonesia are experiencing a decline in audit intensity, potentially due to changes in the regulatory environment. Meanwhile, India, Singapore and South Korea are actively adapting their approaches to international requirements with a focus on environmental aspects. Japan provides an example of the deep integration of non-financial information into the overall management system.

In order to improve the quality, consistency and effectiveness of non-financial reporting audits in Asia, the following concrete steps are recommended:

1. Promote the adoption of specialised assurance standards (e.g. ISAE 3410 and ISO 14064) at a national level to ensure methodological consistency in audits of environmental indicators.
2. Develop clear, binding national frameworks mandating limited or reasonable assurance for sustainability reports in key sectors (e.g., energy, agriculture and manufacturing), drawing on successful experiences in countries such as Australia and Singapore.
3. Encourage enterprises to establish or empower audit committees responsible for overseeing non-financial reporting. This includes setting qualifications and independence criteria for members, thereby improving internal control and auditor interaction.
4. Launch regional programmes to train auditors in sustainability-specific frameworks, including climate-related disclosures, social impact metrics and ESG risk assessment.
5. Introduce market-based incentives, such as tax benefits and advantages in ESG ratings, for companies that undergo independent sustainability audits. Recognition schemes can increase voluntary compliance.
6. Promote the use of digital tools for audit analytics, data integration and document management, particularly in jurisdictions where audits are delayed or inefficient.
7. Establish an international benchmarking system for sustainability audit practices to identify gaps, track progress and share best practices between Asian countries.

These measures will enhance the credibility, comparability and usefulness of sustainability reports for decision-making purposes, thereby fostering stakeholder trust in the region's commitment to sustainable development.

Global experience shows that sustainability reporting audits are becoming increasingly important as a tool for increasing transparency, stakeholder trust and strategic risk management. The application of specialised standards, adaptation to climate challenges, and improvement of verification procedures are becoming key factors in successfully implementing sustainable development policies within Asian enterprises.

We believe that a promising area for further research is studying the experience of Asian countries in forming and auditing sustainability reports.

ADDITIONAL INFORMATION

AUTHOR CONTRIBUTIONS

All authors have contributed equally.

FUNDING

The Authors received no funding for this research.

CONFLICT OF INTEREST

The Authors declare that there is no conflict of interest.

REFERENCES

1. Adamo, S., De Matteis, C., Fasiello, R., & Imperiale, F. (2025). A Literature Analysis of Sustainability Reporting Quality. *Corporate Social Responsibility and Environmental Management*, 32(3), 4194-4215. <https://doi.org/10.1002/csr.3177>
2. Adejumo, I. A., Olofade, B. M., Sanni, M. R., & Adeyanju, D. L. (2025). Ownership Structure and Sustainability Reporting Disclosures of Listed Multinational Companies in Nigeria. *International Journal of Economics and Financial Issues*, 15(2), 301–308. <https://doi.org/10.32479/ijefi.17824>
3. Ardiana, P. A., Diantini, N. N. A., Sudirman, I. M. S. N., Sudana, I. P. G., Putri, N. P. A. W., & Yanthi, K. D. L. (2025). Institutional work in making sustainability reporting mandatory in Indonesia through sustainable finance. *Journal of Accounting in Emerging Economies*, 15(3), 645-669. <https://doi.org/10.1108/JAEE-02-2024-0088>

4. Bezverhyi, K.V. (2013). Classification of enterprise accounts and records. *Actual Problems of Economics*, 14(9), 206–212.
5. Bezverkhyyi, K.V. (2024). Audit of sustainability reporting in countries of South and North America. *International Scientific Journal «Internauka». Series: «Economic Sciences»*, 4(84), 97–109. <https://doi.org/10.25313/2520-2294-2024-4-9853>
6. Bezverkhyyi, K. (2024). Implementation of european sustainability reporting standards. *Foreign trade: economics, finance, law*, 13(2), 134–150. [https://doi.org/10.31617/3.2024\(133\)08](https://doi.org/10.31617/3.2024(133)08)
7. Brogi, M., & Lagasio, V. (2025). Do Corporate Governance Frameworks Affect Sustainability Reporting? *Corporate Social Responsibility and Environmental Management*, 32(3), 3928–3943. <https://doi.org/10.1002/csr.3159>
8. Buerthey, S., Ramsawak, R., & Nguyen, B.H. (2025). Sustainability Reporting Awards and Market Reaction: The Sustainability Awareness of Investors on the Vietnam Stock Market. *Corporate Social Responsibility and Environmental Management*, 32(3), 3423–3437. <https://doi.org/10.1002/csr.3135>
9. Cepêda, C., Monteiro, A. P., & Aibar-Guzmán, B. (2025). Decoupling in Sustainability Reporting: A Systematic Literature Review. *Corporate Social Responsibility and Environmental Management*, 32(3), 2988–3007. <https://doi.org/10.1002/csr.3114>
10. Cicchiello, A. F., Kazemikhasragh, A., Perdichizzi, S., & Rey, A. (2025). The impact of corruption on companies' engagement in sustainability reporting practices: an empirical examination. *International Journal of Emerging Markets*, 20(2), 722–744. <https://doi.org/10.1108/IJOEM-03-2022-0418>
11. Elaigwu, M., Che-Ahmad, A., & Abdulmalik, S.O. (2023). Auditor choice, audit partner busyness, and sustainability reporting quality. *Afro-Asian Journal of Finance and Accounting*, 13(6), 735–758. <https://doi.org/10.1504/AJFA.2023.134699>
12. Fernández Chulián, M., García-Torea, N., Larrinaga, C., & Bebbington, J. (2025). Boundary objects: sustainability reporting and the production of organizational stability. *Accounting, Auditing & Accountability Journal*, 38(2), 509–536. <https://doi.org/10.1108/AAAJ-08-2021-5391>
13. Gallardo-Vázquez, D., de Sousa Paiva, I.C., & Nuevo-Gallardo, C. (2025). Exploring the role of sustainability reporting strategies in promoting sustainable development in social economy entities: The circular economy as a mediator. *Sustainable Development*, 33(2), 2902–2925. <https://doi.org/10.1002/sd.3275>
14. Gian, M., Obydenkova, S. V., & van der Meer, Y. (2025). Key aspects in the social dimension of sustainability for assessment and reporting. *Sustainable Production and Consumption*, 57, 183–197. <https://doi.org/10.1016/j.spc.2025.05.013>
15. Glonti, V., Polinkevych, O., Khovrak, I., Levchenko, V., Trynchuk, V., & Beridze, I. (2024). Transformation of the business models in the context of achieving sustainable development. *Quality-Access to Success*, 25(202), 40–52. <https://doi.org/10.47750/QAS/25.202.05>
16. Gotoh, R. (2025). Quantitative text analysis of sustainability reporting: Decarbonization strategies and company characteristics in Japan. *Energy Reports*, 13, 2722–2739. <https://doi.org/10.1016/j.egyr.2025.02.016>
17. Gupta, M. (2025). Is sustainability reporting a way forward? Evidence from banking industry. *Meditari Accountancy Research*, 33(1), 53–85. <https://doi.org/10.1108/MEDAR-03-2024-2408>
18. Hassanein, A., & Elmaghrabi, M. (2025). How does market competition affect the reporting of sustainability practices? Insights from the UK and Germany. *International Journal of Productivity and Performance Management*, 74(4), 1452–1474. <https://doi.org/10.1108/IJPPM-07-2023-0369>
19. Kateb, I., & Youssef, M. (2025). Sustainability reporting quality: understanding board characteristics, CSR committees and moderation dynamics in Saudi Arabia. *Social Responsibility Journal*, 21(6), 1166–1192. <https://doi.org/10.1108/SRJ-03-2024-0160>
20. Kuzey, C., Elbardan, H., Uyar, A., & Karaman, A. S. (2023). Do shareholders appreciate the audit committee and auditor moderation? Evidence from sustainability reporting. *International Journal of Accounting and Information Management*, 31(5), 808–837. <https://doi.org/10.1108/IJAIM-02-2023-0033>
21. Ligorio, L., Caputo, F., & Venturelli, A. (2025). Sustainability reporting in public–private hybrid organisations: a structured literature review. *Journal of Applied Accounting Research*, 26(2), 362–389. <https://doi.org/10.1108/JAAR-06-2023-0178>
22. Lubenchenko, O. E. (2025). Sustainable Development Reporting: Challenges or Opportunities for Auditors? *Statistics of Ukraine*, 1, 14–26. [https://doi.org/10.31767/su.1\(108\)2025.01.XX](https://doi.org/10.31767/su.1(108)2025.01.XX)
23. Makarenko, I., Kravchenko, O., Ovcharova, N., Zemliak, N., Makarenko, S. (2020). Standardization of companies' sustainability reporting audit. *Agricultural and Resource Economics*, 8(2), 78–90. <https://doi.org/10.51599/are.2020.06.02.05>
24. Metelytsia, V., Gottlieb, U., Brosig, S., & Gagalyuk, T. (2025). Preferences of Ukrainian Agribusinesses Toward Sustainability Reporting for Financing of Green Recovery. *Problems of Agricultural Economics*, 38(1), 1–28. <https://doi.org/10.30858/zer/199951>
25. Meutia I., Yaacob, Z., & Kartasari, S. F. (2023). Sustainability reporting and audit committee attributes: evidence from banks in Indonesia. *Asian Academy of Management Journal*, 28(2), 309–332. <https://doi.org/10.21315/aamj2023.28.2.11>
26. Nasreen, T., Baker, R., & Rezanian, D. (2025). Sustainability reporting—a systematic review of various dimensions, theoretical and methodological underpinnings. *Journal of Financial Reporting and Accounting*, 23(3), 1057–1088. <https://doi.org/10.1108/JFRA-01-2022-0029>

27. Oll, J., Spandel, T., Schiemann, F., & Akkermann, J. (2025). The concept of materiality in sustainability reporting: from essential contestation to research opportunities. *Sustainability Accounting, Management and Policy Journal*, 16(2), 321-350. <https://doi.org/10.1108/SAMPJ-03-2024-0296>
28. Otalor, J. I., & Modugu, K. P. (2025). Sustainability accounting and reporting in Nigeria: A systematic review of literature. *International Journal of technology management & sustainable development*, 24(1), 57-76. https://doi.org/10.1386/tmsd_00102_1
29. Padilla-Rivera, A., Hannouf, M., Assefa, G., & Gates, I. (2025). Enhancing environmental, social and governance, performance and reporting through integration of life cycle sustainability assessment framework. *Sustainable Development*, 33(2), 2975-2995. <https://doi.org/10.1002/sd.3265>
30. Paranita, E.S., Ramadian, A., Wijaya, E., Nursanti, T. D., & Judijanto, L. (2025). The Impact of ESG Factors on Investment Decisions: Exploring the Interplay between Sustainability Reporting, Corporate Governance, and Financial Performance. *Journal of Ecohumanism*, 4(1), 4522-4533. <https://doi.org/10.62754/joe.v4i1.6342>
31. Pasko, O., Zhang, L., Oriekhova, A., Hordiyenko, M., & Tkai, Y. (2023). Do financial auditors impact sustainability reporting? The effects of big four financial audits on the quality of CSR reports in China. *Intellectual Economics*, 17(2), 330-361. <https://doi.org/10.13165/IE-23-17-2-05>
32. Sarto, F., Saggese, S., Ricci, F., & Della Corte, G. (2025). Sustainability Reporting Assurance in Italian Listed Companies: Understanding the Role of CEO Characteristics. *Business Strategy and the Environment*, 34(4), 4622-4641. <https://doi.org/10.1002/bse.4211>
33. Sisaye, S., & Birnberg, J. G. (2025). The evolution of sustainability accounting and reporting in the United States: applications of the ecological anthropology and industrial ecology frameworks. *Journal of Business and Socio-economic Development*, 5(2), 104-121. <https://doi.org/10.1108/JBSED-03-2023-0020>
34. Stitou, O., & Benouakrim, H. (2025). Evaluating Sustainability Reporting in Morocco: A Focus on Publicly Traded Mining Companies. In *Cases on Sustainable Organizational Performance and Competitive Advantages*, 31-64. <https://doi.org/10.4018/979-8-3693-8719-1.ch002>
35. Qasem, A., Wan-Hussin, W.N., Al-Qadasi, A.A., Ghaleb, B.A.A., & Bamahros, H.M. (2023). Implications of sustainability reporting and institutional investors' ownership for external audit work: evidence from Saudi Arabia. *Journal of Financial Reporting and Accounting*. <https://doi.org/10.1108/JFRA-02-2023-0097>
36. Tumwebaze, Z., Bananuka, J., Kaawaase, T.K., Bonareri, C.T., & Mutesasira, F. (2022). Audit committee effectiveness, internal audit function and sustainability reporting practices. *Asian Journal of Accounting Research*, 7(2), 163-181. <https://doi.org/10.1108/AJAR-03-2021-0036>
37. Zúñiga-Pérez, F., Pincheira-Lucas, R., Aguilar-Cárcamo, J., & Silva-Briceño, J. (2020). Sustainability reports and their audit: The effect on Chilean market liquidity. *Estudios Gerenciales*, 36(154), 56-65. <https://doi.org/10.18046/j.estger.2020.154.3558>
38. The state of play: sustainability disclosure & assurance 2019-2022, Trends & Analysis (2024). <https://www.ifac.org/knowledge-gateway/contributing-global-economy/publications/state-play-sustainability-disclosure-assurance-2019-2022-trends-analysis>
39. The state of play: sustainability disclosure & assurance 2019-2023, Trends & Analysis (2025). <https://ifacweb.blob.core.windows.net/publicfiles/2025-05/IFAC-State-of-Play-Sustainability-2019-2023.pdf>
40. International Auditing and Assurance Standards Board (2021). Handbook of International Quality Control, Auditing, Review, Other Assurance, and Related Services Pronouncements. 2021 Edition Volume II, p.78-233 <https://www.iaasb.org/publications/login/66320>
41. AA1000 AccountAbility Principles Standard (2018). <https://www.accountability.org/standards/aa1000-accountability-principles/>
42. ISO 14064 «Greenhouse gases» (2018). <https://www.iso.org/standard/66453.html>

Безверхий К., Парасій-Вергуненко І., Юрченко О., Григоревська О., Несенюк Є., Негоденко В.

ДЕТЕРМІНАНТИ АУДИТУ ЗВІТНОСТІ ПРО СТАЛИЙ РОЗВИТОК: ЕМПІРИЧНИЙ АНАЛІЗ ПРАКТИК У КРАЇНАХ АЗІЇ

У сучасних умовах глобалізації економічних процесів і зростання впливу екологічних, соціальних і управлінських (ESG) чинників на ухвалення управлінських рішень значення звітності зі сталого розвитку стрімко зростає. Особливу увагу при цьому привертає питання аудиту, оскільки саме зовнішнє підтвердження достовірності нефінансових показників формує довіру з боку інвесторів, регуляторів та інших стейкхолдерів. Водночас у більшості країн Азії механізми аудиту звітності зі сталого розвитку лише формуються або перебувають на етапі інституціоналізації.

Метою дослідження є виявлення та систематизація ключових детермінант, що впливають на розвиток і впровадження аудиту звітності зі сталого розвитку в країнах Азії, а також емпіричне оцінювання практик аудиторського супроводу нефінансової звітності протягом 2019–2023 років з урахуванням регуляторних, інституційних, корпоративних і ринкових факторів.

Проведений аналіз практик нефінансового звітування та аудиту звітності зі сталого розвитку на підприємствах країн Азії, зокрема Австралії, Китаю, Індії, Індонезії, Японії, Сінгапуру та Південної Кореї, протягом 2019–2023 рр. дозволив виявити ключові тенденції та проблеми в цій царині.

Наукова новизна проведеного дослідження полягає в подальшому розвитку теоретичних засад аудиту звітності зі сталого розвитку в країнах Азії, що передбачає синтез аудиторських практик, зосереджених на азійському регіоні, враховує критерії (формат аудиту, застосовувані стандарти аудиту, регуляторні фактори та атрибути корпоративного управління). Це дає практичне розуміння того, як азійські країни узгоджуються зі світовими тенденціями аудиту звітності зі сталого розвитку, і може бути використане регуляторами, аудиторами та розробниками стандартів для гармонізації практик забезпечення якості й підвищення надійності аудиту звітності зі сталого розвитку.

Установлено, що динаміка видів звітності зі сталого розвитку відображає перехід від окремої нефінансової звітності до більш консолідованих форматів — річної або інтегрованої (Австралія, Індія, Японія та Сінгапур).

Світовий досвід свідчить про зростання значення аудиту звітності зі сталого розвитку як інструмента підвищення прозорості, довіри з боку стейкхолдерів і стратегічного управління ризиками. Застосування спеціалізованих стандартів, адаптація до кліматичних викликів і вдосконалення процедур перевірки стають ключовими факторами успішної реалізації політик сталого розвитку на підприємствах країн Азії.

Ключові слова: аудит, звітність, аудиторський консалтинг, міжнародний аудит, країни Азії, сталий розвиток, нефінансова звітність, інтегрована звітність, управлінська звітність, корпоративне управління, стандарти аудиту, корпоративна соціальна відповідальність

JEL Класифікація: M14, M40, M41, Q56