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THE ROLE OF STATE AUDIT IN THE DEVELOPMENT OF ENVIRONMENTAL ACCOUNTING: THE EXPERIENCE OF CHINA

State auditing and environmental accounting have shown a synergistic trend in recent years. There is growing interest in the role of State auditing, as an important component of public management, in enhancing the practice of environmental accounting in enterprises, which helps them to achieve sustainable development by measuring and disclosing environmental costs and performance. In this paper, China Railway Construction Corporation (CRCC) is selected as the subject of analysis to explores the impact of state audits on corporate environmental accounting practices. Within the framework of this research general scientific research methods have been employed such as analysis and synthesis, case study method in examining when considering the practical examples of China National Corporation, content analysis method of scientific publications, SWOT analysis to evaluate strengths (e.g., low-carbon transition, ESG investments), weaknesses (e.g., high data collection costs), opportunities (e.g., Balanced Scorecard (BSC), and threats (e.g., market volatility). The study finds that state audits world over have strengthened the binding force of enterprises in resource management and environmental responsibility fulfillment and significantly enhanced the standardization and transparency of corporate environmental accounting through policy recommendations, improved environmental information disclosure mechanisms, and strengthened supervision and feedback mechanisms. In addition, the audit recommendations have promoted sustained investment in the field of green building, and facilitated the achievement of certain results by enterprises in the field of sustainable development, identify issues and weaknesses in corporate environmental accounting; and provide standardized policy recommendations to strengthen disclosure requirements for corporate environmental performance, thereby enhancing transparency and public acceptance.

Keywords*: state audit, environmental accounting, environmental costs, construction industry of China, national resources, sustainable development.*
Кілт сөздер*: мемлекеттік аудит, экологиялық есеп, экологиялық шығындар, ҚХР құрылыс өнеркәсібі, ұлттық ресурстар, тұрақты даму.*
Ключевые слова: *государственный аудит, экологический учет, экологические затраты, строительная промышленность КНР, национальные ресурсы, устойчивое развитие***.**

JEL M420, M490, Q01, Q5, B56

Introduction. Globally, the problems of unsustainable resource utilization and environmental pollution pose a serious threat to ecosystems and economic development. To achieve sustainable management of resources, Governments and institutions have progressively strengthened the monitoring and management of natural resource utilization.

As a key governance tool, national audits provide a scientific basis for optimizing resource management by assessing the efficiency of resource use, the effectiveness of policy implementation and the implementation of environmental governance measures. In recent years, the scope of State auditing has been expanding, gradually expanding from the traditional assessment of economic efficiency to the areas of environmental protection and social responsibility, and its role in promoting corporate environmental responsibility has become increasingly prominent.

Meanwhile, environmental accounting has become an increasingly important tool in business management, helping companies to identify environmental risks and opportunities, assess environmental liabilities and incorporate them into their management decision-making frameworks by quantifying and

disclosing environment-related costs and performance. In the construction industry, a key area of natural resource depletion and environmental pollution, leading companies such as China Railway Construction Corporation (CRCC) are not only making a significant impact on resource utilization but also setting a benchmark for the industry through their green building and sustainability practices. However, there are still many issues worth studying on how enterprises in the construction industry can integrate environmental accounting into their daily management through the policy recommendations and monitoring mechanisms of the national audit.

Taking CRCC as a case study, this study focuses on the following key issues: how state auditing promotes corporate environmental accounting practices; and how state auditing enhances the transparency of environmental information disclosure. By examining these issues, this paper aims to reveal the synergistic effect between national resource auditing and environmental accounting, and to provide theoretical support for enterprises' environmental accounting practices.

The study employs a SWOT analysis to evaluate strengths (e.g., low-carbon transition, ESG investments), weaknesses (e.g., high data collection costs), opportunities (e.g., Balanced Scorecard (BSC), and threats (e.g., market volatility). The research method includes literature review and case analysis.

Literature review. The theoretical framework of environmental accounting is mainly derived from accounting, sustainable development theory and environmental economics, and its core lies in embedding environmental responsibility into corporate decision-making system through information disclosure and cost management.

With the deepening of environmental accounting research, scholars have expanded their research dimensions, building on the original foundation and emphasizing the importance of sustainability, externalities, and costing in its practice, especially corporate environmental disclosure choices. The value impact of climate change and carbon emissions, and the study of environmental management control systems. The importance of standardized guidelines and integration of environmental costs in financial decision-making, as well as the introduction of modern information technology to improve the efficiency and accuracy of accounting were also emphasized.

Environmental accounting plays an important role in today's social development, and in the study of Tang Guoping and Sun Hongfeng, environmental accounting can effectively help enterprises to manage and control environmental costs, as well as enhance corporate transparency and social responsibility by improving the level of information disclosure [1]. In addition, the application of environmental accounting in the public sector is equally important [2].

Kazakhstan researchers have actively explored the role of the role of environmental accounting and auditing in corporate sustainability. Taygashinova, Azretbergenova et al. analyzed the impact of ESG compliance on financial performance in Kazakhstani enterprises, emphasizing the significance of Environmental Management Accounting (EMA) in optimizing resource efficiency. Their findings suggest that companies implementing carbon accounting and digital reporting tools achieve better sustainability compliance and financial stability [3 - 5].

The table below summarizes key findings from Kazakhstani researchers and compares them with other international studies. (table 1).

In international research, environmental accounting research has achieved research results in the design and practice of industry norms, regulations and policies and accounting frameworks [9]. However, it is still in the initial stage in some countries, where there are problems such as non-uniformity of accounting standards and imperfections in related subsystems, and future research needs to further improve laws and regulations in order to promote the systematic application of environmental accounting in enterprise management.

State auditing, as an important part of public administration, has developed into a systematic and independent oversight mechanism.

Many studies have emphasized the importance of state audits in promoting government transparency and accountability and explored how audits can be used to enhance government governance [10]. Firstly, state audits help to reveal and correct problems in government operations, thereby improving the efficiency and effectiveness of government operations, especially in modeling, government regulatory complexity, and quality of governance, and provide a theoretical and practical basis for sustainable development of the public sector [11]. And it enhances public trust in government through increased transparency and accountability [12].

In recent years, state auditing and environmental accounting have shown a synergistic trend in recent years, expanding into the field of state environmental auditing. The theoretical framework and practical application of national environmental auditing have been gradually improved, and a comprehensive framework centered on financial auditing, compliance auditing and performance auditing has been formed, and has been widely applied in the fields of natural resource management, biodiversity conservation and pollution management [13].

Table – 1

Comparison of Kazakhstan and International Studies on Management Accounting and Sustainability

Author(s)	Country	Focus Area	Key Findings
Taygashinova (2022)	Kazakhstan	Current issues of theory and methodology of environmental accounting and audit in the Republic of Kazakhstan	BSC effectively measures corporate sustainability performance.
Azretbergenova et al.(2023)	Kazakhstan	ESG compliance and Environmental Accounting	EMA improves financial performance and sustainability Compliance in Kazakhstan enterprises.
Yerdavletova (2016)	Kazakhstan	Environmental Accounting and Controlling	The introduction of environmental accounting will allow nature users to strengthen environmental activities and implement information support for environmental control.
Alawattage Wickramasinghe (2019)	Uk	Strategic Cost Management &Sustainability	Management accounting supports sustainability through cost optimization and risk mitigation.
Drury (2017)	Global	Life Cycle Costing	LCC helps in evaluating long term environmental and financial impacts.
Vakhrushina (2023)	Russia	Performance Monitoring ESG Integration	ESG and management accounting integration enhance corporate competitiveness

** compiled by the authors: based on sources [3 - 8]*

To summarize, the synergy between national auditing and environmental accounting is mainly reflected in the following: national auditing promotes the disclosure of transparent environmental information by enterprises through the information disclosure mechanism, puts forward policy suggestions and guidance on the insufficiency of their environmental information disclosure, and provides a theoretical basis for the government to formulate scientific environmental protection policies. Finally, through the supervision and feedback mechanism, it can grasp the results of the practice of environmental accounting.

Most existing studies currently focus on a single dimension of national auditing or environmental accounting, and lack a systematic analysis of the mechanisms for combining the two. This paper combines the case of China Railway Construction Corporation (CRCC) to analyze how national resource auditing promotes the improvement and optimization of corporate environmental accounting through policy recommendations, disclosure requirements and supervisory feedback.

Main part. The concepts and roles of the core functions of **state auditing** are to promote transparency and sustainable development of resource management through monitoring, evaluation and feedback mechanisms:

-Monitoring functions are designed to oversee the efficiency of resource utilization and the effectiveness of environmental governance to ensure transparency and compliance in policy implementation;

-The assessment function provides a basis for policy optimization and management improvement by revealing resource wastage and environmental governance deficiencies;

-The feedback function further facilitates businesses and governments to optimize their environmental accounting practices by providing targeted suggestions for improvement.

This paper specifies the impact mechanism, including five parts: problem identification, policy recommendation, information disclosure, supervision and rectification, and social supervision.

Spot the problem: State audits reveal deficiencies in corporate environmental accounting through audits and provide directions for improvement.

Policy recommendations: National audits have indirectly contributed to the standardization of environmental accounting through policy recommendations.

Information disclosure: Enhance the information disclosure mechanism in accordance with the policy recommendations, requiring companies to disclose more environmental performance data and increasing the transparency of environmental accounting

Monitoring corrective actions**:** State audits ensure that audit recommendations are actually implemented by following up on corrective actions.

Social monitoring Pressure: Under social and investor pressure, companies comply with audit recommendations and proactively disclose better environmental accounting data, raising public and stakeholder awareness of corporate environmental responsibility.

The study showed that environmental accounting plays an important role in promoting the Sustainable Development Goals, but its application is influenced by many factors such as the global economic environment, policy changes, technological developments, etc. A review of the above studies allows us to SWOT analysis and combined with the international economic situation to discuss the prospects and problems of environmental accounting in sustainable development (Table 2).

This paper examines the case of China Railway Construction Corporation (CRCC) to illustrate how state audits affect environmental accounting practices.China Railway Construction Corporation (CRCC) is one of the leading companies in the global construction industry, and its environmental accounting practices represent the direction of efforts to fulfill environmental responsibility in high resource-consuming industries. In recent years, CRCC's environmental disclosure level has been gradually improved with the increasing emphasis on environmental governance by national resource audits. Taking 2018-2023 as the time span, this paper explores how state audits have contributed to the improvement of CRCC's environmental accounting practices, especially in green buildings, carbon emissions, and energy-saving investments.

Table – 2

SWOT analysis of environmental accounting

S (Strengths)	W (Weaknesses)
- Enhancing enterprises' sustainable competitiveness. Under the global sustainable development agenda, the core strength of environmental accounting lies in providing efficient decision support to help enterprises balance economic growth, environmental responsibility, and social contribution. - Promote low-carbon transition: Carbon accounting and Environmental management accounting help optimize energy consumption and improve carbon emission management. - Reduce long-term operating costs: Life cycle cost analysis helps companies reduce energy, raw material, and waste costs over the long term. - Drive ESG investment: As investors increasingly focus on environmental, social and governance (ESG) metrics, management accounting can provide reliable data support to enhance the investment attractiveness of enterprises.	- High cost of data collection and analysis: Methods such as carbon accounting and LCC require accurate data modeling, and enterprises need to invest a lot of money to build data systems. CRCC, for example, has invested more than $50m in a global carbon accounting system, with high initial costs despite significant long-term benefits. - Global standard issues: Different countries have different standards in carbon accounting, ESG disclosure, etc., which makes it difficult for multinational companies to form a unified reporting framework. For example, the European Union's Sustainable Financial Disclosure Regulation (SFDR) requires investment institutions to disclose ESG risks, while the SEC in the United States only recommends the disclosure of some climate-related financial information, creating uncertainty about compliance.
O (Opportunities)	**T (Threats)**
- Balanced Scorecard (BSC): Multi-dimensional assessment of sustainable development of enterprises.	- Policy uncertainties and market fluctuations Although sustainable development has become an international consensus, policy uncertainties and market fluctuations

- Financial dimension: green investment rate of return, cost saving benefits (CRCC case: economic benefits of carbon trading policy). - Customer dimension: consumer demand for sustainable products (data support for IKEA's circular economy model). - Internal process dimension: Optimizing supply chain and reducing energy consumption. -Learning and growth dimensions: employee training, sustainable culture building.	may still affect the promotion of management accounting. - Risks caused by policy changes: Some countries may adjust carbon tax or carbon trading policies due to economic pressure, which will affect enterprises' return on investment in carbon accounting. - Unstable international trade environment: trade frictions may affect the global harmonization of ESG and sustainable accounting policies and increase the compliance costs of enterprises.

**compiled by the authors*

This study collects the core indicators of CRCC's environmental accounting in 2018-2023, including the share of green buildings, carbon emissions, investment in energy-saving projects, green bond financing, etc., as detailed in Table 3 and Figure 1 below.

Significant increase in the proportion of green buildings: from 35% in 2018 to 65% in 2023, demonstrating continued corporate investment in green buildings and reflecting the synergy between policy-driven and market demand.

Carbon emissions are decreasing year by year: since the first disclosure of carbon emissions in 2020, total carbon emissions have decreased from 5 million tons to 3.7 million tons in 2023, with a cumulative decrease of 26%. This achievement is due to the application of energy-saving technologies and the optimization of the energy mix.

Table – 3

Trends in environmental accounting indicator data

particular year	Percentage of green buildings (%)	Carbon emissions (tons)	Investment in energy efficiency projects ($ billion)	Green bond financing (billions of dollars)
2018	35	undisclosed	undisclosed	Undisclosed
2019	40	undisclosed	undisclosed	Undisclosed
2020	45	500	60	20
2021	50	450	70	30
2022	60	400	80	40
2023	65	370	90	50

**compiled by the authors: based on CRCC's annual report, environmental responsibility report [14].*

Synchronized growth of energy-saving project investment and green bond financing: energy-saving project investment grows from 6 billion yuan in 2020 to 9 billion yuan in 2023; green bond financing grows from 2 billion yuan in 2020 to 5 billion yuan, providing important financial support for low-carbon transformation of enterprises.

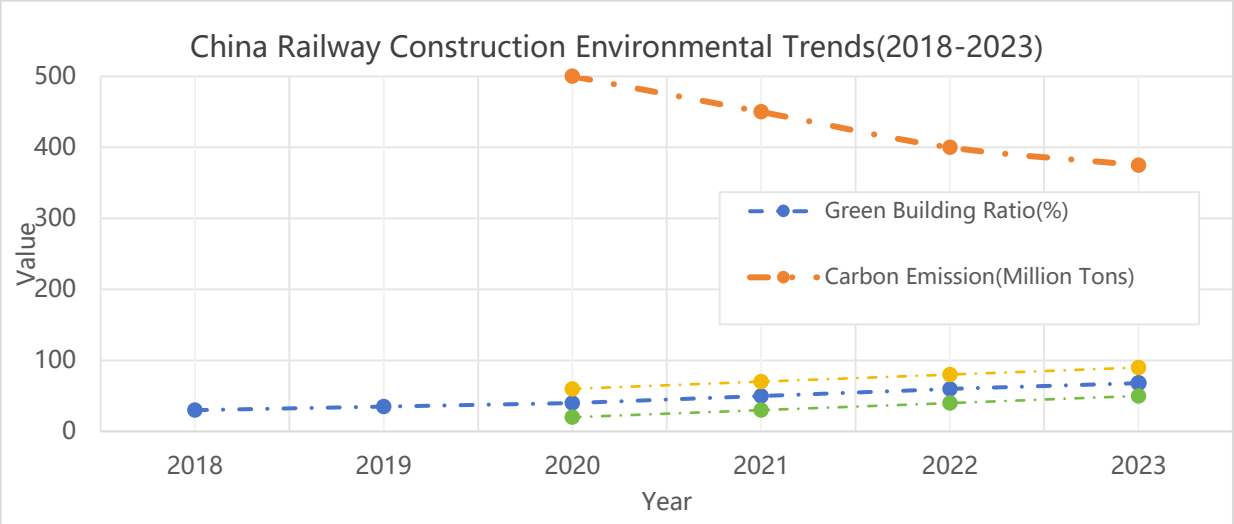

Figure - 1. **Trends in environmental accounting indicator data**
**compiled by the authors: based on CRCC's annual report, environmental responsibility [14].*

How state audits contribute to the continuous improvement of CRCC's environmental accounting practices is analyzed in the context of the five mechanisms of influence of state audits:

1) **Spot the problem: identifying weaknesses in environmental accounting.**

Carbon accounting promotes the development of low-carbon economy. Carbon accounting measures and manages corporate carbon emissions, and optimizes carbon trading and carbon tax management. Shell uses carbon accounting tools to tackle the EU Emissions Trading Scheme (ETS), optimise its carbon management strategy, reduce the cost of carbon credits and open up profit opportunities by investing in renewable energy.

Taken together, environmental accounting tools (EMA, LCC, carbon accounting) can help companies reduce costs, improve environmental performance and promote long-term sustainability.

Audit results: In 2019, the National Audit Office conducted a resource audit of the construction industry, revealing deficiencies in carbon emission accounting and disclosure of energy-saving projects by enterprises. For example, CRCC did not disclose carbon emission data, pollution control inputs were not specifically quantified, and indicators of the energy-saving effect of green buildings were missing.

Corporate practice: Since 2020, CRCC has disclosed its carbon emissions (5 million tons) for the first time and added data on "energy-saving effects of green building projects" to its annual report.

Effectiveness: Carbon emissions reduced to 3.7 million tons by 2023, a cumulative reduction of 26%, and the green building program also resulted in significant energy savings (figure 2).

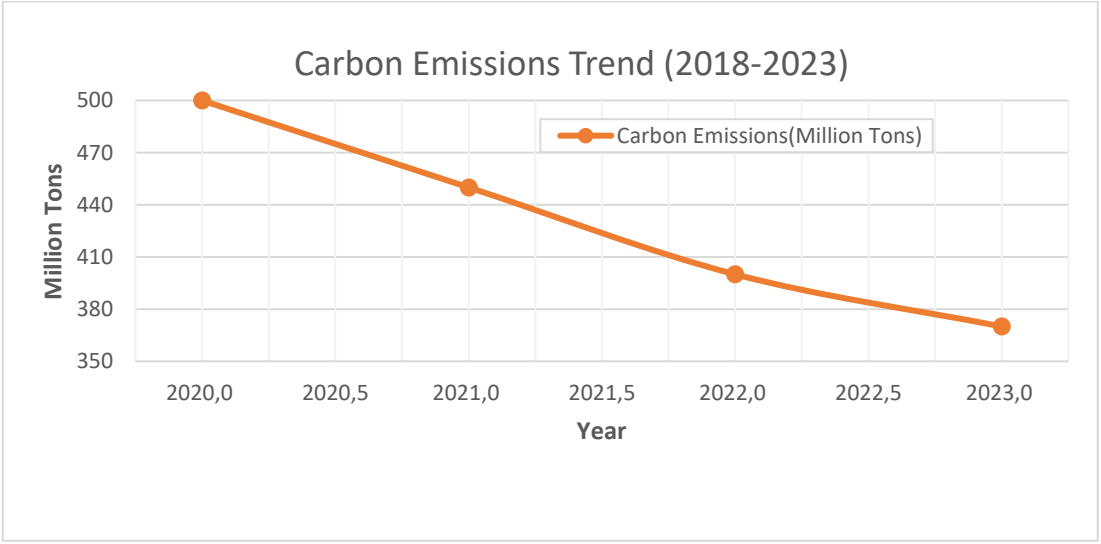

Figure – 2. **Trends in Carbon Emissions Trend**
**compiled by the authors: based on CRCC's annual report, environmental responsibility [14].*

2) **Policy recommendations: promoting the standardization of environmental accounting.**

The international community is accelerating the implementation of sustainable development policies, and environmental accounting has ushered in unprecedented development opportunities. Global carbon neutral policies promote the development of carbon accounting: Policies such as China's "dual carbon" target (peaking carbon by 2030 and carbon neutrality by 2060) and the EU's Carbon Border Adjustment Mechanism (CBAM) have accelerated the development of carbon accounting. Growth in ESG investment and increased demand for corporate sustainability reporting: Global ESG investment has exceeded $40 trillion (2022 data) [15], driving companies to strengthen sustainable accounting systems. For example, global asset managers such as BlackRock require portfolio companies to provide ESG data and promote standardization of ESG accounting systems.

Audit recommendation: In 2021, the Office of the Auditor General explicitly requested that the construction industry harmonize its environmental accounting framework, particularly the methodology for accounting for carbon emissions and energy efficiency projects, to improve the comparability and consistency of data.

Corporate practice: CRCC added the indicator of "green building ratio" in 2021 and improved the accounting and disclosure of "investment in energy-saving projects" in 2022.

Effectiveness: The introduction of standardized indicators has enhanced the role of environmental accounting information in internal decision-making and external communication. For example, CRCCC's investment in energy efficiency programs increased from $6 billion in 2020 to $9 billion in 2023 (figure 3).

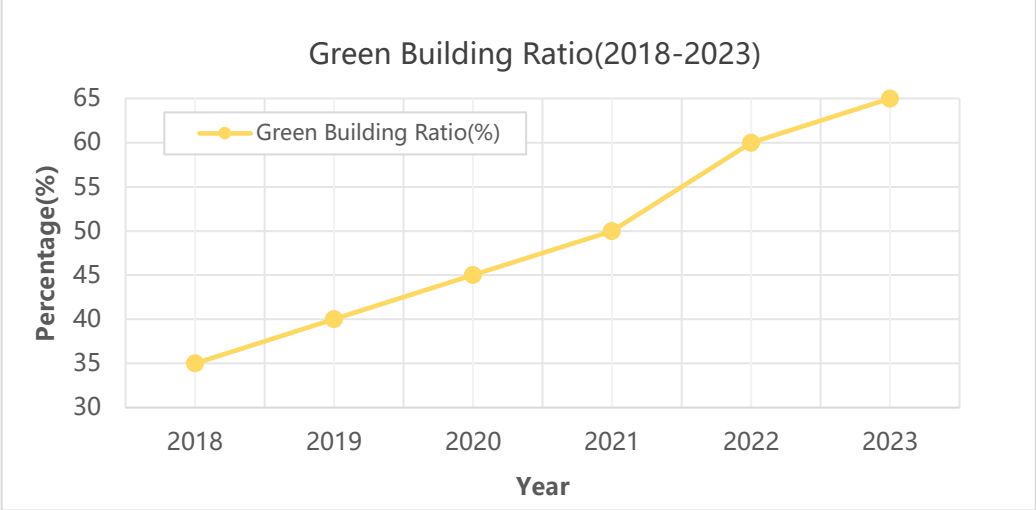

Figure – 3. **Trends in Green Building Ratio**

**compiled by the authors: based on CRCC's annual report, environmental responsibility [14].*

3) **Information disclosure: enhancing transparency in environmental accounting.**

As one of the world's largest construction companies, CRCC faces challenges such as tightening global carbon emission policies and rising prices in the EU ETS. In 2022, the EU ETS carbon price once exceeded 100 euros/ton CO_2, creating huge financial pressure on high-carbon companies. At the same time, the US Inflation Reduction Act (IRA) provides green building subsidies, prompting CRCC to adjust theirs in the construction industry investment structure. CRCC developed a carbon accounting application and environmental accounting strategy. Internal carbon pricing: CRCC adopts the carbon accounting method and sets an internal carbon price of $40-50/ ton CO_2 in the company to evaluate the environmental cost of investment projects. Low carbon investments, such as wind, solar and hydrogen projects, are evaluated through a cost-benefit analysis (CBA). Carbon credit trading and tax management: Due to the EU carbon tax and carbon credit price increase, CRCC increased the purchase of carbon credits to avoid high emission penalties. Low carbon investment strategy: In 2023, CRCC reduce its investment in oil exploration by 10%, while increasing its investment in renewable energy projects by $3 billion. And use life cycle cost analysis

(LCC) to calculate the return on new energy investment and improve the profitability of green energy. (see Figure 4).

Audit requirements: In 2022, audit reports will require companies to disclose more comprehensive environmental performance data, including total carbon emissions, pollution control investments, and green bond financing amounts.

Corporate practice: From 2022 onwards, CRCC discloses detailed carbon emissions, investment in pollution control (5 billion yuan in 2023) and total green bond financing (5 billion yuan in 2023) in its annual reports (figure 4).

Effectiveness: The transparency of environmental information disclosure has increased significantly, providing society and investors with more comprehensive information on corporate environmental performance.

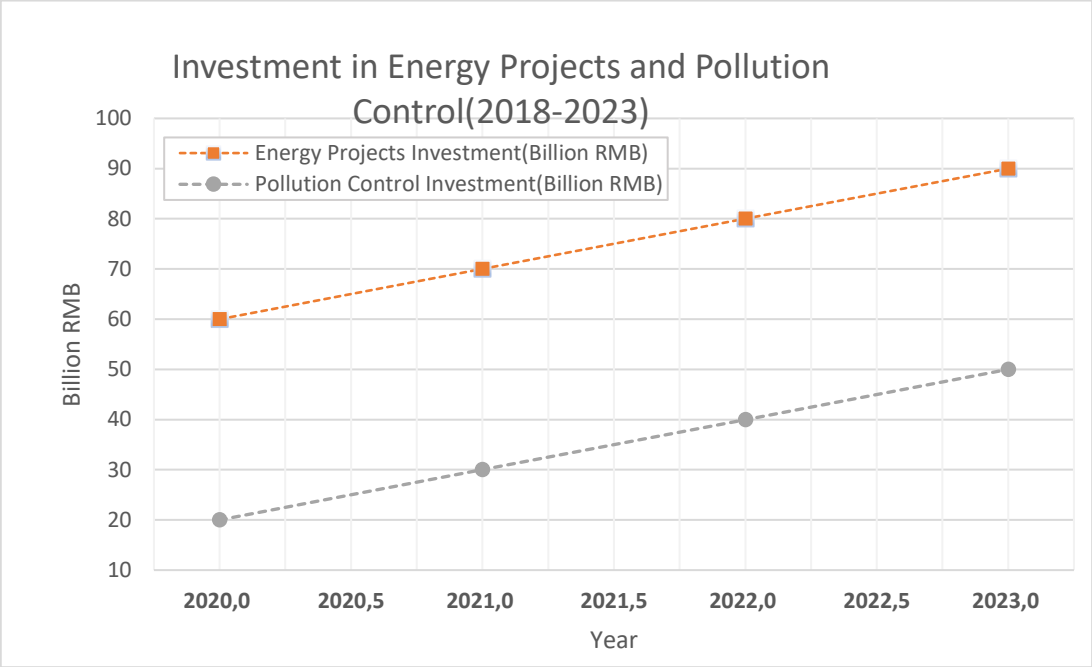

Figure – 4. **Trends in investment in Energy Projects and Pollution Control**
**compiled by the authors: based on CRCC's annual report, environmental responsibility [14].*

4) **Oversight of corrective actions: strengthening the integration of environmental accounting and management.**

Audit oversight: The Audit Bureau ensures that recommendations for improvements in environmental accounting are implemented through regular follow-up on corrective measures. For example, companies are required to report regularly on the progress of their green investments and submit plans for financial support.

Corporate practice: CRCC raised a total of 5 billion through green bond financing to support energy efficiency projects. The return on investment for these projects increased from 5% in 2020 to 8% in 2023.

Effectiveness: closer integration of environmental accounting and enterprise financial management, synchronization of economic and environmental benefits of energy-saving projects.

5) **Social monitoring pressure: raising awareness of environmental responsibility.**

Audit Reports: In 2020, after the National Audit Office made public the results of a resource audit of the construction industry, the CRCC came under widespread public scrutiny for failing to disclose carbon emissions data.

Corporate pratice: Facing the pressure from society and investors, CRCC has strengthened the disclosure of environmental information, improved the annual report and social responsibility report, and enhanced the verifiability and credibility of environmental performance data.

Effectiveness: Under the supervision of the public, the awareness of environmental responsibility of CRCC has been significantly enhanced, providing social consensus support for realizing the goal of green development.

Conclusion. State audits have a profound impact on corporate environmental accounting practices through systematic monitoring mechanisms, mainly in the following areas:

- It identifies issues and weaknesses in corporate environmental accounting creating room for improvements;

- It provides harmonized policy recommendations to strengthen disclosure requirements for corporate environmental performance, thereby enhancing transparency and public acceptance.

First, state audits reveal problems, identify weaknesses in corporate environmental accounting, and promote improvements. Second, audits have made unified policy recommendations to strengthen the disclosure requirements for corporate environmental performance data, thereby improving transparency and social recognition. In addition, audits also ensure the implementation of corporate corrective measures through monitoring and tracking mechanisms. At the same time, the public disclosure of audit results has also strengthened social supervision and enhanced corporate awareness of environmental responsibility.

From 2018 to 2023, the state audit has greatly promoted the green transformation of CRCC: the proportion of green buildings has increased to 65%, carbon emissions have been reduced by 26%, investment in energy-saving projects and green financing has increased significantly, and the transparency of information disclosure has been continuously improved, enhancing the trust of society and investors.

In short, through supervision and guidance, the state audit has promoted the standardization and transparency of CRCC's environmental accounting, reflecting the important role of the national audit in promoting the sustainable development of enterprises and fulfilling their environmental protection responsibilities.

Environmental accounting plays a key role in sustainable development by facilitating corporate low-carbon transitions, reducing life cycle costs, and driving ESG investments. However, high data costs, lack of standardization, and policy uncertainty remain major challenges. With the advancement of global carbon neutrality policies, the growth of ESG investments the application prospects of environmental accounting are broad. By incorporating insights from Kazakhstan research, this study enhances the global understanding of environmental accounting’s role in sustainable development and highlights important regional variations. In the future, enterprises should disclose in their annual reports detailed information on carbon emissions, investments in pollution control for ESG reporting, while governments should expand the role of public audit. Together, environmental accounting and government auditing not only enhance corporate competitiveness, but also provide critical support for achieving the global Sustainable Development Goals.

REFERENCES

1. Tang Guoping, Sun Hongfeng. Research and Development of Environmental Issues in Accounting // New Liberal Arts Education Research. – 2024. – №2. – P. 16– 40.

2. Agus Kurniawan, Heni Verawati. Building a Green Future: The Role of Environmental Accounting in the Public Sector. // KnE Social Sciences. – 2024. – №1. – P. 47–56.

3. Тайгашинова К.Т. Проблемы формирования и развития экологического учета и аудита. Теория и практика: монография. Алматы: ТОО «Жания-Полиграф». – 2022. – 379 с.

4. Azretbergenova G., Yessymkhanova Z., Yessenali A. Development of esg-transparency in the financial market of Kazakhstan. – 2023. – №2(59). – P. 43–52. – URL:https://gov-audit.kz/index.php/ma/article/view/87/115.

5. Yerdavletova F. Environmental Accounting as Information Support for Ecological Controlling. // Entrepreneurship, Business and Economics. – 2016. – №2 – https://link.springer.com/search?new-search=true&query=Yerdavletova

6. Alawattage C., Wickramasinghe D. Strategizing Management Accounting: Liberal Origins and Neoliberal Trends. London: Routledge. – 2019. – 404 p.

7. Drury C. Management and Cost Accounting. London: Cengage Learning. – 2017. – 866 p.

8. Вахрушина М.А., Ивашкевич В.Б., Брюханов М.Ю. Управленческий учет в контексте устойчивого развития. Возможности и перспективы. Монография. Алматы: ТОО «Жания-Полиграф». – 2023. – 250 с.

9. Xu Subo, Zhang Shan, Jian Xinyuan et al. Environmental accounting: Theory review and research outlook. // Finance and Accounting Monthly. – 2019. – №3 – P. 78–85.

10. Wijayanti Y., Suryandari D. The Effect of Regional Characteristics, Leverage, Government Complexity, BPK Audit Findings and Opinions on Local Government Financial Performance // Accounting Analysis Journal. – 2020. – №1. – P. 30–37.

11. Esposito, Spiridione Lucio Dicorato. Sustainable Development, Governance and Performance Measurement in Public Private Partnerships (PPPs): A Methodological Proposal // Sustainability. – 2020. – №14. – P. 56–96.

12. Muhammad Usman. Evaluation of the citizen participatory audit by the department of the auditor general of Pakistan. – 2023. – №129. – P. 201–233.

13. Wu Xun,Guo Juanjuan. Development Status and Insights of Foreign Government Environmental Audit – Based on WGEA Global Environmental Audit Survey. // Auditing Research. – 2019. – №1. – P. 31–40.

14. CRCC's annual report. – URL: https://www https://www.crcc.cn/col/col1564/index.html.

15. ESG Investing. – URL: https:// https://www.esginvesting.co.uk/2024/02/esg-aum-to-hit-40tn-by-2030-says-bloomberg

REFERENCES

1. Tang Guoping, Sun Hongfeng. Research and Development of Environmental Issues in Accounting // New Liberal Arts Education Research. – 2024. – №2. – P. 16– 40.

2. Agus Kurniawan, Heni Verawati. Building a Green Future: The Role of Environmental Accounting in the Public Sector. // KnE Social Sciences. – 2024. – №1. – P. 47–56.

3. Tajgashinova K. Problemy formirovanija i razvitija jekologicheskogo ucheta i audita. Teorija i praktika: monografija [Problems of formation and development of environmental accounting and auditing]. Almaty: TOO «Zhanija-Poligraf», – 2022. – 379 s. [in Russian]

4. Azretbergenova G., Yessymkhanova Z., Yessenali A. Development of esg-transparency in the financial market of Kazakhstan. – 2023. – №2(59). – P. 43–52. – URL:https://gov-audit.kz/index.php/ma/article/view/87/115.

5. Yerdavletova F. Environmental Accounting as Information Support for Ecological Controlling. // Entrepreneurship, Business and Economics. – 2016. – №2 – https://link.springer.com/search?new-search=true&query=Yerdavletova

6. Alawattage C., Wickramasinghe D. Strategizing Management Accounting: Liberal Origins and Neoliberal Trends. London: Routledge. – 2019. – 404 p.

7. Drury C. Management and Cost Accounting. London: Cengage Learning. – 2017. – 866 p.

8. Vahrushina M., Ivashkevich V., Brjuhanov M. Ju. Upravlencheskij uchet v kontekste ustojchivogo razvitija. Vozmozhnosti i perspektivy [Management Accounting in the Context of Sustainable Development. Opportunities and Prospects]. Monografija. Almaty: TOO «Zhanija-Poligraf». – 2023. – 250 s. [in Russian]

9. Xu Subo, Zhang Shan, Jian Xinyuan et al. Environmental accounting: Theory review and research outlook. // Finance and Accounting Monthly. – 2019. – №3 – P. 78–85.

10. Wijayanti Y., Suryandari D. The Effect of Regional Characteristics, Leverage, Government Complexity, BPK Audit Findings and Opinions on Local Government Financial Performance // Accounting Analysis Journal. – 2020. – №1. – P. 30–37.

11. Esposito, Spiridione Lucio Dicorato. Sustainable Development, Governance and Performance Measurement in Public Private Partnerships (PPPs): A Methodological Proposal // Sustainability. – 2020. – №14. – P. 56–96.

12. Muhammad Usman. Evaluation of the citizen participatory audit by the department of the auditor general of Pakistan. – 2023. – №129. – P. 201–233.

13. Wu Xun,Guo Juanjuan. Development Status and Insights of Foreign Government Environmental Audit – Based on WGEA Global Environmental Audit Survey. // Auditing Research. – 2019. – №1. – P. 31–40.

14. CRCC's annual report. – URL: https://www https://www.crcc.cn/col/col1564/index.html.

15. ESG Investing. – URL: https:// https://www.esginvesting.co.uk/2024/02/esg-aum-to-hit-40tn-by-2030-says-bloomberg

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ЭКОЛОГИЯЛЫҚ ЕСЕПТІ ДАМЫТУДАҒЫ МЕМЛЕКЕТТІК АУДИТТІҢ РӨЛІ: ҚЫТАЙ ТӘЖІРИБЕСІ

Аңдатпа

Соңғы жылдары мемлекеттік аудит пен экологиялық есептің маңыздылығы күн сайын артып келеді, бұл компанияларға, соның ішінде ұлттық компанияларға елдің табиғи ресурстарын бағалау және тұрақты даму көрсеткіштерін ашу арқылы тұрақты дамуды жүзеге асыруға көмектеседі. Мақалада зерттеу пәні ҚХР-дағы ұлттық ресурстарға мемлекеттік аудит жүргізу тәжірибесі болды. Талдау нысаны - Қытай Ұлттық теміржол құрылыс корпорациясы (CRC). Зерттеу барысында жалпығылыми зерттеу әдістері, атап айтқанда талдау және синтез әдістері, Қытайдың ұлттық корпорациясының практикалық мысалдарын қарастыруда кейс-стади әдісі, сондай-ақ мықты тұстарды (төмен көміртекті экономикаға көшу, ESG инвестициялары), әлсіз тұстарды (деректерді жинауға кететін жоғары шығындар), мүмкіндіктерді (сбалансталған көрсеткіштер жүйесі – BSC) және қауіптерді (нарықтағы құбылмалылық) бағалау үшін SWOT-талдау қолданылды. Зерттеу ұлттық ресурстардың тиімді мемлекеттік аудиті экологиялық ақпаратты ашу механизмін жетілдіру және табиғи ресурстарды басқаруды қадағалау жауапкершілігін күшейту арқылы корпоративтік экологиялық есептің стандартталуы мен ашықтығын айтарлықтай арттыратынын көрсетті. Сонымен қатар, аудит нәтижелері бойынша ұсыныстар жасыл құрылыс саласына инвестиция тартуға ықпал етеді, экологиялық есептіліктің мәселелері мен әлсіз тұстарын анықтауға мүмкіндік береді, сондай-ақ корпорациялардың экологиялық көрсеткіштері туралы ақпаратты ашуға қатысты ұсынымдар беруге жағдай жасайды. Бұл өз кезегінде тұрақты даму мақсаттарына қол жеткізуге септігін тигізеді.

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РОЛЬ ГОСУДАРСТВЕННОГО АУДИТА В РАЗВИТИИ ЭКОЛОГИЧЕСКОГО УЧЕТА: ОПЫТ КНР

Аннотация

В последние годы важность государственного аудита и экологического учета растет с каждым днем, помогая компаниям, в том числе и национальным, реализовывать устойчивое развитие путем оценки природных ресурсов страны и раскрытию показателей устойчивого развития. В статье предметом исследования явилась практика государственного аудита национальных ресурсов в КНР. Объектом анализа представлена Китайская национальная железнодорожная строительная корпорация (CRCC). В рамках исследования использовались такие общенаучные методы исследования, как метод анализа и синтеза, метод кейс-стади при рассмотрении практических примеров Китайской национальной корпорации, а также SWOT-анализ для оценки сильных сторон (переход к низкоуглеродной экономике, инвестиции в ESG), слабых сторон (высокие затраты на сбор данных), возможностей (сбалансированная система показателей (BSC) и угроз (волатильность рынка). Исследование показало, что эффективный государственный аудит национальных ресурсов значительно повышает стандартизацию и прозрачность корпоративного экологического учета, совершенствуя механизм раскрытия экологической информации и усиливая ответственность надзора за управлением природными ресурсами. Кроме того, рекомендации по результатам аудита способствуют привлечению инвестиций в область зеленого строительства, позволяет выявлять проблемы и слабые стороны экологического учета, а также предоставлять рекомендации по раскрытию информации об экологических показателях деятельности корпораций, что способствует целям устойчивого развития.