The Construction of Carbon Audit Coordination Mechanism in China under the Background of Ecological Civilization

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Abstract. With the 18th National Congress of CPC putting forward the “five in one” development strategy, the construction of ecological civilization has been raised to higher strategic heights. It is necessary and feasible to develop carbon audit in China under the background of ecological civilization. Carbon audit is the category of environmental audit, which is the product of low-carbon economy, and also points out a new direction for environmental audit. China has become the world’s largest greenhouse gas emissions. China’s current carbon audit theory lacks systematic, therefore, the construction of carbon audit coordination mechanism is particularly necessary.

The Research Questions

Carbon audit is the audit behavior of greenhouse gases produced by the process of production and life. As a part of environmental audit, carbon audit is based on the examination and verification of the government and enterprise in the implementation of carbon emission liabilities, and it is an act of independent supervision and evaluation of carbon emission management activities and its achievements. The 18th National Congress of CPC emphasizes the important position of ecological civilization construction in the nation development. It is pointed out that the construction of ecological civilization should be integrated into all aspects and the whole process to realize sustainable development and we must actively carry out pilot projects such as energy-saving, carbon emission rights, emissions, water rights transactions. In order to implement the energy-saving and low-carbon development of the Twelfth Five-Year Plan, China has established five provinces and eight cities as low-carbon pilot cities and seven provinces and cities as trading pilots, and low carbon is deeply affecting the direction and way of social development. Thus, Carrying out carbon audit work has a great significance in our country.

Current Situations and Problems of Carbon Audit in China

From the point of the development of carbon audit in China, carbon audit as a new field, is still in the state of concepts and theories.

Lack of Perfect, Comprehensive Carbon Audit Organization and Interactive Mode

In theory, the audit body of carbon audit should be the organic combination of the state audit, social audit and internal audit. However, China’s carbon audit focuses on the financial audit of low-carbon funds, indicating that the current carbon audit mode is still a typical government audit, and the degree of participation in civil audit is low. If only relying on the power of government audit, it will be hard to cover all enterprises and cannot guarantee the effectiveness and credibility of the audit, and the purpose of all-round supervisions and controls of carbon emissions will also be impossible to achieve. In terms of the reality of our country, there are only more than 30 enterprises taking internal audit. For enterprises, only relying on government audit and giving up internal audit, it means giving up the self-supervision mechanism of environmental audit, which will make the overall effect of carbon audit weakened.
Lack of Standards and Bases for Carbon Audit

China’s carbon audit is in the beginning stage, the current carbon emissions and carbon audit work related to the guidance documents mainly includes “Guidelines for Environmental Information Disclosure of Listed Companies in Shanghai Stock Exchange”, “The Guidance for the Central Enterprises to Disclose Their Social Responsibilities Information”, “Guidelines for the Application of Corporate Internal Control No. 4 - Social Responsibility”, “The Guidance on Social Responsibility of Listed Companies in Shenzhen Stock Exchange” and so on. Although the various departments of our country are actively promoting the implementation of carbon audit, the Environmental Protection Department (EPD) has promulgated “Open Environmental Information (Trial)” to encourage enterprises make major pollutants known to the public voluntarily, including the name of carbon emissions, emission methods, concentration of emissions, total emissions, and the exceeding situation. Environmental protection departments are also required to open the main pollutants to the public, including the distribution of the total carbon emission targets, discharge permits and other government environmental information. But our country has not issued complete carbon audit standards. Due to the lack of adequate auditing standards, the process of carbon audit lacks the basis for the establishment of an audit system that is as structured and standardized as traditional audit.

Theoretical Bases of Coordination Mechanism of Carbon Audit

The Coordination Theory of the System

The coordination theory holds that there is a mutual influence and cooperation relationship between different systems. Although the properties of various subsystems are different, they can adjust the time, space and function spontaneously through their internal coordination. Therefore, due to the interaction and cooperation of the subsystems, the system has a synergistic effect at the critical point, which is far greater than the sum effects of the subsystems. In this way, the system’s coordination mechanism can achieve the overall value of the system upgrade.

Audit Coordination Mechanism

Audit is a systematic project, which reflects the characteristics of the group, interaction, cooperation, distribution, virtuality and integration. Therefore, audit is applicable to the coordination theory. First of all, the audit work system is composed of government audit, social audit and internal audit, and each subsystem coordinates and supports each other. Secondly, each audit project is also a systematic project. Because each audit project is a group of work and needs the cooperation among audit organs, auditors and even the audit units. Thirdly, the use of cloud audit platforms also reflects the coordination mechanism. Under the cloud audit platform, the operating environment of the computer audit is open, dynamic and flexible, and the systems of enterprise information and the computer audit are fully shared and integrated.

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Compositions of Coordination Mechanism

The Audit Subject Coordination. In carbon audit, the national audit institutions, internal audit institutions, social audit organizations should cooperate with each other and establish a cooperative audit project team to allocate tasks through the coordination mechanism.

The Audit Process Coordination. The cooperative audit project team collects and analyses the data through the collaborative case database, collaborative expert library, collaborative database and other tools. If necessary, we can communicate with the relevant members through the platform, so that the audit assessment is obtained and summarized into the shared database. The process of audit includes coordinate data collection, coordinate data analysis, coordinate data storage, coordinate experience and so on.
The Audit Result Coordination. The result of the audit is to reach the final audit conclusion and audit opinion. The person in charge of the cooperative audit project will conclude the audit conclusion and submit the audit report after completing the cooperative audit process and fully discussing the audit evidence.

The Construction of Carbon Audit Coordination Mechanism in China

Carbon audit coordination mechanism consists of carbon audit guidance mechanism, carbon audit operation mechanism, carbon audit security mechanism. Under the guidance of carbon audit guidance mechanism, it is necessary to rely on carbon audit security mechanism and implement carbon audit operation mechanism and exercise the function of carbon audit. Carbon audit guidance mechanism is the strategic command layer of the cooperative carbon audit, including carbon audit related laws and regulations, carbon audit criteria, carbon audit evaluation standards and so on. Carbon audit operation mechanism is the concrete operation of the cooperative carbon audit, and carbon audit operation mechanism is composed of carbon audit entities, carbon audit objects, carbon audit procedures, carbon audit methods and other relevant theoretical systems. Carbon audit security mechanism is to rebuild the audit process and organizational mode, which is the foundation support layer of the cooperative carbon audit.

Countermeasures to the Obstacles of Carbon Audit Coordination Mechanism in China

Strengthening Top Settings of Carbon Audit Guidance Mechanism

Carbon audit is clearly incorporated into the specific laws and regulations of environmental protections to make carbon audit go on a legal track by perfecting the “Government Audit Standards”, “Independent Auditing Standards” and “Internal Auditing Standards”. At the same time, some relevant laws should be established in carbon audit procedure to make all aspects of carbon audit have evidence. Through the “three in one” network audit platform, auditing the compliance and benefits of the use of funds in low-carbon technology development, energy structure optimization, low-carbon product subsidies and so on, and the performance of the low carbon liability of the auditees should also be audited. In other words, government audit is coordinated and managed by project managements, guidance supervisions, information evaluations and so on. The civil audit organization plays the role of carbon audit by specifically undertaking the government’s carbon audit project. Under the supervision of the unified standard, unified method and unified procedure, the internal audit institutions of enterprises carry out the internal audit of carbon audit to achieve the “three in one” network audit platform.

Strengthening Top Settings of Carbon Audit Operation Mechanism

Carbon audit is significantly different from traditional audit in terms of audit evidence, audit objects, audit goals and audit methods, and these differences arise from the professionalism of the assurance business for management level of carbon emissions. Therefore, traditional audit cannot meet the needs of the market for carbon emissions, and constructing carbon audit operation mechanism is needed.

5.3 Strengthening Top Settings of Carbon Audit Security Mechanism

Cloud audit platform is a powerful guarantee for the implementation of carbon audit. Nowadays, an important reason for the low level of audit information is that the data is not standardized. In the cloud audit mode, the unified data standard is the basic premise that the third party cloud platform and the audit data are achieved in high speed communication without barriers through the internet. Cloud audit will greatly shorten the gap about the audit work quality between our country and the big four accountancy firms, will greatly enhance the social responsibility of the audit. Cloud audit has a favorable condition for the unity of theories, systems and practices, so carbon audit based on cloud audit will gain a wide development and innovation platforms.
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References


